

A Complete Bibliography of Publications in the *SIAM Journal on Optimization*

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: <https://www.math.utah.edu/~beebe/>

26 August 2024
Version 3.41

Title word cross-reference

[DV14, LMW16, CCR17, DLR16, DV16, KV17, WLS23, CO12a, GP04, HYZ08, ZL12].
 ℓ_2 [SBFA17]. $\ell_{2,0}$ [TQP22]. $\ell_{2,1}$ [XLxY21].
 ℓ_∞ [LL09]. ℓ_q [WPY23, LW11a]. ϵ
[BBR16, BPT97]. F [MS11c, MP97]. K
[DK22, PW07, PH18, SM93, BHKM14, BA24, BDSS22, CJ18, DV16, Kur24, WDST14, Zha20]. $K_{m,n}$ [dKP12]. K_n
[dKP12]. L [ZN09]. L^1 [CHW12]. l_1
[MU14, BL93, LS98a, MN93]. L_p
[JLW16, Las16, Li93b]. LDL^T [RB18]. M
[HMW21, MST11, LS98a]. Z^n [LM20a].
 $O(\infty/\|)$ [MOP20]. \mathcal{U} [Har14]. \mathcal{VU} [Har14]. n
[Loc15]. $N - k$ [BV10]. ∇u [Cel07]. $O(1)$
[Xu22]. $O(1/k^2)$ [Mis23]. $O(1/t)$
[TY12, YN17, Nem04]. $O([n^3/\ln n]L)$
[Ans99]. $O(\epsilon^{-3/2})$ [GJT23]. $O(n)$
[Roo15, Roo06]. $O(n^2)$ [XXS21]. $O(n^3L)$

#P [TSAKN23]. **#P-Hard** [TSAKN23].
 $(k + 1)$ [BHKM14]. $(L_r, L_r, 1)$ [SVD14].
 $(n - 1)$ [JMW08]. + [BAC11, Las10]. 0
[BZ04, Che15, Las02, LS91, RQMG12]. 0.999
[Mas97]. $0/1$ [ZPXQ21]. $0 < q \leq 1$ [LW11a].
 1 [BZ04, CCFP05, Che15, HAN11, HL06, Las02, LS91, RQMG12, XFLP21]. $1/k^2$
[AP16]. 1024 [GR94]. 2 [Cri22, DV16, HL11, IS02b, Lin08, Ris94, ZL02]. 3 [STY15]. 4
[STY15]. 5 [Eck94]. α [MLRR93]. B
[FT07, HMW13, MS11c]. $b \leq 3$ [VJFC18]. C
[HK09]. $C^{1,1}$ [BDS10, BK10]. C^2 [WP23].
 $C^{k,1}$ [Luc95]. D [SW24]. D_2^* [Dan93]. ℓ_0
[LBT22, SBFA17]. ℓ_1

[McS96]. $O(n \log Tr(X^0 S^0) \epsilon)$ [LT10b].
 $O(\sqrt[n]{L})$ [AZ05, GT92, HY96, McS94]. P
 [CX08, SM18, XY00]. $p > 1$ [SM18]. P_*
 [PS97]. $P_*(\kappa)$ [DIPR20, IPRT00, LR10]. P_0
 [CC99, CY00, Qi99, RG00, ZL03]. Ψ
 [GL08b]. R_0 [CC99, FCF07]. s [RG24]. σ
 [RZ01]. T [Chu03, Chu09, RQMG12]. θ
 [SS22]. u [Cel07, Ous99]. ϵ [RW07]. φ
 [YZZ17]. VU [MS00]. $X^{1/2} S X^{1/2}$ [LM04]. Z
 [MN96].

-Adaptability [Kur24]. **-Algebraic**
 [Chu09]. **-Algebras** [Chu03]. **-approximate**
 [RW07]. **-balls** [Las16]. **-best** [SM93].
-Block [STY15]. **-Convex**
 [JMW08, MST11]. **-Coordinate** [Cri22].
-Dimension [Har14]. **-Dimensional**
 [BHKM14, Loc15]. **-estimator** [LS98a].
-Functions [BDS10, Qi99, RG00].
-Gradient [Har14]. **-Hessian** [Har14].
-Iteration [HY96, GT92, McS94].
-Lagrangian [Ous99]. **-Linear**
 [DIPR20, LR10]. **-Linearization**
 [RQMG12]. **-Locally** [BDSS22]. **-lower**
 [MLRR93]. **-matching** [Ris94]. **-matchings**
 [HL11]. **-Matrix** [CX08, MN96, PS97].
-Means [DK22, PH18]. **-means-type**
 [PW07]. **-Median** [CCFP05].
-Minimization [HYZ08, ZL12].
-Monotonicity [MP97]. **-Norm**
 [DV14, DV16, Lin08, SM18, TQP22, WLS23,
 WDST14, WPY23, XFLP21, ZL02, JLW16].
-Norms [XY00]. **-Number** [SS22].
-Optimization [MU14]. **-processor** [GR94].
-Projection [Tse98]. **-Rectangular** [RG24].
-Regression [GP04]. **-Regular** [YZZ17].
-Regularity [IS02b]. **-Regularized**
 [CCR17, DLR16, KV17]. **-Relaxation**
 [BPT97]. **-Slope** [BHKM14]. **-Stationarity**
 [HMW21]. **-Stationary** [FT07, SW24].
-Subgradient [BBR16]. **-Subsmooth**
 [ZN09]. **-theory** [MS00]. **-Thresholding**
 [Zha20]. **-triangulation** [Dan93]. **-Type**
 [STY15].

/Pseudo [BYZ19].

1 [BLMH06]. **1-Restricted** [HL08a].

2-Matchings [HL08a]. **2-Page** [dKP12].
2001e [QW01].

3-Way [DO06].

97a [ZT98]. **99k** [MZ00].

Abadie [Li97, SYZ19]. **ABCD** [STY16].
Abscissa [GO12, VVM⁺09]. **Absence**
 [AI20, DLV10, JL23]. **Abstract**
 [Ber17, BR07, CT12, Gfr07, IK14, LN14a,
 LN18, NY02, Och19]. **Accelerate** [JLZ20].
Accelerated
 [ALR03, AP16, AFGO20, BRÖA24, CC19,
 CGRV21b, CDHS18, DJ93, Far20, FR15,
 GDG22, GN19, HM16, JST12, KMM19,
 KM21b, KMM23, KBGY22, LY19, LSxY24,
 LM21a, LLX15, LX23, LM23, MT24, MS14,
 NS17, OLM24, RFNP14, SSPY24, VSBV14,
 Wri12, Xu17, ZW18, ZAG24]. **Accelerating**
 [HM15, LYD24, RCGR18, YM14].
Acceleration
 [ADR19, CMV19, CDR22, IH14, LS13,
 LMH19, NN91b, Rd20, SJM21, ZOB20].
Accuracy [CGT19, HSX24, SSSZ10].
Accurate [FFK98a, XA18b]. **Achieving**
 [NOS17]. **Acoustics** [Hab98]. **Acting**
 [vAPA19]. **Action** [GXZ21, ZC91]. **Actions**
 [HN19]. **Active**
 [BHHK00, BM18c, BRZ20, BDL⁺16,
 CWH06, Cri22, CH16, DIS04, DLR16, EI06,
 FFK98a, FJS98, FT02, FT07, GLT03, GL15,
 HZ06a, HIK03, HR15, IS08, JKW15, KR02,
 KR03, Lew02, LT10a, OW06, SZY16, ZC20].
Active-Set [Cri22, CH16, DIS04, FT02,
 FT07, GL15, IS08, JKW15, SZY16, BM18c].
Activity [LW11b, LFP17]. **Actor**
 [HWWY23]. **Actor-Critic** [HWWY23].
Actual [WLZY07]. **Actually** [AP16].
Acyclic [DK18]. **ADAM** [BB21].

Adaptability [Kur24]. **Adapted** [NT19].

Adaptive

[AA06, AABL21, ADV24, AD06, ACD08, ADL08, AILT14, ALT19, AH16, BGMT19, BB19, BBN18, BD09, CMYZ22, CJSY07, CBJF97, CNQ97, DP19, Don16, DFS03, Eic09, FS08, GN23, JLZ20, JSX24, LR21b, MWDS18, NWW09, OP19, PS21a, PW06, RC22, RPK03, SHP18, SV07, SY13, SL15, SAW99, SZ98, Tse98, YKI04, ZU11, Zie14].

Adaptive-Mode [SZ98]. **Adaptivity**

[AD19, LJ20]. **Additive** [Cap02, Qi16].

Adjoint [DSD12]. **Adjoint-Based** [DSD12].

Adjoints [LSW20]. **Adjustable** [BLRS22].

Adjusted [AH05, CCM20, LLS05].

Adjusting [FIS20]. **Admissible** [ZZ16].

ADMM [AH19, BK21b, BAR21, GMM17, KM24, LST16, LMZ15, TP20, ZW18].

ADMM-like [AH19]. **ADMM-Type**

[BK21b]. **Affected** [BTN02]. **Affine** [BM16a, CCM23, CB00, CG17, GLHZ11, JRT97, LRZ21, LL23, MT98, Peñ23, Pot08, Rob07, She14, dGJ18, GT92, LT92, Mas97, MW96, RV93, TM95]. **Affine-Invariant**

[dGJ18]. **Affine-Scaling** [GLHZ11].

Affinely [BLRS22, ZWHZ23]. **AFPTAS**

[EL10]. **Agents** [LdF08, RTM23].

Aggregated [GOP17, VGO18].

aggregation [Gar93]. **Aggregations**

[BDS24, DMS22]. **Ahead** [HN05]. **Alem**

[EA99]. **ALESQP** [AKR23]. **Algebra**

[BZ04]. **Algebraic** [Bar08, Chu09, CP17, Fay06, FFG99, GE14, HU19, Las05, LP10, Mat05, NR09, Pha20, RFB⁺11]. **Algebras** [Chu03, GJ17, LT20, PA14, RSS14, See22].

Algorithm

[ATP21, Alv04, AF01, Ani02, AUU24, AGJJ00, AV20, APR14, ADL08, ALT19, AD15, BK21a, BB21, BBW05, BC05, BM16a, BD17, BM20a, BCS21, Bia16, Bil02, BW02, BKT99b, BRZ20, BP97, BLY14, BCH14, BCN19, BAD18, BAR21, BDPP14, BGM24b, BD09, BI98, BLO05, BCW14, BHN99, Cab05, CCS10, CCFP05, Car22, CJSY07, CCM20,

CCM23, CB00, Cas00, CERS18, CYZ22, CMY15, CCR17, CL14, CH15, CP08, CG17, CC02, CGST96a, CY14, CR04, CP01b, CNW10, CO12b, CJRW14, CRS18, CWZ18, Dai02, DK13, DP19, DIPR20, DLR16, DT98, DHP24, DK10, DW24, FS97, FJS98, FLP02, Fay96, FB19, FLT02, FGL⁺02, Fle12, FS08, FV99, FQ96, FT02, FT07, GS21, GH16, GMS02, GHZ99, GT97a, GT97b, GKR14, GLT04, GJT23, GE14, GY20, HZ06a].

Algorithm

[HP09, HA21, HL98, HW10, HM16, HBM21, HH06, HK09, HL17, HL20, HWWY23, HU17, HFD16, HY96, HOR99, lid12, IPS03, IS02a, Jan06, JL20, KT03, Kel99, KF18a, KT14, Kiw07a, Kiw10, KSS99, KRZ17, KCS97, Kuč08a, KJ17, LPW12, LNP98, LMT09, LT01, Lev04, LT02, LS97b, LC24, LMH19, LS04, LWZ15, LR21b, LLS06, LL09, LM05, LMO06, LY07, LPS05, LM20c, LS98b, LSZ98, MN09, MNP96, MNP98, MWDS18, MP18, McS96, MÖ10, MP14a, Men17, MSU24, MIM20, Mit00, Mon23, MT98, MT03, MT04, MPR10, MST11, NL14, NEYL24, NLQT06, NYZ18, NE19, Pan05, PRRL97, PTZ05, PCA19, PW17, PS98, Pyt98, QQ00, RK19, RW21, RSS00, Roo06, RN98, Sal17, SD00, SKM19, SE99, Sch98, SZY16, SP97, SLWY15, SXBN22, Sim11, SY18, SP12, SKL09b, TF96].

Algorithm

[TA98, TE19, TDKC14, VJFC18, VJM16, WST10, WLWY15, WX17, WX19, WP23, WP24, WCP17, WT04, Wri05, XS99, XY97, XY00, YF00, YST14, YT22, YN17, ZCS10, ZZST20, ZZS23, ZL03, ZLCL21, ZT98, dE14, Ans91, AB95, BMR94, Ber91, BF96, BKT99a, BD93, Bos93, BTZ92, CT93, CH93b, CL92, DvTY91, DL91, EA95, Fre95, GK95a, GV94, GLW91, GT92, KN93, Lag93, Li93a, MN93, Man91, Mas97, MPW95, MW96, MP95, NS91, PR93, PY93, Pot96, RV93, Ser95, Tod92, Tor91, Tse91, TM95, Wri92, Ye92, ZT93, ZT96, Zhu95, dRV92].

Algorithmic

[AMS10, AMRS16, AHSS19, AFSS19, AO06, CM16, DLM21, GLCxY18, GL12].

Algorithms

[AA20, AKS00, ABGJ14, ATU23, ARS07, AC18, AL20, AD00, AD06, ACD08, AILT14, BER04, BGN22, BHM18a, BWW12, BSW23, BE14, BGMT19, BDMS09, BGG⁺12, BB19, BMSS19, BPR20, BCLN22, BNVP24, BKR17, BGNW05, CGT12, CH02, CODL22, Chr20, Chu09, Com14, CGST96b, CVV99, CSV09, Dai06, DSK20, DP00, DHL15, DKS22, DV97, DEAM97, EA99, FRMP18, Fle01, GPR02, GL12, GL14a, Gha23, GLRS15, GM12b, Gon99, GOST01, GSW97, GOP17, HWWM24, HSS17, HV01, HNE16, HL14, HL08c, HHY18, HZ06b, HLY16, HZ22, lid13, IH14, IS02c, JRT97, JLW16, JL19, KP22, Kor00, KNS11, KBGY22, LY19, LYSA20, LS13, LRP16, LT99, LT10b, LBT22, LSxY24, LZ19, MP97, MÖ09, Mia96, MCB09, MN96, Mon97, MT99, MS13, MS21, MW09, MARS10, Mur03, MKU21].

Algorithms [NARS14, PC08, Pan19, PLS08, Pat98, PRS16, PQS01, PW06, PTJY10, Pul00, RNV09, Ric11, RFNP14, RW18, SPT08, Sat22, ST10, SHP18, SSK98, SPM18, Sol98, SJM21, SVD14, SW24, Teb97, TSP18, THDL22, Tor97, TDZ20, ULC20, VSBV14, WUR⁺23, WLLY16, WWLY21, WLN23, WS11, Wri99, XD20, XWSD24, Yil08, Yin99, YLZ02, YKI04, ZYP21, Zha98a, ZK14, ZSX19, ZAL21, ZL22b, ZHE23a, Zha98b, Zha20, ZLTD22, dGJ18, dAGL24, BT94a, BS94, CGST93, Dan93, Dix91, Eck94, Gül92, IKR⁺91, JY94, JSV91, KKM93, LT92, LT93, McS94, MTT94, MKT95, Mon98, Naz91, PQ93, Qi95, ZC91, ZTD92, ZTP93, ZR93, Zhu96]. **Alizadeh** [KSS99, LM05]. **all-inclusive** [WZ95].

Allocation [BBG⁺20, Ete20, HS23, lid12, LdF08, VJM16]. **allowing** [AW94, Ye92].

Almost [Cri22, Fus14, GW21, Xu22]. **Also** [Las04]. **Alternating**

[AAJN16, ARS07, Bec15, BBCS21, Bol14,

BB23, BSR17, CS08a, Chu21b, DKL21, DP23, GMSS17, HTY12, HLR16, KRR99, LLAN22, MS13, NT19, STY15, SS24, TY12, Tse97a, WLS23, XWSD24, YPC18, ZL20].

Alternative [JLL09, Mut01]. **Always** [Ros14]. **AM** [MNR⁺22]. **AM/GM**

[MNR⁺22]. **AM/GM-Based** [MNR⁺22].

Ambiguity [NJS21, RG22, RR15, RW17].

Ambiguous [Cal07, ZJS18]. **Amenable**

[LRS22]. **Ample** [DR01]. **Analyses**

[CM16, DW24, MTB23, RG24, Sat22].

Analysis

[AB18, AWW09, AUU24, AZ19, ASSS23, AD03, ABDL21, AC02, BGY⁺23, BCS21, BDMS09, BT19, BH96, BLY14, BLT17, BNVP24, BKS96, CLMP10a, CLMP10b, Cap02, CHW12, CT12, CQT03, CJ18, CSS19, CCN⁺18, CRS18, Dav15b, Dav15a, DGT20, DMZ12, DR07, DKLM22, DV23, EW09, EH20, FMP18, Far20, FRMP18, GY17, GM17, GM19, GLY96, GG08, Gon14, GZ17, Gre00, Gui16, GLY12, GLYZ14, GXZ17, HL98, HS21, HLZ08, Har14, HKP18, HV01, HMN10, Her09, HS11, HLR16, HWWY23, JFX17, JKM23, KKMP24, KKT20, KL10, Kor00, KNS11, LR10, LRP16, LP08, LLAN24, LN11a, LN18, LM20a, LL23, LSS22, LXL11, LRX14, Lov11, LJ16, Luc09, LM20c, Luo97, Mal07, MPP⁺17, MM21, MO07b, Mor07, MOR15, NA20, NC16, NO09, PS20, PMDL10, RHL14, RW18, Roy20, SBD⁺11, See97].

Analysis [Sen07, ST14, SKB18, SW07, Wal08, WHY⁺19, WWLY21, WLS23, WP24, WZ24, XB99, XBN20, YT02, YNS20, YPL21, Zas13, ZYP21, ZML21, ZXZ16, ZL22a, ZN05, ZW12b, ZN14b, ZN21, dF09, dKLS15, BKT99a, BT96, CT93, Iof94, JY94, Lew96, LT92, MS94b, SZ92, Zhu96].

Analytic

[Abs05, Ded00, GV00, GT97a, GLTP98, Hol04, Kiw97, Luo97, LS98b, LB00, MG98, NV99, OG03, TZS02, XLZH19, dRT92].

Anderson [OLM24, ZOB20]. **Angular**

[CN17, MZ99, SM91]. **Anisotropic**

[FHPS22]. **Annealing** [CF99, Fie00, Nau02, Fox95]. **ANOVA** [TLT⁺18]. **Ansatz** [JS11]. **Any** [PW19]. **Aperture** [RADK05]. **Application** [AD10, ANRV04, Ans17, ALSV18, AD15, BNL⁺18, Bet19, BGG⁺12, BH96, Ceg15, CDM20, DRT17, FBLV24, FGM17, Gfr14, GLHZ11, Gor22, GKT23, GF08, HWWY23, HU19, lid12, KGM23, LLX15, LW08, LSF⁺23, Mai15, MP14a, NT08, NMU18, QW00, QW01, Qi16, RCGR18, RW12, SKC12, SY13, SKL09b, TMHP06, WWLY21, Wu96, YKI04, YCST22, ZH04, ZC09, ZL22a, ZL01, vAS14, CLMS93, IK96, DHLN92, ZÁC17]. **Applications** [ANT16, AHSS12, BBLZ17, Bec15, BTMN01, BDL07, BSTV18, BH14b, Cab05, Car23, CGT11, CT02, CRZ18, CERS18, CQT03, CSW12, CHN18, Chu21b, CKS17, Com14, CVV99, DMZ12, DLV10, DMVV17, DPS17, EL09, ESKL18, FK00, FBM15, FBO21, Fus14, GH16, GLT03, GZ17, GLY12, GNRPT16, HS24, HJB20, Har98, HMN10, HSK15, HLY16, HY02, HYY16, IK14, JBS⁺23, JPT13, JY04, JL16, JW14, JS20, Kan14, KB08, LLD⁺02, LNP08, LM12, LZH14, LM20a, LST21, LFN18, Luc09, MS20, MM21, MS11c, MO01, MTZ03, MO07b, MR12, MN13, MN14, MOR15, PAV21, PW05, RM08, RFB⁺11, RGY99, She14, SSQ04, Ulb01, WLM22, XS99, XYZ15, XLZH19, XY97, YmZS15, YFHS16, ZDR24, ZY07, ZN14a, ZN14b, Zhu02, vdLTY06, Ali95, AEGS93, ACC93, CSY23, Den00, Tha94, Tha93]. **Applied** [BBW05, BSW23, BLY14, CBJF97, GMS21, Hab98, ISU12, HH06, JSV91]. **Applying** [MPR10, SK98]. **Approach** [AAS17, ASNP16, AT03, Ani05a, ACB20, ALSV18, APR14, BQX15, BP05, BCWP21, BEET12, CT06, CP18, CGO22, Chu09, DKL21, DLR14, DEAW99, DYC⁺21, DMVV17, FLLR14, Fay06, FLS03, GSU21, GHKL17, GV14, GJN06, Hal24, HLZ08, HKK11, HNKK17, HXLT23, KU15, Las10, LM18, LP15a, LZ24, LFW98, LLR16, Lu09, LA08, MPB02, MST11, MTB23, MGGS09, NJLS09, Nol98, PFA17, PR07b, PC03, Ram18, RQMG12, RADK05, SS23, SI13, Sch08, SL15, ST09, Tse99, TP02, WZYB08, Wu96, WZZ18, Xu06, XC21, YH01, YB16, YP20, YT02, YLZ02, AEGS93, CL96a, Iof94, TYF96, Wan95]. **Approaches** [Ani05b, Kau99, KM21a, Tuy00, YZ10, dKL10]. **Appropriate** [DHML01]. **Approximability** [Ete20]. **Approximate** [ABCFR20, AD19, BM07, CCFP05, Ded00, DO19b, DYC⁺21, DHP24, ESKL18, Fil99, GLN07, GKPV01, GJN06, GHNS19, HS19, Kiw04, Kiw06, Kiw08, KS05b, LFKCT23, LN14a, LJ16, NO09, SZ14, ULC20, XFLP21, dF09, d'A08, RW07]. **Approximated** [XF24]. **Approximately** [CMYZ22, DV14]. **Approximating** [AP22, Erg19, GdW00, HHJL23, IPS11, Omn94, PW07, SCRS00, Tse03, WH24]. **Approximation** [AMHL05, ATU23, AST10, ABP18, BY11, BZ08, BV18b, BV21, BGM24b, BD09, CHS24, CSS19, CS22, CLYZ22, CST19, DLW99, Don14, EL14, EN14, GHK17, GLRW21, GHKL17, GL12, GL14a, GRW20, GL10, GXZ21, HLL98, HL08c, HCH20, Jan06, JLZ20, KdK23, KSdM01, KT08, Krä24, KS15, Kur24, LY98, LL22, Las05, Las06b, LB18, LN02, LJ02, LN03, LX14, Liu20, LR21b, LZ14, LA08, Luk08, LSTZ07, MX06, MU20, MBW09, NJLS09, Pan16, PS21a, Pat98, POLW20, RP23, RSvdVH16, SB18, Vil05, XHL14, YKI04, dP02, DJ93, GK94]. **Approximations** [ACN15, ACS14, AFGG11, BK12, BTN02, CCL09, CH97, CWZ12, DFR07, GY23, Gür10, Har14, INT17, JHR23, JL05, KM21a, KTSB21, LMMZ21, LWZ15, Lov11, MP16, MHL15, MP07, NS07, RvdVH15, RPK03, SdM00, Sva02, ZVP06]. **Arbitrary** [CGT20, CERS18, PA19, BF96]. **Arbitrary-Order** [CGT20]. **Arc** [Pul97].

architectures [AM94]. **Arise** [PT24]. **Arising** [FV07, FGG07, GMO14, SDGM99, VZQD17, GMS92, JYZ94, PR93, dCST15]. **Arithmetic** [Wri01]. **Armijo** [Cri22]. **Array** [Che01]. **Ascending** [BBTT12, PS10a]. **Ascent** [Gha23]. **Aspects** [FWKS15, LS97a]. **Asplund** [BW07, NT02]. **Assessments** [GC23]. **Assets** [BCM03]. **Assignment** [Ans00, MP10, PRRL97, BCT93, PR93]. **Associated** [CDZ17, GHR14, LM04, MP10, ZL01, ZW12a]. **Assuming** [EA99]. **Assumptions** [JKM23, Sal17, Di96]. **ASTRO** [SHP18]. **Asymmetric** [RFNP14]. **Asymptotic** [BC09, BNT04, BKMW20, Cha02, FB03, FBLV24, LS20, RG24, SP24, Tüt03, YNS20, Zhu96]. **Asymptotical** [HY96]. **Asymptotically** [Li10, LST20]. **Asymptotics** [WZZ18]. **Asynchronous** [CCT21, FH14, KPZ19, KT04, Kol05, LW15, MPP⁺17, Pan19, Tse91]. **Attacks** [BLMH06]. **Attouch** [ABW21]. **Aubin** [OOR17, OR11]. **Auction** [DP00, Ber91, BCT93]. **Augmentation** [DHL15, DKS22]. **Augmented** [ABMS08, ASS18, ACFH24, AW00, AKR23, AI12, BNP24, BR07, CT06, CGST96a, DL01, DFS03, FS12, FGG07, GAD20, HS21, HHY15, HLP23, HFD16, IK96, ISU12, JR08, KS16a, KS19, KMM23, LT02, LST18a, LST20, LZCW23, LST21, LZ23b, LSL08, NTA04, SFMF20, Sta04, SLM05, SS24, Toh03, WDLW23, ZST10, BTZ92]. **Aumann** [FBH22]. **Autoencoders** [LLC22]. **Automated** [MS11a]. **Automatic** [BC05, LN93, MN00, Dix91]. **Automorphisms** [LLL24]. **Auxiliary** [BCCL22, Nes21]. **AVaR** [Den14]. **Average** [BBMW16, BGLW08, CWZ12, CSS19, CWP20, CC14, EN14, GY23, GS01, Har09, HCH20, HG16, KSdM01, Krä24, LL22, LM21a, Liu20, MX06, NMU18, PS21a, Wan11, WB22]. **Averaged** [BLT17]. **Averages** [BWW12]. **Averaging** [DFR18, Ete22, NL14, SD23]. **Averse** [BCD20, FWKS15, GSU21, Gui16, KS16b, Krä24, LZ23a, MP19, GKS18]. **Aversion** [ST03]. **Aware** [KP22]. **Away** [BRZ20, PRS16]. **Away-Step** [BRZ20].

B [FT02]. **B-Stationary** [FT02]. **Back** [HTY12]. **Backtracking** [CC19]. **Backward** [ATP21, ACP11a, APR14, AP16, AC18, AD15, BRÖA24, BFO19, BPR20, BAD18, Gis21, LSxY24, LFP17, MT20, RW21, Sal17, TSP18, VSBV14, CR97]. **Backward-type** [LFP17]. **Bad** [Pat17]. **balance** [Fre95]. **Ball** [AY08, AL21, ADR22, Lim11, MLC22, SZY16, WX16, Yil08]. **Ball-Constrained** [WX16]. **Ball/Sphere** [SZY16]. **Balls** [AST10, Gar21, LTY12, Las16, Mar94]. **Banach** [BP07, BCCL22, BKMW20, CT03, Den97, DGLM14, DFR07, DS12, GW21, GYZ14, HS06, HSK15, Hu07, HK92, Iof94, KT03, KKS19, KS19, KRS11, KT08, KNT10, LPT07, LN03, LN05a, LN14b, LN18, RZ01, Sab11, TZ10, ZN04, ZN05, ZN07a, ZN07b, ZN08, ZN09, ZN10, ZN11, ZN14b, Zhu02]. **Bandit** [AFH⁺13]. **Bandwidth** [lid12]. **Barrier** [AD09, Aus99, BER03, BTZ97, BMSS19, CL14, FG04a, GKR20, Gül97, HL23b, MÖ10, MSS15, NWW09, Ren96, Sch09, SW11, SOT09, YY03, And96a, GLW91, Mel96, MW94, Pow95, Wri95, Gon91a]. **Barrier-Based** [CL14]. **Barriers** [FS23, Fay02, HL02, Mit94]. **Barzilai** [CPRZ20, HDL21, Ray97]. **Based** [AZ05, ABCFR20, AUU24, BER03, BSV14, Bil02, Bla21, BLPP16, BCS99, BKMW20, BHP23, BR19b, BLS21, CX99, Chr20, CL14, CP01a, DIPR20, DD19, DV97, DEAM97, DL22, DJ21, DW22, DSD12, DHP24, DFR18, FLLR14, Fle98, FV16, FHPS22, FV99, Gfr14, GV15, GG08, Gon99, GRVZ15, GR12, Gui16, Hal24, HPD14, HL23b, HLP23, HSW14, HSK15, HNKK17, HR22, HFD16,

HS17, IdW16, IJOT19, IS10, JSX24, JKW15, Kal18, KMM23, KCS97, Lau01, LJ20, LR10, LSY24, LZ03, LP15c, LM05, LMO06, LS98b, Man04, ML05, MÖ07a, Men17, MLLB08, MCB09, MP10, MNR⁺22, NJS21, PRRL97, PGH18, Pat16, PMR19, POLW20, PRT02, PTZ05, QWY04, QCLP19, RG22, RR23, RQM12, ST22, ST10, SSW16, SK06, ST14, SM18, SL15, SVD14, SSD22, Sva02, YP20, YL11, ZYP21]. **Based** [Zha98b, ZLCL21, dKLS15, AH16, CM11, JY94, Mon98, BHHK00, NE19]. **Bases** [CP08, Spa14]. **Basic** [BGLW08, BLY14, JPT13, KS18, LLAN24, LJ02]. **Basins** [LDS22]. **Basis** [KKS03, SW07, WS11]. **Batch** [CKL97, DR23]. **Bayesian** [GXZ21, JHR23, LLZ24, SS23, SZL23, SLS24, TPF22, WZZ18]. **BCQ** [LNYZ21]. **Be** [BS19, XXS21, Lau94, Wri95]. **Beats** [Bom15]. **Behaved** [Li10]. **Behavior** [Abr05, BB21, BM20a, BCGH08, CB00, DIL16, GHNS19, LM04, NF01, Tüt03, BLN92]. **Belief** [HHP18, HP18]. **Beliefs** [DG20]. **Bell** [HKP24]. **Benchmarking** [MW09]. **Bend** [MW06]. **Benders** [RCGR18, WA15, ZPR00]. **Benefit** [LDS22]. **Benign** [MB24]. **Benson** [Qiu08]. **Best** [BQX15, CCM20, CCM23, CU99, CST19, DLW99, LS22, LN02, LJ02, LN03, Luk08, Pan16, Pot14, BL91, SM93]. **Best-Response** [LS22]. **Between** [Bac15, BGV20, EF02, INT15, AP14, BO17, HLB20, HN07, HHJL23, LH02, SZ14, WX20a, Zha96]. **Beyond** [BSTV18, DHL15, ZMB⁺20]. **BFGS** [AGJJ00, BB19, BTZ92, Dai02, GG18a, GL18, HAG18, KON98, LF01, NN91a, XBN20, YMT04, ZC10]. **Bi** [LCPS20, MS23]. **Bi-level** [MS23]. **Bi-parameterized** [LCPS20]. **Bias** [DL22]. **Bicriterion** [CJK98]. **Bidirected** [DW11]. **Bienstock** [Mas20]. **Bifunctions** [JW14, KQ19]. **Bifurcations** [RM08]. **Bilevel** [AAS17, BDM16, BM16b, BNL⁺16, BCD20, CCLW14, Chr20, DKL21, DGJ09, DMZ12, DZ14, DKM18, HWWY23, HXL23, JLLP16, KYYZ22, LSS19, LM24, NWY17, NWY21, SS17, SS23, Sol07, WX17, WTKR13, XYZ15, YK18, YZZ97, Ye04, YZ10, ZZ96]. **Bilinear** [BFS16, DRT17, GACD14, MSG20]. **Bin** [EL08, EL10]. **Binary** [BHM18a, BT00a, BMZ01, BV06, GVA11, GdW00, KL10, NST18, Pap16, STKI17, XHL14, ZJS18, ZT92]. **Biobjective** [hRK14]. **Biological** [BLMH06]. **Bipartite** [BMS23, Gro95, RV93]. **Biquadratic** [LNQY10]. **Bisection** [SM99, PR95]. **Bivariate** [MN09]. **Black** [LLRV19, Vav93]. **Black-Box** [LLRV19, Vav93]. **Blackbox** [ABK22]. **Blackboxes** [AABL21]. **Bland** [DHL15]. **Block** [BT14, BPS15, BDL23, CN17, CH02, CHLZ12, CP15, DL15, DLR16, GG18a, GK96, GL08a, HM15, HY15, LLZ23, LUZ15, Lu17, MZ99, MN96, MS13, NT19, Och19, RHL14, SBT16, SY19, STY15, Wri12, XY15, Xu18, GMR91, SM91, ZWHZ23]. **Block-Angular** [CN17, MZ99]. **Block-Coordinate** [CP15, Wri12]. **Block-Decomposition** [HM15, MS13]. **Block-Diagonal** [GK96, GMR91]. **Block-Diagonalization** [GL08a]. **Block-Iterative** [CH02]. **Block-Regularized** [NT19]. **Block-Separable** [SBT16]. **Blocks** [BFM98, GK94]. **Bodies** [GPT10, LRO05, TP02]. **Body** [dCST15]. **Boltzmann** [BH95]. **Boolean** [BMS23]. **Boosted** [AV20]. **Boosting** [LM20b]. **Bordered** [GK96]. **Borwein** [BWY10, CPRZ20, HDL21, Ray97]. **Both** [ZZN18]. **Bound** [AKS00, BJ22, BBCS21, FL98, GJT23, HP09, KLLM22, KM24, LT99, Li10, LM99, MNP98, uDR15, MT04, PRRL97, RVZ24, RvdVH15, RSvdVH16, Ulb01, Vui14, YZS19, ZL22a, BT96, Eck94, Lau94, Li96, LT92, LT93, LL94, MT91, NE19]. **Bound-Based** [NE19]. **Bound-Constrained**

[KLLM22, LM99, uDR15, Ulb01].
Boundary [DD98, ET07, GTdS06, KS99, Man99, SKR16]. **Bounded** [CCM23, CWP20, DGR17, DK10, FLP19, FPT22, KTSB21, LLAN22, LLAN24, MGGS09, PH23, Phu10, Shi18, LS93].
Boundedness [MOT04]. **Bounding** [Cap02, HP07, SÖ17]. **Bounds** [AHH⁺24, AMS16, Ans00, BMFY24, BNT04, BDDM19, BCD⁺18a, Bom15, BHS15, CGT20, CX08, CR23, CCT21, CL96b, CL23, CPRZ20, Den97, DFS03, DdLM21, ESKL18, FL98, GM12a, GMO14, GL08a, HWWM24, HS06, HLNZ08, Hu07, HN04, HR15, IdW16, Jan04, JSX24, KNT10, KR03, LL22, LCC⁺20, LT02, Li97, LN09, LLLP24, LM04, LSTZ07, MMN⁺22, MP16, MP19, MLLB08, MP10, NST18, NC16, NZ01, NY02, NY05, NT08, NKT10, Nga15, NF01, PARN22, Pen19, PM15, Pyt98, Son06, SWW21, Stu00, WY01, WY03, Yan09, YK18, Zha00, ZN05, ZW12b, ZB18, dKL10, dKP12, dKHL17, dSTVB18, CH93b, CL96a]. **Box** [BL09, Dos97, FJS98, FLP02, HZ06a, LLRV19, Qi99, RG00, SW99, XSLZ11, dKHL17, FM94b, MMZ95, Vav93].
Box-Constrained [dKHL17, MMZ95]. **Boyle** [PB17]. **Branch** [AKS00, FL98, HP09, PRRL97, Pfe08, Eck94, Lau94, NE19].
Branch-And-Bound [FL98, AKS00, PRRL97, Eck94].
Branch-and-Cut [Pfe08]. **Branching** [NRS21]. **Breakdown** [GP04]. **Breaking** [HN19]. **Breakpoint** [Cap02]. **Bregman** [ATP21, AIMM24, BC03, BDL18, BDL21, CH02, CT93, Ius91, LTAP22, WB22, YT22].
Bridge [SZ14]. **Bridging** [HHJL23].
Broadcast [IH14]. **Broyden** [YMT04, BLN92, HGA15, HK92, KS91, KS93, O'L95, YY95, ZCD00].
Broyden-Like [ZCD00, YY95]. **Budget** [LY98]. **Budget-Dependent** [LY98].
Buffered [MU18]. **Bundle** [ANP08, AFFG14, ASSS23, BR19b, DSS09, DG23a, DG23b, FK00, FH14, Fra02, HS10, HR00, JBK⁺18, KPZ19, Kiw06, Kiw07b, LM21b, MSQ98, Mon23, OSS11, SS05, SSN04, Sol07, vAS14, vAF18, Kiw96, SZ92].
Bundle-Trust-Region [KPZ19].
Bundle-Type [MSQ98]. **Burer** [BDK⁺24, WW20]. **Burmeister** [BPC11].
Calculation [FG04a]. **calculations** [Dun93]. **Calculus** [BFO19, CD00, CHL16, EL09, HLZ08, HJB20, LN11a, MR12, PW05].
Calm [Lev00]. **Calmness** [CCP22, CKL⁺14, DSZ17, Gfr11, GCPT18, HJO02, HJ02, KYYZ22, SYZ19, Son06, ZN09, ZN10].
Campoy [BSW23]. **Can** [ABGJ14, BS19, Gor22, HN05, Lau94, XXS21, Xu22].
Canonical [BV18b, CKLP07, SVD14].
Capacitated [AKT17]. **Carathéodory** [AHH⁺24]. **Cardinality** [BKS16, HL11, NMU18, RSKW19].
Cardinality-Constrained [RSKW19].
Carlo [SdM00, VV21]. **Case** [ACB20, BTKNZ99, BC14, BLMH06, BR08, Cap02, CGT20, CW23, DGT20, FB00, GJV16, Gfr07, THG17, VJFC18, Tha93].
Castaing [Den00]. **CAT** [DP23]. **Cauchy** [ZNW99]. **Causal** [BBLZ17]. **Caveats** [ACB20]. **CDFs** [HXH22]. **CDT** [AZ09, Bie16, SNTI16]. **Celis** [CY99, CL23, YWAS17]. **Center** [GV00, GT97a, GLTP98, Hol04, Kiw97, Luo97, LS98b, LB00, MG98, NV99, OG03, TZS02, dRT92]. **Centerpoints** [BO17].
Centers [BR19b, Chu06, Kiw08, LT96]. **Central** [Gon99, GKS18, HdR02, LP06b, NF01, Pot14, QLSZ18, Zha98b, KN93].
Certain [PZ98]. **Certainty** [WX22].
Certificates [And00, DP22]. **Certifying** [HKP24, JL23]. **CG** [CRRW21, HL23b, HLP23, WST10, ZST10].
Chain [BCU00, BM98a, BDPX09, DS12, HS24].
Chains [AH16, Sau20]. **Chance** [CSW12, CWZ18, GHKL17, GXZ17, JHR23,

JAL15, NS07, POLW20, RP23, SFM14, TSR22, WK19, XA18a, ZJS18, vAS14].

Chance-Constrained [CSW12, POLW20, RP23, ZJS18]. **Change** [HL98, LV08, WZ95]. **Chaotic** [CB00].

Characterization [AP14, CHN18, CHPA16, DSZ17, PA14, Qiu08, RS11, Win08, Tha93].

Characterizations [BJ22, BGM19, CGT10b, DSST20, DR96, Gfr11, GM15, Hu07, JL10, JJ15, MRS14, GIJT96].

Characterizing [FBM15, FBO21, Jey03, JLD03, WG19, ZT92]. **Charge** [AKT17].

Charged [YTY24]. **Cheaper** [Nau02].

Chebyshev [FI08, Fay02, FG04a].

Chemical [BLMH06, JSC95].

Chemical/Biological [BLMH06].

Chemistry [XS99]. **Chen** [CX99].

Chervonenkis [LL22]. **Chinese** [SM93].

CHIP [ET07, LJ02, LN03, LN05b, LNP07, LN14b].

Choice [BMS23, HXH22, IK92]. **Cholesky** [SE99, Wri99]. **Chordal** [WML21a, WML21a]. **Chordal-TSSOS** [WML21a]. **Christoffel** [Slo22]. **Chromatic** [GL08a, GL08b]. **Chvátal** [AL14, Mas20].

Circle [BP12]. **Circles** [MC05]. **Circuit** [DKS22]. **Circuit-Augmentation** [DKS22].

Circuits [GLM98, LL00]. **Circulant** [Dah99]. **Circular** [HL06]. **Circumcenter** [BBCI⁺24]. **Clarke** [BDLS07, DF19, JBK⁺18, nnSnPm24].

Class [ASNP16, ABCFR20, Ani05a, ARS07, AST10, BPL12, BT21, BR23b, BTT96, Ber97, BDL23, BU22, CODL22, CB14, CLO14, CLP16, CH17, Chr20, Chu18, CS15, Dah99, DLM21, DIS04, Dax09, DLR14, DSZ17, EA99, GAP08, Gfr13, GST11, GER23, HM16, HJO02, HK06, HL17, HL20, HM02, HF14, HGA15, Ios01, IK00, IK16, KR02, Lau00, LM02, LT10b, LBT22, LH04, LZ03, LZ19, MG98, PC08, PT18, PLS08, PS10b, Pul00, QP23, QY14, SU14, SA04, SHP18, SW14, Sol07, Sta99, SH97, SW24, Sva02, WA15, WCP17, Xu06, XLZH19, YFHS16, YPC18, Yin99, YPL21, YL11, ZML21, ZX99, ZL22b, ZHE23a, ZCT10, ZLTD22, BT94b, BLN92, CGST93, DL91, MS94a, Sar95, ZTP93, Zha94b, dRT92].

Classes [CN17, CHLZ17, LX23, LBP20, PR07a].

Classical [BT04, BNVP24, Di96, KMM23, TP16].

Classification [Sch92]. **Clique** [BMP22, MPB02]. **Closed** [CL14, DLW99, JPT13, KS18, Las11, LN05b, LNP07, Rut17, SYZ19, ZN11, Zhe20].

Closed-Form [Rut17]. **Closing** [WX20a].

Closure [DG09, GVJS10]. **Closures** [DGR17]. **Clouds** [CKS15]. **Cluster** [BH96, PM15]. **Clustered** [LLST19].

Clustering [DK22, PW07, PH18, PM15, RSKW19, YCST22]. **Clusters** [DV16]. **CM** [Eck94]. **CM-** [Eck94]. **Co** [ZM96].

Co-Coercivity [ZM96]. **coarse** [DMK⁺94]. **coarse-grained** [DMK⁺94]. **Cocoercivity** [MT20]. **Coderivative** [MO07b].

Coderivatives [HY16, YY23]. **Coefficients** [MEV23, RP12, SW14, SW15, IK96].

Coercive [BS15]. **Coercivity** [ZM96].

Coherent [GSU21]. **Cohesion** [HKK11].

Coincide [LWY24]. **Coincidence** [AAZ15].

Collection [RP12, SYZ19, ZN08]. **collinear** [Lag93]. **Colorings** [CZZ19]. **Column** [LS98b, RADK05, TQP22, LN93, Mit94, Ye92]. **Combination** [CGST96a].

Combinatorial [ABGJ14, BYZ00, BNT04, BGM24a, BGM24b, EAV10, FHKM06, MS02, PARN22, VD06, ZÁC17, Ali95, Omn94].

Combined [HYF05]. **Combining** [AA20, BCD⁺18a, IH14, RK19, YZ10].

Commodity [JJ15]. **Common** [BLT17, DR13, EL10]. **Communicating** [FFG99]. **Communication** [ZM06, GMS92, Lau94]. **Commutation** [GJ17, RSS14]. **Compact** [DP22, KS18, RR08, Sch05, TY04, ZT92].

Compactification [AM00]. **Compactness**

[MZH20]. **Comparative** [BER04].

Comparison [AH16, BHHK00, Cel07, GHZ99, HAN11, MS11a].

Comparison-based [AH16].

Compensation [ZM06].

Complementarity

[AM00, AFS01, ASS18, AHSS19, Ani05a, Ani05b, BM18a, BLRS22, Bil02, BW02, BKS16, CPS07, CH97, CX99, CY00, CQT03, CX08, CYZZ19, CLYZ22, CY10, CO12a, DIPR20, DIS04, DYC⁺21, FS97, FCF07, FFG99, FLT01, FT02, FT07, GS07, GNL11, HYF05, HK09, HMP⁺08, IPRT00, IS02b, IS02c, IS08, ISU12, JRT97, JFQS98, JR00, JRS10, KDB09, KP99, KN05, KFF09, KS14, KLLM22, KSH97, KSS99, KSX08, LR10, LLCN06, LP06b, LXL11, LM05, MN96, O'D21, Pot08, Pot12, RB05, RFNP14, Sch01, She14, dCST19, Sim11, SS97, SS00, ST09, Tse97b, TP02, Ulb01, WBME14, XS16, Xu06, YF00, Ye99, YZ16, Yos07, ZC09, ZY14, Zha98b, ZCT10, vdLTY07, DL91, Gow92, Kan96, KKM93, Li93a, Man91, McS94, MS94a, MPW95, TYF96, Zha94b].

Complementarity-Type [BKS16].

Complementary

[Gre00, IPRT00, MPB02, dAGL24].

Complete [AP14, GM15, GIJT96, JL10, NYZ18, RT19, Sch96, RS96]. **Completely**

[AKK14, Don14, LP15a]. **Completion**

[CCS10, CCF⁺20, FGM17, LZ24, RO18, iT17, Van14, FKMN00]. **Complex**

[JM18, SBD⁺11, SVD12, ZH06]. **Complexity** [AHLN16, AMS16, Ans02, BC14, BGM⁺16, BM18c, BRZ20, BM20b, BR21, CCLW14, CGT10a, CGT11, CGT12, CGT14, CGT20, CTW19, Cri22, CRS18, CRRW21, CW23, DW24, Ete20, Fil99, FV99, FL16, GHK17, GJV16, GLY96, GMM17, Gon99, GJT23, HL23b, HLP23, HWWY23, HCH20, HY15, JSX24, KT14, KMM19, KMM23, KM24, LOZ23, LT10b, LM21b, LX23, LZ23b, MR10, MT04, MS10, MS11c, MS12, MS13, NS98, Pap16, PS20, Pot14,

RW18, SP97, Shi17, Spa14, THZ23, Vav10, WC24, WZ24, Yun14, dKV16, HH96b, JY94, Ren95, Tod92, Vav93, Ver96, Zha96, dRV92].

Component

[CCN⁺18, DKLM22, EH20, WLS23].

Components [KLW18, TY11]. **Composite**

[ATP21, ACS14, BIM23, BH14a, BAC11, BAR21, BH14b, CC19, CGT11, CN23, CT03, CPS18, DN22, DR18, FGO14, GL12, GL14a, GN19, GN23, HS21, HM15, HM16, HLY16, Jey91, JL03, JLZ20, KMM19, KM24, LSS14, LN07, LP15b, LST16, LZCW23, LM21a, Lu17, MS20, NC16, NY05, RW21, SFMF20, THG17, TDFC18, WC24, WPY23, Xu17, Xu24, ZX21, dAGL24, Iof94, TZSW96].

Composition [BGN22, YWF19].

Compositional [KP22]. **Compositions**

[KLW18, LMZ21a]. **Compound** [EN14].

Compressed [AI11, AI12, CWW18, ZYP21].

Compromise [BNL⁺18]. **Computable**

[Den97]. **Computation** [BGV20, BM07, CH17, DW15a, DJS13, GLR14, HF14, KS12, LFKCT23, TQP22, Pan94]. **Computational**

[AHLN16, BLG13, CCLW14, FWKS15, FL16, GR03, Luc09, Mit00, OF03, RS97, SBT16, THZ23, Wri98, Zas10, ZK15].

Computationally [HNO15, LT01].

Compute

[BCD⁺18a, MPR10, MGGS09, Dan93].

Computing [Aus10, Bac14, CST19, EZ10, For05, FT02, FT07, GLTP98, GL08a, HH96a, INT15, PT18, PVZ07a, Pot12, Sag16, Spa14, XLD99, ZAG24]. **Concave**

[AHLN16, BB23, BL22, Del19, GKPV01, HA21, HM16, KM21b, MOP20, Nem04, OLR21, XWSD24, Xu24, ZLTD22, BD93, FM94b, GMR91]. **Concavity** [GVJ06].

Concept [MS02]. **conceptual** [SZ92].

Concordance [Gül97, CM11]. **Concordant**

[CBP24, FS23, Fay02, KU15, Lu17, MSS15].

Concrete [GNL11]. **Condition**

[AZ09, AB12, AMS10, AFSS19, Ani00, BM17, BV21, CWY11, CCH05, CCP08, CC14, CH17, EF02, FS12, FGO14, FV99,

HSS20, JJ15, KYYZ22, Kel99, MP97, MY09, Mat05, MS11b, MPR10, NF01, OF03, Pat16, QW00, QW01, Ren96, RVZ24, See22, VD06, WZ24, YZ13, YZS19, Zas05, Zol03, NT02, Ren95, War92]. **Condition-Based** [FV99]. **Condition-Measure** [NF01]. **Conditional** [Bac15, BPS15, BSR17, ET19, GC23, GH16, HKMS20, HCH20, KS16b, LZ16, LRZ21, OS23, Peñ23, SFMF20, dF09]. **Conditioning** [CT13, DU21, EF02, Fle98, NRP19, Pat16, Wri98, AW93]. **Conditions** [AAS17, AXY23, AHSS19, ASS24, Aus10, BT04, BYZ19, BT00a, BE14, BTKNZ99, BGY⁺23, BH19, BOT06, BPC11, BGM⁺16, BCW08, BHP18, BCS99, BKMW20, BHR19, BKS16, CLMP10b, CT02, CdIRT08, CHW12, CM20, CM22, CNY14, Che15, CW18, Chu18, CHL16, CLPA21, CDZ17, DZ14, DKM18, DLW99, Dol20, EW09, FBM15, GW21, Gfr07, Gfr13, Gfr14, GM15, GJN06, HMW21, HS06, HN09, HJ02, HS11, HN04, JLD03, JL03, JL24, KT18, LP06a, MM11, MFBR24, ML05, MY10, Ni05, PY97, Pen17, RT06, SN07, SDR20, SPM18, SKR16, TM15, WX20a, WY01, WY03, XY10, YZZ97, Ye99, Ye00, YZ10, YZ16, ZFL06, ZN11, Zhu02, nnSnPm24, Di96, DFKS11, Gil97, JSC95, KS10, Sta92]. **Condor** [CF01]. **Cone** [AMRS16, AKK14, Aus15, BBW18, BF08, BA24, BGM19, BA13, CT06, CYZZ19, CH17, CST19, Don14, EI06, FBM13, FSF12, FLT01, GVA11, GU22, GKT24, HYF05, HW10, HNKK17, JY04, JL18, JBAS10, KFF09, Kas10, KM21a, KSX08, LP15a, LST21, Lim11, LY07, MOS14, NT16, OOR17, OR11, PC08, Sha97, TW14, Tse07, Wan24, YZ16, ZY14, ZN14b]. **Cone-Constrained** [JY04]. **Cone-Continuity** [AMRS16]. **Cones** [BSW23, BP07, CM20, CM22, Chu03, CY10, CL14, Fay02, FG04a, GS07, HL02, KFGT21, KT00, LL23, LLLP24, LRS22, LS91, NT98, PA14, Per23, Ran06, Ros14, RT19, Sau20, Yos07, ZW12a, ZVP06, nnSnPm24]. **Confidence** [Lu14, Vog08]. **Configurations** [RO18]. **Conflicts** [EL08]. **Conformation** [Wu96]. **Conic** [AB08, AT06, BTNR02, CCH05, CCP08, CP01b, DJV06, DSZ17, EF02, FV99, Fre03, GL15, Góm21, HL23b, JR08, KKT20, KM19, LP15a, LFJ⁺11, LZ23b, MÖ09, MDV12, MOR15, NS14, Ni05, OHF12, Peñ00a, PR20, PRT02, PFA17, PH18, RSKW19, SOT09, SH15, SAV14, STY15, WA15, WPD22, Zha00, ZN05]. **Conic-Constrained** [GL15]. **Conic-Quadratic** [BTNR02]. **Conical** [BJ22, DLW99]. **Conjecture** [GR10c]. **Conjugacy** [LTP23]. **Conjugate** [BTT96, Bla21, BW05, DO19a, DHL⁺99, DY99, DK13, GP19b, HZ05, HZ14, IY09, IS02a, Luc09, NYF11, PP18, QQS03, Ren96, Sat22, TK02, GN92, IKR⁺91, Ort91]. **Conjugate-Gradient** [Ren96]. **Connected** [RK19]. **Connections** [RR15]. **Connectivity** [YmZS15, GMS92]. **Consecutive** [HL06]. **Consensus** [BHP23, FHPS22, SLWY15, SY18]. **Consensus-Based** [BHP23, FHPS22]. **Consequences** [AMS10, AMRS16, AHSS19, AFSS19]. **Conservative** [LT21, Sva02]. **Conservativeness** [RG24]. **Consistency** [CCD24, HS19, JHR23, Ram18]. **Consistent** [Den14, KCS97]. **Constant** [BHG07, GSZ14, JL24, LLT22, MS11b, QW00, QW01, Qi16, SW14, SW15, Zua03]. **Constants** [AC02, CCP22, SK06]. **Constrained** [ANT16, AMS10, Ani02, AKR23, AKK14, AO18, AFS14, ACP11a, ACP11b, AD06, ACD08, AST10, ACL99, BQX15, BCL07, BBTT12, BE14, BCRZ21, BHHK00, BG08, BGM⁺16, BM18c, Bla21, Bla23, Bom15, BMSS19, BP97, BHP23, BM20b, BCN08, CKP12, CGT14, CM20, CM22, CTW19, CR23, CSW12, CDM20, CV17b, CPRZ20, CNW10, CO12b, CRS18, DV97, DEAM97, DR14, DGN12, DW10, Dos97, EA99, FLP02,

FNMK24, FLLR14, FS96, FIS10, Fle14, FV16, FBM13, FM97, FS05, FLT03, GSU21, GP19a, GHKL17, Ger08, Ger11, GMS02, GL15, GKR14, GHHL05, Gou99, GSW97, HPU19, HZ06a, Hal24, HH96a, HLP23, HR14a, HSS20, HK06, HK10, HSW14, HR22, HY06, Iid12, JHR23, JAL15, JY04, JST12, JL16, KLLM22, KK02, KLT07, KMM19, KM24, KS16b, KR02, LLS05]. **Constrained** [LNP98, LM02, LT99, LT00, LT10a, LJ02, LNP08, LST16, LM99, LY11, LLC22, LLS06, LL09, LLS10, LLR16, LFJ⁺11, LSL08, MNP98, Mar17, MLC22, MU24, MM21, uDR15, MP99, MRS14, MBW09, NS07, ND10, NR20, OBN23, POLW20, Pen19, PC03, PM15, Qi99, QQ00, QLSZ18, RP23, RSKW19, RN98, SS05, SU14, SO21, RSW16, SZY16, SBT16, SV07, SY13, Sol98, SLWX23, SW99, SLM05, TDKC14, Tse02, Ulb01, VIT22, WX16, XSLZ11, XA18a, XHL14, XYZ15, Xu17, Xu18, XLZH19, YH01, YLQ03, YPL21, Zas05, ZJS18, ZL20, ZC20, ZL22a, ZWHZ23, Zhu02, ZU11, Zie14, dKHL17, vAS14, BCT93, BNS95, Bur92, BTZ92, EA95, FMS94, Gil97, GR94, GK95b, GLW91, MMZ95, NN91b, PZ94, RS94, War92, Wri92]. **Constraint** [AHSS12, AMRS16, AFSS19, ACFH24, BJ22, BM20a, BDdSM15, BH19, BKMW20, BHR19, CS08b, Din98, Dol20, FLN10, Fle12, Gfr11, GY17, GM17, GM19, GJLVP14, GVJS10, GXZ17, Her09, HY16, IS02b, IS04, JLD03, Kan14, KS10, KNT10, Li97, LNS00, LJ02, LN03, LN05a, LNP08, LPR98, NKT10, SD20a, Son06, Sor97, TAW06, VR05, WB16, WA15, Ye00, ZN04, ZN07b, ZW12b, dSTVB18, FM91]. **Constraints** [ABMS08, ASS18, AHSS19, Ani05a, Ani05b, Ans17, AKR23, BT04, BMS23, BT00a, BE06, BDM16, BM18a, BCWP21, BCU00, BMW10, BGM24a, BGM24b, BFMS14, BKS16, BL09, BA13, CCL09, CCD24, CGT20, CdlRT08, CSW15, CM21, Chu16, CS15, CGST96a, CGST96b, CO12a, CWZ18, DLM21, DFNS05, DZ07, DR03, DHR07, DW15b, DJV06, DFS03, DK10, FFK98a, FJS98, FRMP18, FLRS06, FHN09, FP98, FT02, FT07, GLCxY18, GW21, Gfr07, Gfr14, GY17, GLT03, GNS08, GLHZ11, GNL11, GLY12, GYZ14, GLYZ14, HLB20, HCH12, HW10, HJ02, HH06, HK09, HK10, HS11, HR12, HR14b, HL06, dMM10, HMP⁺08, HS17, HYY16, ILR01, IS08, ISU12, Jey03, JR00, KDB09, Kan14, KS10, KS14, KY21, KLLM22, KNP98, KCS97, KU15, Kuč08a, LRZ21, LRP16, LT02]. **Constraints** [LLCN06, LN03, LSY24, LXL11, LX14, LMX17, Lue08, LA08, LSF⁺23, LSTZ07, LZ10, Mal07, MX06, Men17, Nga15, NTA04, OHF12, PS10a, PZ98, PZ00, PZ03, PS11, PY97, RB05, RT06, RR08, Sch09, SW11, SFM14, Sch01, SSSZ10, Sha97, SKR16, SLWX23, SU10, SKL09a, SXMW13, STY15, TN21, TAW06, TSR22, Trö05, THZ23, Wac14, WJ00, WWLY21, WBME14, WK19, Xu06, XY10, Xu20, Xu22, Ye99, Ye00, YZ16, Zas13, ZXZ16, Zie14, vAH14, vAPA19, vdBf11, BM94b, CJ18, CGST93, FM94b, GK94, GMS92, Hei93, LS93, Li96, MT91, Out94]. **Construct** [YZ13]. **Constructing** [ZFL06]. **Construction** [Dan21, KdK23]. **constructive** [Wan95]. **Contact** [BTKNZ99, BHKO02, BHK⁺09, KP98]. **Containment** [ALSV18, KTT14, KTT15, PR07a]. **Containments** [Jey03]. **Context** [VD06]. **Contextual** [RP23]. **Contingencies** [DKL21]. **Continuation** [CX99, CC99, CY10, CH15, HYZ08, Lov11, MNP96, MNP98, MW97, SK22, Wu96, CH93a, LP93]. **Continuation-Smoothing** [CC99]. **Continuity** [AMRS16, AVS21, BSTV18, CM17, CKS17, Gri19, LTAP22, LP22, Rob07, SJM21, SW07, TM15, Gow92]. **Continuity-Like** [AVS21]. **Continuous** [AFFG14, BK12, BBW07, CAFO24, CSY23, FHKM06, FHN09, GHK17, GLHZ11, GN17, GN20, GXZ21, HP24, HKMS20, HN05,

HN07, HHP18, HG16, JY04, LM23, Luc02, MST11, MTB23, MBW09, NT06, Nem04, Pul00, SFP11, SW14, SW15, SBFA17, Tüt03, VIT22, Zhe20, ZT98, Dan93, ZT96]. **Continuous-Time** [MTB23]. **continuously** [Luc92]. **Continuum** [TY04]. **Contour** [LSW06]. **Contracting** [DN20]. **Contraction** [RTBG20]. **Contractions** [Chu21b]. **Contractive** [HLWY14]. **Control** [BDM16, BM16b, BM18a, BHHK00, Bet19, BG08, BGM24a, BGM24b, CT02, CdlRT08, CHW12, CT12, Chr20, DHP24, DFS03, FV07, FGG04, Ger08, Ger11, GHHL05, Her09, HMW13, HV05, HH06, HK10, HSW14, IK00, IT18, JS20, KS99, KS00, KU15, KR02, Mal07, MN14, PZ03, PW06, QW20, RT06, RFB⁺11, Sch09, SW11, SU14, SKC12, SKR16, Trö05, VZQD17, Wac14, ZML21, ZDR24, ZHE23a, Zie14, Dun93, GK95b, IK96, RHW93, Ral96, Wri91]. **Control-State** [Ger08, Ger11, RT06, Trö05]. **control-structure** [RHW93]. **Controlled** [Cab05]. **Controller** [LLS05]. **Controllers** [RS97]. **Conundrum** [MRS16]. **Converge** [BSW23, Las04, PV23]. **Convergence** [AA06, Abs05, AA20, ATP21, AAGM22, AFC22, AHO98, AMHL05, Alv04, ASS18, ACFH24, Ani05a, AUU24, AD19, ASSS23, AP16, AC18, AH16, ADR19, ADR22, AIMM24, BR23a, BCL07, BGN22, BSV14, BB21, BD17, BT14, Bec15, BH20, BFO19, BBCS21, BCS21, BT00b, Bia16, BF96, BDMS09, BCCL22, BT94b, Bol14, BPR20, BL91, BLY14, BLT17, BS94, BGNW05, Car22, CCM23, CHS24, CM16, Cha02, CT93, CNQ97, CR97, CW14, CSS19, CS22, CLL23, CK00, CMV19, CGST96a, CGST96b, CSV09, CP01a, CY14, DSP10, DHL⁺99, DY99, Dai02, Dav15b, Dav15a, DGT20, DV97, DEAM97, DG23a, DJV06, DG23b, DP23, DLT03, DW24, ES22, EA99, Ete22, FIS10, FS12, FGO14, FLT02, FGL⁺02, FLRS06, Gar21, GAP08, Ger08, Ger11, Gon14, GT97a, GT97b, GOST01, GR10a, GR10b, GLR15].

Convergence

[GJT23, GW19, Gri19, GY20, Gui16, GXZ17, GL18, GOP17, GOP19, GP19b, HYZ08, HdR02, HS21, HN07, HL14, Hol04, dM08, HLR16, HLY16, HK92, ISU12, JPS99, JW21, JKM23, JZZ20, JW14, JE19, JLL23, KT03, KN05, KFF09, KS14, KY21, Kiw04, Kiw07a, KT04, KRZ17, Kor00, Kuč08a, LY98, LRWW98, LPW12, LV22, LLAN22, LF01, LN07, LUZ15, LP15b, LMQ23, LSxY24, LFP17, LMZ15, LW15, LYS17, LR21a, LS21, LM05, LJ16, LS02, LM20c, LSZ98, LSL08, MM08, Man91, McK98, McS96, ML05, MÖ10, MS18, MM05, Mis23, MER18, MGR18, MOP20, MT98, MT99, MBG24, NT06, NC16, NRP19, NOS17, Nem04, NT16, NK10, Och19, OR16, Peñ23, PP16, PW17, Pul00, QP23, Ran06, RHL14, RKG08, RN21, ST13, Sat22, SU15, Sch01, Sch16]. **Convergence** [Sch96, SDR20, SdM00, ST14, Sim11, Sol98, SP24, SZ98, SSD22, TY12, TBZ16, Teb97, TP20, TWB⁺03, Tor97, TDZ20, ULC20, VGO18, VJFC18, WB05a, WB05b, Wal08, WLWY15, WLLY16, WHY⁺19, WWLY21, WLN23, WLKK23, WLS23, WP24, WCP17, WS11, Wri05, Xu22, YY95, YF00, Yin99, YNS20, YN17, YPL21, YLY16, YZS19, Zas10, ZCH⁺23, ZW12a, ZC10, ZMB⁺20, ZPXQ21, ZM96, dF09, dKHL17, BQ95, BKT99a, Boy95, CGST93, EM91, GN92, GHS95, Gur94, Ius91, Kan96, KS91, Kup96, Li93a, LT92, Mon98, Pow95, SZ92, Tor91, Tse91, Tse92, TM95, ZTD92, ZTP93, Zha94b, Zhu96]. **Convergent** [Ani02, AP21, BBCI⁺24, BHG07, BRB19, CODL22, CH15, CH16, FHS16, FS05, FQ96, GH16, GR14, GKV03, IS02c, JLLP16, Las06a, LT02, LSW06, LST20, MBW09, PNA10, PS98, PS10b, QQ00, QLSZ18, SP97, SS00, STY15, Sva02, Tse02, Wat00, WBME14, ZK14, ZOB20, ZL03, ZW12a, ZCT10, BH14b, CH93b, EW94, Li93b, McS94, PY93, ZT93]. **Converging** [LCC⁺20]. **Conversion** [KNP98]. **Convex**

[AFH⁺13, APX17, AAGM22, AB12, And00, ADV24, Ans98, ATU23, AUU24, AGJJ00, AV20, AI20, AFGG11, ASSS23, APR14, ADR22, ACC93, AT06, AFGO20, BJ22, BO17, BD17, BM20a, Bec15, BPS15, BBCI⁺24, BTZ97, BPT97, BOT06, BY11, BP05, BCU00, BNP24, BM14, BMR00, BDMS09, BCW08, BLY14, BCD⁺19, BU22, BHS15, BDL⁺16, BGM24a, BBNT24, BL22, BH14b, BGH18, BCGH08, Cal10, CG08, CKLP07, Car23, CODL22, Cha02, CM11, CCR17, CCF⁺20, CM24, CBF23, CL14, Chu16, Chu21b, Chu18, CC02, CGST96b, CH13, CDZ17, DSS09, DD19, DENR20, Den97, DLW99, DGN12, DMS22, DW22, DSD12, DNSD13, DN20, DR96, DK10, DLR17, DR18, EZ10, EL09, FMP18, FLN10, FLY11, FRMP18, FGO14, FH14, FB00, FBH22, FV99, FT08, FHN09, FQ96, FLT03]. **Convex** [Gar21, GP19a, GW21, GL12, GL14a, GTdS06, GLY96, GM12b, Gon14, GKR14, GDG22, Gor22, GN19, GN20, GN23, GU22, Gui16, Gün14, GWZ15, GP19b, HLTW14, HNO15, HHI⁺20, HA21, HTT⁺15, HLZ08, HKP18, HTY12, HLWY14, HHY15, HM16, HN09, HJ02, HR22, Hu07, HLY16, HY15, HR15, HPW23, IY09, IS02a, JMW08, JFX17, Jey03, JLD03, JL03, JL10, JST12, JLZ20, KFGT21, KF18b, KKT20, Kiw97, Kiw04, Kiw08, KT00, KS18, KNT10, Kuč08a, LRO05, LPW23, LZ16, LRZ21, LZ23a, Las16, Lem98, Lew96, LLAN24, Li97, LS97b, LNS00, LN03, LN05a, LN05b, LN07, LNP07, LNP08, LFL09, Li10, LN11a, LN14b, LST16, LMP⁺18, LM20a, LNYZ21, LCD⁺21, LBT22, Lim11, Lim23, LFW98, LNS18, Loc15, LMO06, LFN18, LM23, LZ23b, LPV05, Luc09, LPR98, LDLS20, Luk08, LS98b, MSFL17, MUPT24, MP14a]. **Convex** [MS23, MZ99, MSQ98, MM05, MOP20, MG98, MT98, MS11c, MS14, MST11, MARS10, MTB23, Mur03, NRP19, Nem04, NS07, NV99, Nes05, ND10, NS21, NY05, NKT10, Nga15, NTP24, OS23, PS10a, PC08, PH23, Phu10, PW16, Qi16, QLSZ18, RNV09, RS11, RC22, Ren16, Rev97, Ric11, RvdVH15, RSvdVH16, RW07, SS17, ST22, SS05, SD20a, SPW15, Sau20, SW11, SFM14, Sch16, See97, SKC12, ST14, Sol07, Son06, SMG14, SKL09b, SK98, Sva02, TY04, TT24, TN21, THG17, THDL22, TDKC14, TDFC18, Tse97a, Vel15, WUR⁺23, WLWY15, WZ24, Win08, Wri00, WLZY07, WSLZ17, XY15, Xu17, Xu18, Xu20, Yan09, YNS20, YN17, YPL21, YCST22, Zha00, ZWL10, ZFL06, ZN04, ZN07b, Zhe20, Zhe23c, Zhe23b, ZCTW12, ZMB⁺20, ZLTD22, dKL11, dBdH07, AH05, BMR94, BT94a]. **convex** [CH93b, CGST93, FMS94, Gar93, GLW91, GK94, Gül92, Ius91, JS95, KN93, LS93, LT93, Mel96, MS94b, NN91b, PZ94, See92, SGK21, TK96, dRT92, HKMS20]. **Convex-Concave** [BL22, HA21, HM16, MOP20, Nem04, ZLTD22]. **Convex-Constrained** [HR22]. **Convex-valued** [GTdS06]. **Convexification** [DRT17, FS08, FPT22, VZQD17]. **Convexifying** [KS15]. **Convexity** [AP14, BDS24, BSTV18, BCD18b, BR07, CHPA16, DLV10, Fay06, FBO21, GH16, HKKRZ24, KMP23, KKMP24, Las09, LTP23, LSxY24, Lim11, SL21, WLZY07, TK96]. **Convexly** [CTW19, CT03]. **Convolution** [FMP19, IT18, MWDS18]. **Coordinate** [AB12, BT14, BT21, BDL23, CLL23, CCT21, CN23, CP15, Cri22, DLR16, DPW15, FR15, FB19, HY15, LLX15, LW15, NC16, Nes12, NS17, Och19, RK20, ST13, SD23, XXS21, Xu18, Yun14, Wri12]. **Coordinate-Descent** [FB19]. **Coordinate-Free** [AB12]. **Coordination** [DMK⁺94]. **Coordinative** [Wan17]. **Copositive** [Bom15, BNVP24, BD09, NYZ18, PR07b, dP02]. **Core** [KFGT21]. **Corner** [ACHW21, ABP18]. **Corrected** [Val20]. **Correcting** [ST10]. **Correction** [BJKJ17, Gis21]. **Corrections** [BDdSM15, ML05]. **Corrector**

[DIPR20, DSD12, Gon99, JPS99, KT14, KSS99, KJ17, LMT09, LP06b, LM05, Mia96, MT04, PTZ05, SPT08, Sim11, CLMS93, DL91, LMS92, MS94a, Pot96, TZSW96]. **Corrector-Predictor** [DIPR20, LP06b]. **Correlated** [SFP11]. **Correlation** [LdQ11, PM15]. **Correlatively** [QT24]. **Corrigendum** [CM22, KN04, QW01, Zhe23c]. **Cost** [Abs05, AHLN16, BGV20, BPT97, CHW12, MBW09, Pat98, XLD99, RV93]. **Costs** [ARS07, CGC15]. **Costs-to-Move** [ARS07]. **Coulomb** [BHK002, BHK⁺09]. **Countably** [Gha17, GRS21, KTSB21]. **Counterexample** [GR10c]. **Coupled** [ACS14, Bet19, THZ23]. **Coupling** [ACP11a, CC02, GK94]. **Covariance** [HH96a, Lu09, ZJS18]. **Covariances** [HP07]. **Covariate** [QCLP19]. **Covariate-Dependent** [QCLP19]. **Cover** [AKT17, WLZY07]. **Covering** [AI20, Aus15, BP15, BDDM19, DFO20, EMN22, HHJL23, Jan06, WK19, Yil06]. **CQ** [SYZ19]. **Criteria** [GS01, XB99]. **Critic** [HWWY23]. **Critical** [CD00, CM20, CSV09, FIS20, GVJ06, HLB20, HNP00, JRS09, OOR17, OR11, Spa14, Sch92, CM22]. **Criticality** [MS19]. **Crossing** [Mut01, dKP12]. **Cryptography** [ZÁC17]. **crystallography** [DHLN92]. **Cube** [EL14, HPW23]. **Cubic** [BM17, CD19, CGT14, Lie20, YZS19]. **Cubic-Regularized** [CD19]. **Current** [DKL21]. **Curse** [HN19]. **Curvature** [CW18, FLP19, LLAN22, LLAN24, LM21a, LR22, WWLY21, Zha96]. **curve** [IKR⁺91]. **Curves** [Wen97]. **Curvilinear** [LRR98, DEG⁺91]. **Cut** [Bar96, BS19, DK22, Lau01, LSW06, LB00, Pfe08, RR08, SM99, TZS02, BMZ01]. **Cut-Generating** [BS19]. **Cuts** [ALT⁺21, AL14, ABP18, BCDJ21, EG24, GV00, Gui20, GMS21, HAN11, Luo97, Mas20, NS21, OG03, ZPR00]. **Cutting** [AWW09, Ans98, BM14, BLST19, BBV02, DSP10, DG09, DKLM22, FMW96, FGG04, GLY96, GV00, dMM10, Kiw97, Luo97, MP14a, Mit00, MG98, NV99, OG03, Por20, SXMW13, TZS02, AEGS93, Boy93, Boy95, KN93]. **Cutting-Plane** [DG09, SXMW13]. **Cutting-Planes** [BM14, Por20]. **Cutting-Surface** [dMM10]. **Cycle** [AP22, HL08c]. **Cycles** [ABW21]. **Cyclic** [BPS15, BLY14, Cri22, Lim23, MGR18, ST13, SD23, Yun14].

D [LN09]. **D-Gap** [LN09]. **D.C** [AT03, TA98]. **Damped** [ACR19, Lu17, SDR20, SW99]. **Damping** [AA20, AL21, SP24, YTY24]. **Dantzig** [Che05]. **Darboux** [Slo22]. **Data** [BRA⁺20, Chu20, Fil99, GJLVP14, Hol04, JX24, JS20, LM18, LYSA20, LZ24, LLZ24, Luc02, MMZ95, MN13, Nol98, PR20, RP23, RG22, WZZ18, KSW94, LS93]. **Data-Driven** [BRA⁺20, JX24, RP23, RG22, WZZ18]. **Data-Independent** [PR20]. **DC** [Bon97, CLPA21, FLY11, GLM98, JBK⁺18, LZ19, MM08, SW24]. **Decay** [CCH05, NA20, SAZ22]. **Decentralization** [Wan17]. **Decentralized** [HBM21, HZZS22, LdF08, LOZ23, SLWY15, SY18, SSPY24, XKK22, Xu24, YLY16, ZHE23a]. **Deciding** [ALSV18, BRS15, Ver96]. **Decision** [CSY23, Gha23, GS01, HG16, JX24, LYD24, NJS21, NS18, QCLP19, RG22, WD23, YK18]. **Decision-Dependent** [CSY23, NS18, WD23]. **Decision-Making** [JX24]. **Decisions** [AFFG14]. **Decompose** [MFBR24]. **Decomposing** [BFM98]. **Decomposition** [AP18, ADL08, BHM18a, Bec15, BW07, CSPW11, CV17a, CM11, DNSD13, Ent96, GB22, GJ17, GR12, Gui16, Har14, HM15, HHY15, KPZ19, KRR99, LC24, LZ03, LS20, LZ14, MÖ07a, MÖ09, MÖ10, MS13, PT18, RCGR18, SI13, SZ14, ST14, SVD14, SAV14,

SSY24, TLT⁺18, VJM16, WDLW23, WA15, XA18b, YL11, ZK14, DMK⁺94, DMZ94, MOT95, ZPR00, Zen91].

Decomposition-Based [MÖ07a, CM11].

Decompositions [BWY10, DP22, EZ10, MEV23, NTP24, SVD14]. **Decrease** [Kel99].

Decreasing [LSS22, RGY99]. **Dedication** [OS99]. **Deep** [BRÖA24, CHP20, LSS22].

Deficient [CGT14, CNW10]. **Definable** [CH15]. **Defined** [See97]. **Definite** [Chu03, Lim11, SH15, Fle95]. **Deflected** [dF09]. **deformation** [Dan93]. **Degeneracy** [Fle98, Fle14]. **Degenerate** [Ani00, Ani02, BCLN22, Gfr07, ISU12, KJ17, Wri02, Wri05, XYZ15, YT02, TM95].

Degradation [ABT00]. **Degree** [Mar05, Mas20, NR09, Pap17, SWW21, iT17].

Delay [MIM20]. **Delay-Tolerant** [MIM20].

Delayed [SY18]. **Delays** [Pul97]. **Delivery** [CKL97]. **Demand** [CSW15, CSY23].

Demands [BRU97]. **Dennis** [CY99, CL23, YWAS17, Don12, EA99, HL98].

Denoising [BC05]. **Dense** [Lás17].

Densities [BM07, CZZ19]. **Depend** [SLS24]. **Dependence** [QW00, QW01, QZ08]. **Dependent** [BM16b, CSY23, CJK98, CSW12, KS05a, LY98, NS18, QCLP19, WD23]. **Depending** [Cel07]. **Derivation** [WN16]. **Derivative** [AO06, AD09, BBN19, BLG13, BFMS14, CGT12, CH17, CHN18, CHNT21, CSV09, CGT10b, CR21, FLLR14, GPR02, GDG22, GR10a, GR10b, HK10, HR22, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MW09, hRK14, ST10, SHP18, WH24, WS11, XWSD24, ZCS10]. **Derivative-Free** [AO06, AD09, BBN19, BLG13, BFMS14, CGT12, CSV09, CR21, FLLR14, GPR02, GDG22, HR22, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MW09, hRK14, ST10, SHP18, WS11, XWSD24, ZCS10].

Derivatives [AD04, CV07, DHP24, GJV16, GN20, KM09, LS13, LT10a, MS03, PV23, SC91, See92, War96]. **Deriving** [SW07].

Descent [Abs05, ASSS23, BT14, BH20, BT21, BTMN01, BM17, BSR17, CT13, CWW18, CC19, CGRV21b, CD19, CGT10a, CLL23, CCT21, CN23, Chu16, CC02, Cri22, DL15, DLR16, DHP24, DAJJ12, ES22, FR15, FB19, GRVZ15, Gri24, HZ05, HL23a, HY15, JZZ20, LLZ23, LW15, LLZ24, MPTD21, MT24, MGR18, Mur03, NYF11, NC16, NL14, Nes12, NS17, NLZ10, NT19, OLM24, Pat98, QWY04, QP23, RZ01, RR23, RK20, ST13, Sch16, SS24, Tse99, XXS21, Xu24, YLY16, Yun14, ZCH⁺23, ZMB⁺20, Zhu95].

Descriptions [Kum16, SPW15]. **Design** [Bar96, BTN97, BTKNZ99, BRU97, FGM12, GHK17, GNL11, JKZ98, KNX16, LLS05, Lau00, LRP16, MPSU19, PW05, Rag13, RCGR18, RS97, SCRS00, YZ13, BTB93, BTN94, GMS92]. **Detect** [Shi18].

Detecting [NYZ18]. **Detection** [ADLL24, BCW14, BCN10, Góm21, Kel99, LR22, LLZZ19, RSKW19, ZLCL21, LP93].

detectors [GK99]. **Determinant** [DZ07, WST10, YST14]. **Determination** [TZ10]. **Deterministic** [AADD09, BH20, Gri19, Pan19, SS23, XA18a, YNS20].

Deviation [GZ17]. **Deviations** [GY23]. **DF** [SHP18]. **Diagonal** [BJKJ17, CGRV21b, Don16, GK96, KK92, SK06, ZNW99, GMR91]. **Diagonalization** [GL08a, JL16, ULC20]. **Diameter** [AP22, Ris94]. **Dictionaries** [AAJN16].

Difference [APX17, AV20, CPS18, LBT22, THDL22, YPL21, NTP24]. **Difference-Max** [CPS18]. **Difference-of-Convex** [APX17, LBT22, YPL21].

Difference-of-Convex-Functions [THDL22]. **Difference-of-Convex-SOS** [NTP24]. **Difference-of-SOS** [NTP24].

Different [EF02, Pic13]. **Differentiability** [BU22, HS24, MS20, Sal17, AB18, Jey91, LSdZ18, Sha94]. **Differentiable** [BTT96, FSF12, FLT03, GKR14, JS20, Li96, Li97, SW99, ZA14, Zhe20, Zhe23c, Zhe23b, Luc92, TYF96]. **Differential**

[BCL07, CW14, DDPR24, DST23, DR00, HV05, HST24, KRT07, LMZ21b, QW20, VJFC18, ZML21]. **Differentially** [KBGY22]. **Differentiated** [HAG18]. **Differentiating** [BPSF24]. **Differentiation** [Gfr14, MA00, vAPA19, Dix91]. **Diffusion** [FHPS22]. **Dimension** [LL22, YCST22, GHRT98]. **Dimensional** [AHLN16, AP18, BGV20, BHKM14, BM16b, BHK⁺09, BBNT24, HDL21, HPW23, JJ15, KKMP24, Lev00, Loc15, MRS16, MB24, MSG20, BDM16, Kup96]. **Dimensionality** [HN19]. **Dimensions** [BCT19, HMN10, LRWW98, LPW12, MN09, Zha94a]. **Diminishing** [RTM23]. **DIMIX** [RTM23]. **Dini** [War96]. **Direct** [AA06, AF01, AD06, ACD08, ADL08, AILT14, ALT19, CMVV11, DT91, GV14, GRVZ15, RVZ24, RR23, VZQD17]. **Direct-Search** [RVZ24]. **Directed** [SSPY24]. **Direction** [Bol14, DIPR20, GMSS17, HTY12, HLR16, IY09, JH14, KSS99, LM05, MS13, RB18, Sim11, STY15, SS24, TY12, TTT98, ZL20, dPRT01]. **Directional** [APX17, AAI07, AGH10, BYZ19, CW18, CGT10b, DHP24, DPS17, Gfr13, KM09, PT18]. **Directionally** [TZ10]. **Directions** [AADD09, BH20, BPS99, FGM17, KN02, KN04, QWY04, SSK98, Toh00, Mon98]. **Disappearance** [LDS22]. **Discontinuous** [ABK22, HMW21, MA00, MS06a, AW94]. **Discrete** [ALT19, BBLZ17, CS22, DFR07, FHN09, GHZ99, GdW00, IS02a, KP98, KSdM01, MN09, Mar05, MÖ10, Mur03, RV06, RN98, Sag16, TSAKN23, TMHP06, YKI04, ZAL21, dMS24, vdLTY07, And96b, Ral96]. **discrete-time** [Ral96]. **Discretizations** [Che01]. **Discretized** [ZT98, ZT96]. **discrimination** [BM94a]. **Disjoint** [ABDL21]. **Disjunctions** [MR10]. **Disjunctive** [BGY⁺23, Gfr14]. **Dispersion** [HLTW14, WX16]. **displacement** [BL95].

Disposal [GL10, JJ15]. **Distance** [ACHW21, AT03, AAZ15, BQX15, BDL21, CLPT06, DPW15, DKVW17, INT15, LH02, MPSU19, MP10, MW97, NY05, PR20, PP12, RBDM22, RO18, RG22]. **Distance-Based** [RG22]. **Distance-Sparsity** [ACHW21]. **Distances** [BGV20, BNL⁺16, dEH01]. **Distributed** [AH19, BJKJ17, BBG⁺20, BCN24, DW15a, DSK20, FV07, dM08, HFD16, Iid13, IH14, JRJ10, KS12, KNS11, LZ18, LZ23a, LYSA20, LS22, LL20, MIM20, MARS10, NOS17, Pan19, PB17, SB18, SSD22]. **Distribution** [BRU97, HP07, Sol98, dKLS15, CD92, FM91, FM94a]. **Distributionally** [BHM18a, BMFY24, CDL14, CCN⁺18, DM20, DMM22, GB22, GXZ17, JX24, LMX17, MLC22, MU20, NJS21, PS21b, RBDM22, Sha17, SZL23, XA18a, ZXZ16, ZAL21, vBRM24, CJ18]. **Distributions** [BCM03, Pfl10, WD23, vAH14]. **Divergence** [HZZS22]. **Divergent** [RZ01]. **Do** [LM19, PT24]. **Dogleg** [ZX99]. **Domains** [Dan21]. **Dominance** [CS15, DR03, DHR07, DR14, DW15b, GNS08, HSS17, dMM10, Lue08, MLC22, OR02, RR08, SXMW13, CJ18]. **Dominant** [BBMW16]. **Dot** [WPD22]. **Double** [DGN12, JBK⁺18, KRZ17]. **Double-Layer** [KRZ17]. **Doubly** [CST19]. **Douglas** [BM16a, BD17, BM20a, BH14a, BCN24, BAR21, CM16, DP19, Dav15b, HSX24, LR21b, LM20c, TP20]. **DQA** [BMR94]. **Drawings** [MW06]. **Driven** [AA20, BRA⁺20, JX24, RP23, RG22, WZZ18]. **Drops** [CGTZ14]. **Drum** [CU99]. **Dry** [AA20, NEYL24]. **Dry-like** [NEYL24]. **Dual** [AFC22, AHO98, And00, ADLL24, BER03, BER04, BT21, BF08, BCD⁺18a, Bom15, BH14a, BCH14, BR19b, CGRV21b, CERS18, CYZ22, CLO14, CBF23, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DP22, DHLN92, DR13, DG23b, DM20, FK00, FB19, FIS20, FG98, Fre03, FKS02,

Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, Gui20, GMS21, HA21, HSS17, HHJL23, HIK03, HSW14, JR08, JS00, KPZ19, KJ17, KR02, LCC⁺20, LN14b, LYYD24, LS04, LMO06, LJ16, LSZ98, MPTD21, MP18, ML05, MZGS08, MS00, MS03, MT99, MDV12, NO09, NT98, NS14, OR02, Pan05, Pan16, PRT02, PFA17, PS98, Pot08, Qiu08, RT19, SD23, SS24, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, Wri00, Xu17, Xu20, YY03, YT10, ZZST20, ZL22a, ZWHZ23, ZAG24, ZLTD22, dPRT01].

dual [AZ05, GT92, Ius91, Meh92, MTT94, MKT95, Mon98, RV93, Wan11, ZTD92, ZT93, ZR93, Zhu95, Mon97, Zha98a].

Dual-Degenerate [KJ17]. **Dualities** [FLN10, LTP23]. **Duality** [AAS17, AZ09, ABW21, ATU23, ABD⁺18, AT00, Bac15, BE06, BTT96, BNP24, BT20, BM07, BR19b, BAC11, Car23, Chu18, Chu20, Com14, Dax09, DG20, DO19b, FLY11, FBM13, FL16, FMP14, Gha17, GAD20, GF08, Gür10, HL08b, HY02, IS02a, JL10, KM19, LCC⁺20, Lem98, LFL09, LP15c, LBH22, LV19, MRS16, RTW97, RR08, SW14, THZ23, XSLZ11, YWAS17, ACC93, BT96, Tha94]. **Dualization** [Pen00b]. **Duals** [BTT96, KKW05].

Dijkstra [PB17, Pan19, WP24]. **Dijkstra-Type** [WP24]. **Dynamic** [ASNP16, BR23b, Ber17, BG08, BZ08, BHT16, BT19, CBJF97, Che01, CS22, DM20, ESKL18, FV07, GS21, Gui20, GMS21, HNO15, HN19, LdF08, LCC⁺20, MP07, MKU21, NA20, Pul97, SZ14, XA18b, Wri91].

Dynamical [APR14, AF22, BB21, BDL07]. **Dynamics** [ACR19, AL20, DD20, Ete22, GAP08, SDR20, YTY24].

Earliness [CKL97]. **Easy** [Shi18]. **Economics** [vdLTY06]. **Economies** [JJ15]. **Edge** [CZZ19, Ete22, Fle98, ZSY10]. **Edge-Colorings** [CZZ19]. **Edmonds** [DHL15]. **Effect** [ABT00]. **Effective** [HCH12, RBDM22, Wu96, Lau94].

Effectively [GLTP98]. **Effects** [Wri01].

Efficiency [HSX24, Kiw97, Nes12, NS17, Qiu08].

Efficient [BER03, BS19, BF08, BR08, CCFP05, DP22, GL10, HZ05, HNO15, HKK11, JL19, LT01, LST18a, LSY24, LLST19, LWZ15, LPV05, LSW20, OLR21, Pyt98, Ren16, Rot09, SSW16, SK06, SKC12, STY16, Win08, XS99, XY97, XY00, ZY14, ZAL21, ZLCL21, dBdH07, And96a, WZ95, YG91]. **Efficiently** [LST18b]. **Eigenfrequency** [SKL09a].

Eigenvalue [AINT17, Ans00, ANP08, Lie20, Men17, Nol98, Ous99, SF95, SW95].

Eigenvalues [AK08, CC18, GMO14, SNTI16, Ove92].

Eigenvectors [TP16]. **Ekeland** [GKNRP17, LN11b]. **El-Alem** [EA99].

Elastic [Ani05a, Ani05b, CO12a, Sta99]. **Electric** [PMDL10]. **Electrical** [SDGM99].

Electronic [SDGM99]. **Elementary** [LP15c]. **Elements** [SV07, ZT92].

Eliminating [LSS22]. **Elimination** [AY08].

Ellipsoid [BHS15, Dai06, FV99, Yil06, ZG03].

Ellipsoidal [BDPP14, GLRS15, Gür10, HP09].

Ellipsoids [Ans02, INT15, LH02, LH04, Yil06].

Elliptic [Bet19, CHW12, CK99, HS11, HR12, RT06, Voi08, Xu19]. **Elliptope** [dCST15].

Elliptopes [dCST19]. **Embedded** [GHW08]. **Embedding** [BQX15, HL08c, O'D21, PFA17, Qi16].

Emission [JS00]. **Emphasis** [ACB20].

Empirical [CGC15, LLX15, PP16, XF24]. **empty** [MS94b]. **Enclosing** [AY08, Yil08].

Endogenous [BG22, JX24, RS15]. **Energy** [LSF⁺23, Wu96, vAS14]. **Engineering** [SDGM99]. **Enhanced** [ASS24, BOT06, GYZ14, KS10, LZ19, LLZZ19]. **Enhancing** [SSD22]. **Entropic** [LX14]. **Entropies** [FS23]. **Entropy**

[BCM03, CHS24, CS16, SW07, WN16, BL91, BL93, BH95, DHLN92, PY93].

Entropy-Regularized [CHS24]. **Envelope** [BPR20, DDD22, JMW08, PAV21, TSP18, Wri00]. **Envelopes** [BDL18, Loc15, PW16].

Epi [AB18, BH14b, HS24, MS03, MS20, BD02].

Epi-convergent [BH14b]. **Epi-Derivatives** [MS03]. **Epi-Differentiability** [HS24, MS20, AB18]. **epi-pointed** [BD02].

Epiconvergence [CT03]. **Epiderivatives** [FB03, KM09]. **Equalities** [DEAW99, KGM23, Zua03]. **Equality** [AKR23, AO18, BT04, BCRZ21, BG08, BCN08, CGST96a, CNW10, CRS18, DV97, DEAM97, DFS03, DK10, FNMK24, FS96, HLP23, HR14a, LNP98, LY11, MX06, SO21, WJ00, XC21, Gi97].

Equality-Constrained [AKR23, AO18, DV97, FNMK24]. **Equation** [CT13, FS17, YLQ03]. **Equations** [BW02, CNQ97, CSS19, DDPR24, FP97, GO21, GLT04, GER23, HMW21, HV05, IS02c, LYSA20, LRX14, MP99, Pen00b, QY14, QW20, Roy20, SH97, SSQ04, Ulb01, Ulb03, ZK15, ZN07b, ZN10, Dan93, DMZ94, O'L95, PQ93, Pan94, Qi95, YG91].

Equilibria [CCM20, DJS13, GXZ21, GNRPT16, HF14, KS12, LFKCT23, OLR21, Pot12, RS15].

Equilibrium [AVS21, BNL⁺16, BK21b, BHR19, CSW15, DLM21, DFNS05, Ete20, FK10, FLRS06, FB00, FP98, Gfr14, GY17, GLYZ14, GKNRP17, HM15, HS11, HSK15, HST24, KS10, KS16a, KKS19, LS22, LX14, LSF⁺23, NTZ23, Sag16, SU10, XY10, DFKS11, JSC95]. **Equipping** [HDL21].

Equivalence [ET19, HLB20, TYF96].

Equivalent [Las02, Mat05, QCLP19, WX22].

Equivariant [FSP15]. **Ergodic** [Bia16, DAJJ12, MS10]. **Erratum** [ACD08, FT07, Ger11, HL20, Kea11, MZ00, OOR17, ZT98, dKPS09a]. **Error** [BJ22, BBCS21, BLG13, CHW12, Den97, ESKL18, GZ17, HS06, Hu07, HN04, KKS03, KNS11, KNT10, KS05b, Li97, LN09, Li10, LLLP24, LM04, LT92, LT93, Mar05, NC16, NZ01, NY02, NY05, NT08, NKT10, Nga15, Pen19, RvdVH15, RSvdVH16, Roy20, Son06, SWW21, Stu00, Vui14, Wri98, WY01, WY03, Yan09, YZS19, Zha00, ZL22a, ZN05, ZW12b, dKL10, dKLS15, LL94]. **Errors** [BT00b, HWWM24, JYK24, Krä24, XBN20, Zas10]. **Escaping** [ABK22, DDD22].

Essentially [BM98a, BM98b, TZ10].

Estimates [CCH05, CK99, Krä24, KS05b, Mar05, MU24, SLS24, Zua03, BL91, BL93].

Estimating [AAZ15, CSW15, MP10].

Estimation [BH03, BT20, BLO⁺23, CPS18, DGT20, GHZ99, HCH12, HH96a, LYS17, OS17, PW05, QCLP19, RTBG20, MN93].

estimator [LS98a]. **Estimators** [NK10, SLS24].

Euclidean [And96a, BQX15, BD17, BCGH08, CBJF97, DPW15, DKVW17, GMM17, GJ17, Las22, LTP23, LTY12, LT20, MMN⁺22, Mar94, MBW09, QZ00, RO18, RSS14, See22, XY97].

Euler [BCL07]. **Evaluation** [AM94, BGM⁺16, CGT11, CGT14, CGT20, KLL22b]. **Evaluations** [AF01, AILT14, BGMT19, Pic13, PW06, SOT09].

Evasion [PMR19]. **Evolution** [AAGM22, CDL16, Hyn23, Mor07].

Evolutionary [Bet19]. **Exact** [Aus15, BNP24, BDPP14, BCWW15, CG08, CYZZ19, DLM21, DdLM21, DL17, FS12, FGL24, FT08, FSF12, GAD20, GYZ14, HNE16, HY02, HN03, JL18, KS10, LCC⁺20, LP15c, MY10, RK19, RQMG12, RPK03, STKI17, Sch12, SLWY15, SBFA17, SXMW13, THG17, XLxY21, YZZ97, Zas05, Zas13, ZA14, Li96, Luc92, PZ94].

Exactness [DL01, KS18, SL14]. **Example** [HPU19]. **Exceedance** [MU18]. **Excess** [ST03]. **Excessive** [Nes05]. **Exchange** [ET19, HW10, OHF12, ZWL10]. **Execution** [MCL10]. **Existence** [AZ19, AVS21,

CGTZ14, FB00, GXZ21, HF14, JS20, KQ19, KP98, KT08, KRT07, OR16, SS23, Sha94, SSK98, Wan95, Zas00, BL93, Ver96, ZT92]. **Expansion** [BC09]. **Expectation** [CCD24]. **Expected** [CT12, DR13, DW24, MPA21, PS20]. **Expected-Integral** [MPA21]. **Expensive** [BLG13, TPF22]. **Experience** [FL98, GR03, Mit00, OF03, ZNB⁺93]. **experimental** [KBS93]. **Experiments** [BV10, IKR⁺91, KH05, Kea11]. **Explanatory** [OF03]. **Explicit** [AZ08, ESKL18, HW10, KW10, Las02, LT10a, OHF12, RN21]. **Exploit** [Gor22]. **Exploiting** [FKMN00, KKW09, CL92, Hen95]. **Exploits** [HZ16, WML21a, WML21b]. **Exponential** [BR23a, DT98, NA20, PT24, SAZ22]. **Exponentially** [XA18b]. **Exposed** [NPS10, Ros14]. **Exposing** [BM94b]. **Expressing** [FFG99]. **Expression** [NWYZ21, QT24]. **Expressions** [Rut17]. **Expressive** [Sau20]. **Extended** [AAS17, Ber96, BA13, CPS07, FLN10, FGM17, GLT03, GR12, KS05b, MS20, MTZ03, PM15, SY19, WHY⁺19, YWAS17, ZR93, Zhu95]. **Extended-Real-Valued** [MS20]. **Extending** [BCT19, DQ24, Zha98a]. **Extension** [GF08, LL94, WML21a, BMR94]. **Extensions** [AG14, BCN24, Den14, FHN09, VR05]. **Exterior** [YT10]. **EXTRA** [LL20, SLWY15]. **Extraction** [KPV18]. **Extragradient** [CV17b, IJOT17, IJOT19, MOP20, MS10, MS12, MS14, MSS15, ZZS23]. **Extrapolation** [KLL22a, LZ18, SD23, WLS23, WCP17]. **Extremal** [MTZ03, PARN22, Tha93]. **Extreme** [GLdS05, GTdS06, GHHL05, LB18].

Face [FGM17]. **Faces** [NPS10, Sau20]. **Facet** [DGR17]. **Facets** [EB20, GMS92, RT05]. **Facial** [DKVW17, KW10, LMT18, PFA17, HP94]. **Facially** [Ros14, RT19]. **Factor** [BA24, GSZ14]. **Factor-Width-** [BA24]. **Factorable** [HT24, GW93]. **Factorization** [AO18, BDK⁺24, GV15, SE99, Shi17, TQP22, Vav10, WW20, YPC18, JYZ94]. **Factorization-Free** [AO18]. **Factorizations** [Gou99, HLB20, Wri99]. **Factorized** [ZCD00, YY95]. **Factors** [RTBG20]. **fails** [Mas97]. **Fair** [DFO20]. **Families** [ABP18, Lás17, SY13]. **Family** [HLR16, JRT97, MT99, PA19, RG24, YMT04, ZCD00, Mon98, YY95]. **Fan** [DV16]. **Farkas** [Bar08, BW05, DGLM14, DMVV17, FLN10, LZH14]. **Farkas-Type** [BW05, DMVV17]. **Fast** [ACR19, BC05, CL23, CU99, Dai06, DLR16, GM12b, GH15, GK94, Gro95, NEYL24, OS17, PMR19, SP24, XKK22, YTY24, BH95, KF18a]. **Faster** [AP16, Fle01, Fox95, Gri24, HL17, HL20, ST22, TDZ20]. **Fastest** [BDPX09]. **FATCOP** [CF01]. **Fault** [CF01]. **Favorable** [JX24]. **Feasibility** [AH10, ALSV18, BD17, BBCI⁺24, BF08, BEET12, BCGH08, CG08, DLR14, DIMS18, FP98, GMSS17, GLY96, HL14, LL22, Liu20, LS98b, NRP19, TZS02, WLWY15, Gar93]. **Feasible** [AGJJ00, BH20, BDL⁺16, CLMP10a, CWH06, DIPR20, DGL10, Fil99, FS08, Gon14, GVJS10, GJR08, HR15, JRS10, LT01, LNS18, NS21, Pfe08, TT24, WY15, WLM22, WT04, YLQ03, YP20, JRW94]. **Featuring** [CAFO24]. **Federated** [ZHE23a]. **Feedback** [AFH⁺13, LFKCT23, RS97, ZHE23a]. **Fees** [BK21a]. **Fejér** [ACS14, CP15]. **Fenichel** [AAS17, BD02, Boy93, Boy95, BT96, Car23, FLY11, GF08, IS02a, LCC⁺20, LFL09, LBH22, See92]. **Fenichel-Type** [IS02a]. **Fermat** [NARS14]. **Few** [CC18]. **Fiber** [ZM06]. **Field** [HST24]. **Fields** [LT21]. **Filter** [AD04, Ber96, FGL⁺02, GKV03,

GLT04, GST05, GLR14, GLR15, LY11, MU14, RKG08, SS05, SZY16, WB05a, WB05b, FLT02]. **Filter-Trust-Region** [GST05]. **Filtering** [CK00, LLD⁺02, GK95a]. **Final** [BM16b]. **Final-State-Dependent** [BM16b]. **Finance** [KB08]. **Finding** [AO06, BCH14, CC18, DV14, EMN22, EGG09, GL10, HL23b, HLP23, KL97, Luk08, MSFL17, NR20, SW24, YP20, JBK⁺18]. **Finds** [CD19]. **fine** [Zen91]. **fine-grain** [Zen91]. **Finely** [ZT98, ZT96]. **Finite** [AA20, BER03, BD17, BBCS21, BDM16, BM16b, BRB19, CP01b, ESKL18, FG04a, GP04, Gu00, GVJ06, HBM21, HMN10, HG16, LY19, LTAP22, LV22, LYSA20, Lev00, LLS06, MNP96, MNP98, PQS01, RG24, SV07, WLLY16, WC24, Wri01, XKK22, BL93, MN93, Zha94a]. **Finite-Dimensional** [BM16b, Lev00, BDM16]. **Finite-Precision** [CP01b, Wri01]. **Finite-Sample** [RG24]. **Finite-Sum** [HBM21, LY19, WC24, XKK22]. **Finitely** [AKS00, BBCI⁺24, Sab11, ZK14]. **Finito** [LTAP22]. **Finito/MISO** [LTAP22]. **Firmly** [KL97, KT08, Tse92]. **First** [AI11, AI12, BT12, BV18a, BSTV18, BRB19, CGT12, CB14, CMV19, CS15, CSV09, DDPR24, DHR07, DO19b, DFR18, GLCxY18, Gfr11, GL14b, GNS08, HM15, HS11, HN04, HZ22, LS13, LJ16, LFN18, LM23, LZ23b, LM24, MP18, OLR21, SS17, SLWY15, THG17, TDZ20, Wal08, WB16, WY03, Xu17, Xu22, YZ16, ZL22b, ZWHZ23]. **First-** [CSV09, GL14b, HN04]. **First-Order** [AI11, AI12, BV18a, CGT12, CB14, CMV19, CS15, DO19b, GLCxY18, GNS08, HM15, HS11, HZ22, LJ16, LFN18, LM23, LZ23b, LM24, MP18, OLR21, SLWY15, THG17, TDZ20, Wal08, WB16, WY03, Xu17, Xu22, YZ16, ZL22b, ZWHZ23, BRB19]. **Fischer** [BPC11]. **FISTA** [KF18a, AD15, OP19, RC22, TBZ16, VJFC18]. **Fitting** [BP12, LM18, KSW94]. **Fitzpatrick** [BBW07]. **Fixed** [AKT17, BWW12, BPL12, BLT17, CP15, DFR07, FV07, Fie00, HYZ08, IY09, Iid13, Iof11, KL97, KT08, KRZ17, SL15, ZOB20, ZL01]. **Fixed-Charge** [AKT17]. **Fixed-Point** [HYZ08, ZOB20]. **Fixed-Size** [FV07]. **Fixed-Width** [BPL12]. **FJ** [FBM15]. **Flexible** [MIM20]. **Flow** [AHLN16, AKT17, BPT97, EB20, FG04b, KGM23, LM16, McB98, RSE18, Vil05, Bon97, RV93]. **Flows** [BC09, BGV20, BCD18b, Cas00, FHKM06, KS05a, MS18]. **FM** [LNYZ21]. **Focus** [RBDM22]. **Folkman** [BT20]. **Follower** [HF14]. **Followers** [ABDL21]. **Following** [BDK⁺24, DNSD13, Fay96, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LMO06, LSZ98, Mon97, SLS24, Sim11, TDKC14, Tse97b, ZL02, AZ05, AB95, Ans96, Gon91b, Gon91a, HK06, NN91b, SG94, Zha96, dRV92]. **Food** [KS00]. **Forest** [Rot09]. **Form** [FV99, Rut17, WX19]. **Forms** [DR23, ZVP06]. **Formula** [CYZZ19, Luc95]. **Formulae** [PA19, vAH14, Fle91]. **Formulas** [CHLC19]. **Formulation** [BH19, CDF⁺94]. **Formulations** [ASZ08, BHM18b, BV10, BM18b, BMP22, GACD14, Kal18, Lu14, Lue08, RR08, WZZ18]. **Fortified** [Tse99]. **Fortified-Descent** [Tse99]. **Forward** [ATP21, ACP11a, APR14, AP16, AC18, AD15, BRÖA24, BFO19, BPR20, BAD18, Dav15b, Gis21, LSxY24, LFP17, MT20, RW21, Sal17, TSP18, VSBV14, CR97]. **Forward-Backward** [ATP21, ACP11a, APR14, AC18, AD15, BRÖA24, Gis21, LSxY24, MT20, RW21, TSP18, VSBV14]. **Forward-Backward-Half** [BAD18]. **Forward-Douglas** [Dav15b]. **Foundations** [ABD⁺18, DR13, PS21b]. **FPTAS** [HNO15, HN19]. **Fractional** [BR19b, BGH18, BGH19, CZZ19, GL08a, Jan06, KM21a, ZL22b]. **Frames** [PC03]. **Framework** [Aus99, BT12, BY11, BNVP24, DLM21,

DW22, EG24, FFK00, FH14, GLCxY18, GL12, GMM17, HS23, HWWY23, JBS⁺23, JX24, ND10, Pat98, Sat22, TDFC18, ZDR24, ZCH⁺23, AW93, FKMN00]. **Frameworks** [IK14]. **Frank** [BCD⁺18a, BRB19, BRZ20, CBP24, FGM17, PRS16, WLM22, XF24]. **Fréchet** [AXY23, SPM18]. **Free** [AB12, AB08, AO18, AO06, AD09, BTKNZ99, BBN19, BLG13, BDDM19, BFMS14, CGT12, CWH06, CSV09, CHL16, CR21, CNW10, FLLR14, GPR02, GDG22, GL10, GJT23, GKT23, HR14a, HR22, JJ15, KT14, KNX16, LLS06, LL09, LLS10, LLR16, LLRV19, LS02, MWDS18, MT24, MW09, QQ00, RSS00, hRK14, ST10, SN07, SHP18, SKL09a, SKL09b, WS11, XWSD24, ZCS10]. **Frequencies** [BBF⁺04]. **Friction** [AA20, ABCdC23, BHKO02, BHK⁺09, NEYL24, Sta04, GK95b]. **Frictional** [KP98]. **Frictionless** [TP02]. **Fritz** [BOT06, KS10]. **Fromovitz** [GVJS10]. **Front** [MGGS09]. **Frontier** [DKVW17]. **Fronts** [BKR17]. **Frugal** [MBG24]. **Fulkerson** [Che05]. **Full** [HHY15, MRS14, MN14, MOS14, MN16, Roo06, Roo15, CJ18]. **Full-Newton** [Roo06, Roo15]. **Fully** [DN22, FNMK24, MARS10, ZZN18]. **Function** [AF01, AILT14, BM20a, BDMS09, BGH18, BGH19, CGT11, CHS24, CL96b, CHLC19, DL01, DW22, FS97, FBH22, GV14, GJT23, GKT23, Gül97, GLYZ14, HK06, HK09, HPW23, HN03, JPT13, Kau99, KT14, KMM23, LSW06, LY11, LL09, Men17, MS23, MST11, Ous99, PTZ05, PW06, SS05, Sch08, Sor97, SGK21, SW99, SXMW13, TF96, Ulb03, WHY⁺19, WS11, XLxY21, YY03, YZ10, ZZ16, FM94b, GLW91, Gon91a, JY94, Luc92, MW94, SZ92, See92, Tha93, War96]. **Function-Based** [DW22]. **Functional** [CHW12, CW18, DLV10, Fay96, GNRPT16, ILR01, Xu20, Xu22]. **Functionals** [BH15, Cel07, CKS17, KKS03, Lás17]. **Functions** [Abs05, AAGM22, AXY23, ABF14, AV20, AZ19, AFGO20, BER04, BDS10, BGJ12, BS19, BBW07, BNL⁺18, BBN19, BCU00, BM14, BLG13, BDLS07, BDL07, BM98a, BM98b, BW05, BU22, BH14b, BGH19, CBP24, CV17a, CX99, CQT03, CCR17, CWP20, CH09, CDM20, CHY10, CT03, CGT10b, CDZ17, DHML01, DSS09, DF19, DRT17, DD19, DLR14, DMZ12, Don16, DK10, EH20, FMP18, FG04a, FB19, FH14, FB03, FBLV24, FGG04, FHN09, FSF12, FLT01, Fus14, Gor22, GN17, GN19, GN20, GVJ06, HLZ08, Har09, HXH22, HHY18, HP07, JMW08, JFX17, JL03, JLL23, KKS03, KM09, KLW18, KMP23, Kuč08a, LP10, LMMZ21, LB18, LSS14, LS13, LN07, LN09, Li10, LN11a, LNYZ21, LC24, Lim23, LN11b, LLRV19, Loc15, LT20, LPV05, LWY24, MWDS18, MFBR24, MZGS08, MY10, MS00]. **Functions** [MS03, MS20, Mon23, MN13, MA00, Mur03, NZ01, NY05, NP23, ND09, PA19, PAV21, Pha20, Phu10, PW16, PR96, Qi99, QW20, RG00, RGY99, Sch16, See97, Sen07, SVD12, SMG14, SW07, TM15, TSP18, THDL22, TZ10, VIT22, WC24, WZ24, WDST14, YZZ17, ZA14, ZFL06, ZT98, ZCT10, dBdH07, vAPA19, AW94, ACC93, BD02, CT93, GK95a, GIJT96, Li96, LS91, Luc95, MLRR93, Mar94, MS94b, PHR91, PZ94, ZT96]. **Functors** [Vel15]. **Fundamental** [Dan21, HL14, SKL09a]. **Funnel** [CRS18]. **Further** [TSP18, Tse03, WZYB08]. **Fused** [HL17, HL20, LST18b, YLS⁺15]. **fuzzy** [NT02]. **Gâteaux** [JS20]. **Game** [ABDL21]. **Games** [ABGJ14, CCM23, GXZ21, HS23, HF14, Hyn23, KS12, MPR10, PS11, RS11, SS23, ZSX19, vdLTY06]. **Gap** [AP14, ABW21, BT20, BLO⁺23, CM21, CW18, DO19b, FPT22, GW18, HHJL23, LN09, Nes05, WX20a, XSLZ11, YWAS17, Tha94]. **Gaps** [GSZ14]. **Gas** [ALSV18, HPU19]. **Gateaux** [Jey91]. **Gauge**

[ABD⁺18, CV17a, FMP14, Lim11]. **Gauss** [Bel94, FGO14, GLN07, LN07, LWZ15, SW99, Xu18, ZC10, dPRT01]. **Gaussian** [GK99, HTY12, MWDS18, SFP11, vAH14]. **Gaussian-Like** [vAH14]. **General** [ABMS08, AKR23, AZ08, BGY⁺23, BKT99b, CMY15, CC02, CGST96a, CSV09, DEAM97, DS12, FGL⁺02, GVJS10, HA21, JBS⁺23, KR02, KVZ24, LL22, LRZ21, LT02, LY07, MP19, MB24, Pul00, Pul05, RT05, Ren16, SS23, Sat22, SJM21, TT24, Tse99, Wri00, XWSD24, YmZS15, YN17, Eck94, NS91, ZTP93, FKMN00]. **general-purpose** [NS91]. **Generalization** [HL23a, HL17, HL20, MN09, SVD14]. **Generalizations** [AHFH16, Don12, KM21a]. **Generalized** [AINT17, ABW21, AFS01, AD03, AVS21, BDS10, BNL⁺16, BDMS09, BK21b, BHR19, BI98, BDL21, BGH18, BGH19, CBP24, CDL16, CSS19, Chu21a, CY14, DJ21, DSST20, DJS13, FK10, FS17, FB00, Fra02, Gfr14, GO21, GJR08, GER23, HJB20, HSK15, HST24, HY06, JW21, JFQS98, JL19, JL20, JS11, KS16a, KKS19, KKW05, LFKCT23, LTP23, LZ13, LN09, Lie20, LLLP24, Lin22, LRX14, LYS17, LMZ21b, LT20, MN96, MPA21, MS21, MA00, NARS14, NTZ23, Pen00b, PQS01, PW06, PR96, QLSZ18, QY14, RC22, RPK03, Roy20, SNTI16, SFMF20, SS22, SKB18, VR05, WX19, WLKK23, WA15, XFLP21, YZZ97, ZCH⁺23, ZSL17, ZFL06, ZN07b, ZN10, ZZ16, ZÁC17, dEH01, vAPA19, DFKS11, TK96, Tre95]. **Generalizing** [KF18b]. **Generate** [BKR17]. **Generated** [Fay02, FG04a]. **Generating** [BS19, BTT96, BGP09, Boy93, DD98, KLT07, Lov11, LPV05, MP14b, NS21]. **Generation** [DKLM22, LS98b, RADK05, RR08, Mit94, Ye92]. **Generic** [BCS21, DIL16, GL12, HS19, JS97, KYYZ22, LP17, Lev04, LMH19, PW16, SS15, Zas00, JSV91]. **Genericity** [ABDL21]. **Genuine** [YF00]. **Geodesic** [Per23, ZZS23]. **Geolocation** [RM08]. **Geometric** [ATU23, DSP10, GM12a, GLY12, GYZ14, HL08b, IdW16, NOS17, SDR20, SH15, Wan24, JSC95]. **Geometrical** [CN17, KKT20]. **Geometry** [ANRV04, AL14, AIMM24, BO17, BWW12, BGH18, CM10, DV23, Fre03, Las09, MW97, Peñ00a, RFB⁺11, ST10]. **Given** [Chu21a, HP07]. **Global** [AAGM22, AKS00, ACFH24, Ani05a, BBW05, BT00a, BCS21, CCM23, CKS15, CX99, CC99, CLL23, CMV19, CGST93, CSV09, CR04, DY99, DEAM97, EA99, FLT02, FGL⁺02, Ger08, Ger11, GN92, GR10a, GS07, GH15, HPU19, HP09, HL98, Hu07, HMP⁺08, ISU12, JLL09, JLLP16, JKM23, JSC95, JL05, Kan96, KM24, Las01, LL00, LS13, LF01, Li10, LP15b, LMZ15, Lov11, LS02, LSL08, MS11a, Mis23, MT98, MW97, NLZ10, Nga15, NRS21, QWY04, Rag13, RKG08, Sch06, SK06, SZ98, SSY24, TWB⁺03, TM95, VGO18, VIT22, VS08, Vui14, WB05b, WS11, Wu96, XB99, Yin99, Zha00, ZL22a, ZC10, And96b, BKT99a, BD93, GIJT96, Hen95, RS94, RD95, Ser95]. **Globalization** [MU14]. **Globally** [AP21, BV18a, CH16, EW94, FHIS16, FS05, FQ96, GR14, GKV03, LT02, QQ00, SS00, Sva02, WX19, Wat00, WBME14, ZOB20, ZL03, CH93b, Li93b]. **GM-Based** [MNR⁺22]. **GMRES** [FP97, SAW99, ZW18]. **GMRES-Accelerated** [ZW18]. **Golden** [CYZ22]. **Gomory** [AL14, EG24, Mas20]. **Good** [BS19, LL00]. **Goodness** [Che01]. **Governed** [AL20, DST23, Voi08]. **GPS** [BP12]. **Gradient** [AA20, AFC22, ADV24, ADLL24, AT06, AFGO20, Bac15, BC09, BPS15, Ber97, BT00b, BMR00, BHG07, Bla21, BSTV18, BB23, BCD18b, BSR17, BLO05, CWW18, CD19, CHS24, CERS18, CMSZ20, CLL23, Chr20, DHL⁺99, DY99, DK13, DSK20, DGT20, ET19, ES22, Far20, FLP19, GH16, Gar21, Gri24, GOP17, GOP19, GP19b,

HZ05, HZ14, HWWM24, HL23a, Har14, HKMS20, HZZC22, HR12, HR14b, HU17, HU19, HY15, IY09, JBS⁺23, JKM23, JST12, JZZ20, KF18b, Kiw07a, Kiw10, LZ16, LZ18, LRZ21, LOZ23, LTAP22, LJ20, LS22, LT21, LM21a, LLX15, LX23, LLZ24, LM20b, LM23, MPTD21, MEV23, Mal15, MT24, MS18, MS00, MS03, MIM20, MGR18, MOP20, NYF11, NEYL24, NT19, OS23, OLM24, Pat16, Peñ23, PP18, PW05, QQS03, Ray97, Ren96, SKM19, Sat22, SW11, Sch06]. **Gradient** [SFP11, SFMF20, SSPY24, SP24, SSD22, Tse98, VGO18, WWLY21, WZ24, WCP17, XZ14a, XZ14b, XY15, Xu20, Xu24, YWF19, YLY16, Yum14, ZC09, d'A08, dSTVB18, vAH14, GN92, IKR⁺91, LT93, Ort91, Tre95, Tse91, ZR93]. **Gradient-Based** [Chr20, LJ20]. **Gradient-Like** [MS18, SP24]. **Gradient-Response** [LS22]. **Gradient-Type** [HR14b]. **Gradients** [CMYZ22, DW22, GP19a, HJB20, JLL23, SY18, VIT22, XF24]. **grain** [Zen91]. **grained** [DMK⁺94]. **Gram** [CWY11, JFX17]. **Granular** [ALT19]. **Graph** [BCN24, GHR14, GSZ14, GL08b, LOZ23, LP15a, LV22, PVZ07a, PR07b, SM99, SAZ22, SL14, dP02, MOT95, PR95]. **graph-bisection** [PR95]. **Graph-Structured** [SAZ22]. **Graphical** [CH17, CHN18, CHNT21, LS21, YLS⁺15, ZZST20]. **Graphs** [AP22, BDPX09, Dah99, HL11, MUPT24, MRT15, MB24, Mut01, NOS17, Pan19, SS22, SSPY24, WPD22, HP94]. **Greedy** [RN21]. **Grid** [AHLN16, CP01a, PMDL10]. **Grid-Based** [CP01a]. **Grids** [BV10, PC03]. **Gröbner** [Spa14]. **Group** [BHKM14, CDR22, DW10, FdOF07, GH15, LBT22, Lin22, YST14, ZZST20]. **Grover** [BBW05]. **Growth** [Ani00, CHNT21, CDZ17, DL13]. **Guarantee** [WZZ22]. **Guaranteed** [HZ05, MP19]. **Guarantees**

[BdHP21, CCF⁺20, Cri22, CRRW21, DSK20, HL23b, HLP23, Kur24, Lin22]. **Guided** [DG19].

Hadamard

[Bac14, LBH22, Rev97, WLLY16]. **Haeberly** [KSS99, LM05]. **Hahn** [DGLM14]. **Half** [BAD18, ET07]. **Half-Strips** [ET07]. **Halfspace** [Pan16]. **Halfspace-Quadratic** [Pan16]. **Halpern** [DP23]. **Halpern-Mann** [DP23]. **Hamiltonian** [DJ21, HMJ⁺23]. **Hamming** [MP10]. **Han** [PB17]. **Hand** [GST11, Gre00, HCH12, KRT07]. **Handling** [AB08, EL10]. **Hard** [PW19, RK19, TSAKN23]. **Hardening** [HMW13]. **Harmonic** [CV24]. **Harnessing** [BIM23]. **Heavy** [AL21, ADR22, JBS⁺23]. **Heavy-Tail** [JBS⁺23]. **Hedging** [BCD⁺18a, ZSX19]. **Helmberg** [Sim11]. **Hemivariational** [HKK11, LMZ21b, MS11c, ZML21]. **Hermitian** [Lew96]. **Hessian** [Har14, AA20, AW00, BNS95, BMSS19, BCNN11, CK99, Fle95, GL01, GL03, Gur94, LR21a, PCA19, PR96, XB99]. **Hessian-Driven** [AA20]. **Hessians** [BDS10, GN17, LZ13]. **Heterogeneous** [TE19]. **heuristic** [BH95]. **Heuristics** [BMZ01, RK19, SM99]. **Hidden** [BDS24, WLZY07]. **Hierarchical** [BGG⁺12, Cab05, Iid12, Mut01, SLS24, Zha94a]. **Hierarchies** [BR23a, CV24, Don14, FSP15, Las14, LV22, Slo22, dKHL17]. **Hierarchy** [BMP22, JM18, KTT15, LMMZ21, Mas20, WML21a, WML21b, dKL11]. **High** [AP18, BGM⁺16, CGRV21a, DN22, HPW23, JSX24, Lin08, Mar17, Mas20, Nes21, Pap17, SJM21, Bon97]. **High-Degree** [Pap17]. **High-Dimensional** [AP18, HPW23]. **High-Order** [BGM⁺16, CGRV21a, DN22, Lin08, Nes21, SJM21, Mar17]. **Higher** [BL22, CLMS93, GN20, KT18, MN09, Pen17, WH24]. **Higher-Order** [BL22, GN20, KT18, Pen17, WH24, CLMS93].

Highly [LST18a, SS22]. **Hilbert** [Alv04, BK21b, BI98, DLW99, ES22, FI08, GP19a, IK96, KS91, Kup96, LN02, LJ02, Luk08, RW16, Rut17, SO21, Sha94, WyW04, Zas10]. **Histograms** [BGV20]. **Hoffman** [AC02, BT96, CCP22, LL94, Zua03]. **Hold** [CU99]. **Hölder** [GN17, GN20, LP22, LM12, SJM21, WLN23, ZN15]. **Hölderian** [MN14, Vui14, ZZN18]. **Homogeneous** [And00, Chu03, HLNZ08, LSTZ07, MZH20, NV99, O'D21, SLWX23, Yos07]. **Homotopies** [GLM98, Wat00]. **Homotopy** [Bil02, BW02, SAW99, WBME14, XZ14a, IKR⁺91, Naz91, RHW93]. **Homotopy-Based** [Bil02]. **Horizon** [BZ08, Gha23, HG16, LS21, XA18b]. **Horizontal** [Pot14, Zha94b]. **Horn** [CC18]. **Hot** [JKW15]. **Hot-Starts** [JKW15]. **HPE** [AMS16, GMM17, HM16]. **HPE-Type** [AMS16, HM16]. **Huber** [LS98a]. **Huge** [Nes12, NS14]. **Huge-Scale** [Nes12, NS14]. **Hull** [CG17, DLW99, DMS22, LRO05, LW08, SD20a, SPW15]. **Hulls** [HN09]. **Human** [SBD⁺11]. **Hybrid** [AFC22, Alv04, ADLL24, BNVP24, CERS18, MS10, MS14, MSS15, NT06, SW24, Xu18, ZC10]. **Hyperbolic** [BDSS22]. **Hyperbolicity** [NT16]. **Hypercube** [Mar05, dKL10]. **Hypergeometric** [dKLS15]. **Hypergraph** [BLS21, HL08c]. **Hypergraph-Based** [BLS21]. **Hypergraphs** [DK18]. **Hyperparameters** [SLS24]. **Hyperpath** [DP00]. **Hyperplane** [BDS24]. **Hypersurfaces** [YmZS15]. **Hypotheses** [GKS18].

idea [SZ92]. **Ideals** [GPT10, MEV23]. **Identically** [dM08]. **Identification** [AY08, BRB19, Cri22, FFK98a, FFK00, LT10a, LFP17, OW06, TW14, KSW94]. **Identifying** [DKL21, DSS09, LW11b]. **Identities** [HJB20]. **II** [AW93, BGM24b, CLMP10b, Fre95, GL14a, GLT97, Gon91b, KLL22b]. **III** [IT18]. **III** [JZZ20, Ver96, Wri98]. **Ill-Conditioning** [Wri98]. **Ill-Posed** [JZZ20]. **Ill-posedness** [Ver96]. **Image** [BC05, JS00, PR07a]. **Images** [FBO21, GdW00, MHL15]. **Imaginary** [JYK24]. **Imaging** [CERS18]. **Impact** [MCL10, Dix91]. **Impatient** [BRB19]. **Imperfect** [JS16]. **Implementable** [FT02, FT07]. **Implementation** [LNP98, MÓ09, PRRL97, XS99, Meh92, RV93, YG91]. **Implementations** [SAW99]. **implementing** [LMS92]. **Implications** [BHR19, MS14, WDZZ23]. **Implicit** [CK00, GAP08, GO16, WLKK23, Xu06, GK95a]. **Imply** [BBCS21]. **Importance** [MWDS18]. **Improve** [XF24]. **Improved** [AMS16, Ans02, DK13, DL01, GMM17, HSX24, HL08c, HXLT23, KS10, Lin22, PH18, Ric11, Roo15, dKP12, dKHL17]. **Improvement** [CHLZ12, LUZ15, OR16]. **Improving** [CT12, DIMS18]. **IMRO** [KV17]. **In-Face** [FGM17]. **Inaccurate** [LM19]. **Including** [ASSS23, FK00, GJT23, ISU12, Kiw07b, dCST19]. **Inclusion** [BPSF24, CT13, GY20, MS12, VJFC18]. **Inclusions** [ACN15, ACS14, AMS16, BCL07, BH14a, BAC11, BAD18, BAR21, CDL16, Com14, DST23, DR01, KRT07, Lev04, MT20, Mor07, RW16]. **inclusive** [WZ95]. **Incoherence** [CSPW11]. **Incomplete** [PCA19, TY11, WX20b, MP95]. **Inconsistent** [KCS97]. **Incorporating** [Ren95, VD06]. **Incremental** [Ber96, Ber97, BHG07, GOP17, GOP19, IH14, JRJ10, Kiw04, Mai15, MER18, MGR18, NB01, ND10, RNV09, Tse98, VGO18, vAF18]. **Indefinite** [HLNZ08, LST16, SW95, VZQD17, ZX99]. **Independence** [Pf10, Hei93]. **Independent** [BGN22, PR20, TSAKN23]. **indices** [CH94]. **Individualized** [QCLP19]. **Induced** [GNS08, CJ18]. **Inducing** [CDR22, GG18b]. **Induction** [KKT15]. **Inequalities**

[AB18, ABCdC23, AM00, AKT17, ACP11a, ACL99, AC02, Bar96, BTN02, BP05, BDS24, BL22, CHS06, CWZ12, CW14, CS22, CSW12, CK99, CDM20, CH15, DG09, DEAW99, DMS22, DLV10, DR96, FFK98b, HP24, HMN10, HNE16, HR12, HR14b, Hu07, HZ22, HYY16, IJOT17, IJOT19, KS19, KRS11, KK05, KLL22a, KLL22b, Li97, LNS00, LN05a, LMZ21b, Lu14, LSW20, MZH20, MSFL17, Mal15, MZ98, MS11c, MS12, MSS15, MO07b, Nem04, NV99, PvZ07b, Rob07, SSN04, Stu00, Tse97a, WyW04, YL11, ZML21, ZN04, ZN05, ZW12b, ZM96, Zua03, MZ00].

Inequality [AT00, AVS19, BT04, Bet19, BDL07, BI98, BD10, CCP22, CLMP10a, Car23, Ceg15, CMY15, Chu18, Ded00, Den97, DK10, FM97, FHN09, HKK11, HKP24, JLL09, KY21, LN02, LNP08, LN09, LN14a, LN18, LNYZ21, LMQ23, LL09, LB00, MP97, NY02, NTA04, Qi99, QQ00, RG00, RN98, SU14, SU15, SZ98, SW99, TF96, TAW06, Xu19, YLQ03, Ye00, ZL01, BCT93, GLT97, LT92, Out94, Rot92, TK96].

Inequality-Constrained [FM97, RN98].

Inertia [CAFO24]. **Inertial** [AA20, Alv04, APR14, AC18, ACR19, AL20, BDL23, CMY15, CG17, MM08, SDR20, SP24, Val20, YT22]. **Inexact** [BGMT19, BLPP16, BPR20, BFMS14, BM20b, BD10, BCWW20, BCN08, CJRW14, CH16, CW23, DGT20, DNSD13, FS12, Gon14, Gui20, GMS21, HV01, HZ06b, IPS03, IS10, JST12, KMM19, KM21b, KMM23, Kor00, LZ24, LST21, LMH19, LX23, LR21a, Nes21, Och19, OSS11, PLS08, QGD18, RC22, SOT09, STY16, TN21, TDKC14, VSBV14, Wal08, WLN23, YT22, ZPR00, ZU11, Zie14, vAS14, CGST93, EW94, Man91, Zhu96].

Inexpensive [CGT20]. **Infeasibility** [And00, ADLL24, ALSV18, BBCS21, BG08, BCW14, BCN10, PR20]. **Infeasible** [GR10c, Kor00, KR03, LMO06, Mia96, MKT95, Peñ00a, PS97, PS98, Ran06, Roo06, Roo15, SS05, SP97, Sim11, SS97, Tse97b, Tse02, BF96, Fre95, MW96, Pot96, Wri95, Zha94b].

Infeasible-Interior-Point [Kor00, PS97, PS98, Ran06, SP97, SS97, MKT95, MW96, Pot96]. **Inference** [WPD22]. **Inferred** [BCM03]. **Infimal** [IT18]. **Infinite** [BHKM14, BZ08, BHT16, BBNT24, BK10, BCT19, CLPT99, CKLP07, CLMP10a, CLMP10b, DW10, ESKL18, FLN10, FS08, Gha17, GRS21, Gha23, GJLVP14, GVJS10, Gür10, HW10, HMN10, HLL98, Jey03, JJ15, JS97, JS11, Kan14, KKMP24, KTSB21, LNS00, LN05a, LN05b, LNP07, LN14b, LMP⁺18, LFW98, LW08, LV19, MRS16, MP14a, MLLB08, OHF12, Pap17, PAV21, PQS01, RSE18, ST09, WY15, ZWL10, vAPA19, CCP22, CKL⁺14, CODL22, CHY10, CLPA21, GHS95, GJR08, JRW94, KN93, Kup96, LZH14, MN13, NKT10, NLQT06, RPK03, VR05, ZY07, ZW12b].

Infinite-Dimensional [KKMP24, MRS16, Kup96].

Infinite-Horizon [BZ08, Gha23]. **Infinity** [JL23, LSS22, nnSnPm24, AB95].

infinity-norm [AB95]. **Information** [BCNN11, DG20, GSG12, JNN21, JS16, LR21a, PCA19, RP12, WX20b, ZJS18, Ser95].

Informed [DHP24]. **Inner** [GHKL17, KMM23, NS21]. **Inner-Outer** [GHKL17]. **Input** [LLZ24, MS18].

Inscribed [Ans02]. **Insensitivity** [Pat16]. **Instability** [JL24]. **Installation** [SCRS00].

Instance [AADD09]. **Instances** [PR07a]. **Instationary** [HH06]. **Integer** [AH10, ADE⁺18, AHH⁺24, AWW09, BHM18b, BMFY24, BCWP21, BNP24, BZ04, BDDM19, BEET12, BCD⁺18a, BG22, BMW10, BDPP14, BHS15, BDL⁺16, BR21, BV06, CF01, Chu21a, DLM21, DO06, DHL15, DENR20, Del19, Din98, EG24, GMSS17, GNS08, Góm21, GAD20, GNL11, GACD14, HPU19, HAN11, KPZ19, LSW06, LM20a, LU97, MR10, MDV12, MW06, NS21,

NRS21, RvdVH15, RSvdVH16, Sch96, ST03, SSY24, WX17, ZK14, vBRM24, Boy95, Eck94, KM19]. **Integer-Linear** [DHL15]. **Integral** [CBFG23, FRMP18, FGM12, HKP18, LRP16, MPA21, Zha96]. **Integrality** [DLR14, GSZ14, GW18, dMS24]. **Integrals** [FBH22]. **Integrands** [TPF22]. **Integrated** [LL00]. **Integration** [BD02]. **Interaction** [HST24]. **Interconnecting** [XLD99]. **Interdiction** [DRT17]. **Interior** [AY08, Ali95, AHO98, AB08, AGJJ00, AT06, BER03, BER04, BHHK00, BCW08, BP97, BHN99, Cas00, CM11, Chu09, CO12a, DIPR20, DT98, EAV10, FFK00, FM03, FG98, FGG07, FKS02, GSU21, GLY96, GS98, GG03, GG08, Gon14, GLTP98, GLHZ11, Gor22, GOST01, GMO14, GK96, Gu00, GR10c, IS10, JKZ98, JR10, KSH97, KSS99, Kor00, KU15, LM02, LR10, LLCN06, LT10b, LS04, LM05, LY07, McS96, ML05, MÖ07a, MÖ09, Mia96, Mit00, MT03, MOT04, NS98, NT98, NT16, NWW09, PC08, PRT02, Per23, PS97, PS98, Pot08, PS10b, Pot14, RB05, RB18, Ran06, Roo06, Roo15, SOT09, Sch98, SP97, SSK98, Sim11, SS97, SZ98, TWB⁺03, Toh00, Tse02, Wri98, Wri99, Wri01, YY03, YT02, YW02, Yos07, Zha98a, Zha98b, dKV16, BF96, CLMS93]. **interior** [CL96a, Gro95, HRVW96, JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MKT95, MW96, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, Wri92, ZTD92, ZTP93, ZT93, Zha94b, ZL03]. **Interior-Point** [AHO98, AB08, BER03, BER04, Cas00, Chu09, CO12a, DIPR20, EAV10, FFK00, FM03, FKS02, GSU21, GLTP98, GLHZ11, GMO14, Gu00, GR10c, IS10, JKZ98, KSH97, KSS99, LR10, LS04, LM05, LY07, McS96, ML05, Mia96, MT03, MOT04, NS98, NT98, NT16, PRT02, Per23, Roo06, Roo15, SOT09, SSK98, TWB⁺03, Tse02, Wri99, Wri01, YT02, YW02, Zha98a, BF96, HRVW96, JS95, JY94, LMS92, McS94, MTT94, TZSW96, Tod92, Wri92, ZTP93, ZT93, Zha94b, ZL03]. **Interiors** [BP07]. **Interpolants** [Pap17]. **Interpolation** [CRY99, DQQY02]. **Interpretation** [Hen15, JSC95, Lag93]. **Interpretations** [GG18b]. **Intersecting** [BM16a]. **Intersection** [ABP18, BBW18, BSW23, CST19, DD98, DLW99, LL23, LH04]. **Interval** [BTN02, MS11a]. **Intervals** [Lu14]. **Intrinsic** [BH19, KFGT21]. **Invariance** [GY23, GHRT98]. **Invariant** [BM07, LOZ23, Peñ23, Sen07, dGJ18]. **Inverse** [ABCFR20, BSTV18, BSR17, BR21, BH15, CCM20, ET19, FKP10, HH96a, Kal18, IK92]. **Inverse-Adjusted** [CCM20]. **Inverses** [CNQ97, XFLP21]. **Inversion** [BLMH06]. **Investigation** [LM16]. **Investment** [RS15]. **Invitation** [Iof09]. **Involutivity** [Lim23]. **Involving** [CDR22, Jey03, Ni05, WJ00, GIJT96]. **iPiano** [Och19]. **IPMs** [CN17]. **IQN** [MER18]. **Irreducible** [HL02]. **Ising** [BNVP24]. **Ising-Classical** [BNVP24]. **Isoda** [HSK15]. **Isoda-Based** [HSK15]. **Isolated** [DSZ17]. **Isotone** [LU97]. **Isotonic** [HL17, HL20]. **Issue** [DR07]. **Issues** [FP98, GR10b]. **ISTA** [TBZ16]. **Item** [BHT16, BT19]. **Items** [EL10]. **Iterate** [JNN21, MPP⁺17]. **Iterated** [AL14, QGD18, Bel94]. **Iterates** [Abs05, FIS20, MS10, Man91]. **Iterating** [BC03]. **Iteration** [AZ05, AMS16, DP23, GMM17, HY15, HY96, KMM23, LT10b, LM21b, LZ23b, MT04, MS12, MS13, Pot14, XY15, Yun14, GT92, McS94]. **Iteration-Complexity** [AMS16, GMM17, LM21b, LZ23b, MT04, MS12, MS13]. **Iterations** [BLT17, CP15, CG17, DFR07, ZOB20, Ans91]. **Iterative** [BTC08, BCWW15, CGRV21b, Ceg15, CH02, EGG09, FGG07, HN07, Iid12, KS12, KRS11, KF18a, LMO06, Toh03, ZM96, Kan96].

Iteratively [Bec15, BDMS09, FRW11].

J [MZ00, QW01, ZT98]. **Jacobi** [ULC20].
Jacobi-Type [ULC20]. **Jacobian**
 [DSST20, HHY15, KP99, Xu18]. **Jacobians**
 [CNW10, Nau02, Wal08]. **Job**
 [BLS21, CKL97, AEGS93]. **Job-Occupancy**
 [BLS21]. **John** [BOT06, KS10].
John-conditions [KS10]. **Johnson** [Che05].
Joint [JHR23, Las10, XA18a, vAS14].
Jordan [Fay06, GJ17, LT20, RSS14, See22].
Jordan-Algebraic [Fay06].

Kalman [Bel94, Ber96, Pat16].
Kalman-Based [Pat16]. **Kantorovich**
 [BGV20, FS17]. **Karmarkar**
 [Ans91, GV94, JY94, Lag93]. **Karp** [DHL15].
Karush [HSS93, KT18, Pan94, QQS03].
Kenderov [AG14]. **Kernel**
 [BER04, LR10, NK10, Slo22].
Kernel-Based [LR10]. **Kernels** [KdK23].
Kink [GW19]. **KKT** [ASS24, BDdSM15,
 BH19, BGM⁺16, BKMW20, DZ14, DFKS11,
 FBM15, FG04b, LFJ⁺11]. **Klee** [CHPA16].
Knapsack
 [BHT16, BT19, CCLW14, CDL14, FMW96,
 GLHZ11, MP14c, PW98, RQMG12, Boy93].
Knapsacks [AH10]. **Knopp** [PV23].
Knowledge [LSxY24, Man04, SFP11].
Knowledge-Based [Man04]. **Known**
 [Pot14, EM91]. **Kojima** [Sim11]. **Korkin**
 [PvZ07b]. **Korpelevich** [MS11c].
Kronecker [Ans17]. **Krylov**
 [ABCFR20, BS94, ML05].
Krylov-Subspace [ABCFR20]. **Kuhn**
 [HSS93, KT18, Pan94, QQS03, ACS14,
 VR05]. **Kurdyka** [JKM23, LMQ23, QP23].
Ky [DV16].

L1 [ZYP21]. **L1/L2** [ZYP21]. **L2** [ZYP21].
Labeling [BBF⁺04, vdLTY07]. **Ladders**
 [BCQW95]. **Lagrange** [AAS17, FIS20,
 GJ99, JLD03, JS20, MS19, NWYZ21, QT24,
 Sha97, Tre95, Trö05, WJ00, ZN07a].

Lagrangian

[AXY23, ABMS08, ASS18, ACFH24, AKR23,
 AT00, AI12, BNP24, BCD⁺18a, Bom15,
 BTZ92, CGST96a, DL01, DNSD13, FLN10,
 FK00, FS12, FS05, FKS02, GAD20, HS21,
 HHY15, HLP23, HFD16, HY02, IK96, ISU12,
 KS16a, KS19, KKW05, Kiw07b, KMM23,
 Las14, LT02, LSW06, LST18a, LST20,
 LZCW23, LST21, LZ23b, LSL08, MZGS08,
 NTA04, Ous99, PR93, ST22, SFMF20,
 Sta04, SS24, WDLW23, YH01, ZST10].
Lagrangian-Based [ST22].
Lagrangian-Dual [MZGS08]. **Lagrangians**
 [BR07, DFS03, SLM05]. **Lanczos**
 [GLRT99, JW21, SY19, ZSL17]. **Landscape**
 [LSS22, LXB19]. **Landscapes** [MB24].
Landweber [XC21]. **Language** [FFG99].
Laplacians [GHR14]. **Large**
 [AZ05, ABCFR20, AT03, ADLL24, BBN14,
 BER03, BYZ00, BH03, BKT99b, BLO⁺23,
 Bou97, BHN99, BHNS16, CB14, DGN12,
 DNSD13, FJS98, FLP02, FP97, FB19,
 FM97, For05, GMS02, GL03, GR94, Gon91b,
 Gon91a, Gon99, Gou99, GST11, HZZC22,
 Ios01, JST12, JS00, JM18, KKM93, LNP98,
 LT10b, LM21b, Lie20, LM99, LRR98, Mai15,
 NLQT06, NW12, Ove92, PS97, Pyt98, Ray97,
 RSS00, SD00, Sor97, TK02, Toh03, Wan17,
 WG10, XS99, YCST22, Zha98b, ZLCL21,
 AM94, BNS95, BKT99a, Dun93, GMR91,
 GT92, MT91, NN91a, RD95, dRT92].
Large-Scale [ABCFR20, AT03, ADLL24,
 BBN14, BYZ00, BLO⁺23, BHN99, BHNS16,
 CB14, DGN12, DNSD13, FJS98, FM97,
 GMS02, GL03, Gou99, HZZC22, Ios01, JS00,
 LNP98, Lie20, Mai15, NLQT06, NW12,
 Pyt98, RSS00, SD00, Sor97, WG10, XS99,
 YCST22, ZLCL21, GR94, Ove92, AM94,
 BNS95, BKT99a, GMR91, RD95].
Large-Step [PS97, KKM93, GT92, dRT92].
Large-Update [BER03]. **Largest** [DV16].
larvicide [CD92]. **Lasserre**
 [GSZ14, JM18, KS18, dKL11, dKHL17].
Lasserre-Type [dKHL17]. **Lasso**

[HL17, HL20, LST18b, LST18a, LLST19, YST14, YLS⁺15, ZZST20, BBH24, TBZ16].

Last [JNN21]. **Lattice** [ALT⁺21, BDDM19, HW07]. **Lattice-Free** [BDDM19]. **Lattices** [MS06b]. **Layer** [KRZ17]. **Layered** [MT03]. **Layered-Step** [MT03]. **LCP** [AZ05, Gon99, McS96, MW96, PS97, PS10b, Pot14, SP97]. **LCPs** [Lin08, ZL03]. **Leader** [ABDL21, HF14].

Learning [AAJN16, APX17, BRÖA24, BH15, BCNN11, HHP18, HP18, HZZC22, KP22, KB08, KLL22b, LZCW23, Mai15, NK10, PTJY10, SY13, WLM22, ZDR24, ZCH⁺23].

Least [BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, DLR16, FRW11, GLT04, GLN07, GSW97, HL98, KV17, LSY24, Lin08, LV08, RM08, SM18, STY16, XZ14a, ZCD00, ZCS10, ZL02, ZC10, vdBF11, Dax92, Hei93, Hus94, KSW94, WZ95, YY95].

Least-Change [HL98]. **Least-Squares** [CGT14, GLT04, LSY24, XZ14a, ZCS10, vdBF11, KSW94]. **Legendre** [See92].

Leibniz [MPA21]. **Lemma** [BT20, DGLM14, Bar08]. **Lemmas** [FLN10].

Length [HSW14, MBW09]. **Level** [ABMS08, BGN22, BDM16, BM16b, Chr20, DMZ12, Fre03, LST18b, LNS18, SXMW13, ACC93, MS23]. **Level-Independent** [BGN22]. **Level-Set** [LST18b, LNS18].

Levenberg [Kiw96]. **Levitin** [HY06].

Lexicographic [RT19, ZÁC17]. **Lift** [BZ04, BV06, Che05, Lau01].

Lift-and-Project [BV06, Che05, Lau01].

Lifted [AD10]. **Lifting** [BP15, KN20, MBG24]. **Lifts** [FSP15].

Light [LTP23]. **Like** [AVS21, BR19a, MS18, PC08, QZ08, SP24, Teb97, ZCD00, vAH14, AM12, AH19, CAFO24, CT93, CGT10b, NEYL24, YY95, YY23, AL20, BJKJ17].

Limit [GKS18, GHNS19]. **Limitations** [Sau20]. **Limited** [BB19, GL03, GST11, HZ14, MN00, NN91a, ZNB⁺93].

Limited-Memory [BB19, GL03, ZNB⁺93].

Limiting [GS01, LM04]. **Line** [BCS21, BLPP16, Cri22, DK13, HZ05, HA21, HHY18, IJOT19, MW94, NEYL24, PS20, RW18, SU15, WB05a, WB05b, WG10, YPL21, ZH04, dBdH07]. **Line-Search** [RW18, SU15]. **Line-Search-Based** [BLPP16]. **Linear** [AAGM22, AB08, Ans99, ADLL24, AH16, AC02, BER04, BC09, BK12, BGJ12, BBW07, BWY10, BM20a, BSW23, BTN02, BLRS22, BZ08, BGW07, Bol14, BG22, BR21, BD09, BCWW15, BCD20, BGNW05, CT13, CCP22, CLPT99, CLPT06, CLMP10a, CKL⁺14, Car22, CB00, CHS24, CX99, CY00, CX08, CB14, CLYZ22, CCH05, CSW12, CC14, Chu16, Chu18, CGST96a, DF19, DIPR20, DO06, DHL15, DKS22, DY04, DK10, DS12, EAV10, Ent96, EF02, FCF07, Fay96, Fil99, Fle12, FBO21, FGL24, FM97, FV99, Fre03, FHN09, FT02, FT07, GS21, GB22, GRS21, GCPT18, GLT03, GLdS05, GJLVP14, GNS08, GT97b, Gor22, GS07, GST11, Gre00, GK96, GKT24, GNRPT16, Hab98, HSX24, HS21, HW10, Hen15, HNE16, HLL98, HL08b, dMM10, HZ06b, HMP⁺08, HY96, HY16].

Linear [IPRT00, Ios01, JRT97, Jan04, JR08, JL20, KFF09, KH05, Kea11, KLW18, KFGT21, KM21a, KSH97, KSS99, KRZ17, Kor00, KTSB21, LLS05, LW11a, LMT09, Las14, Lau01, LP15a, LTY12, LYSA20, LR10, LLAN22, LN05b, LNP07, LN14b, LMP⁺18, LST20, LM20a, LNYZ21, LSxY24, LFP17, LFW98, LMZ15, LP06b, Lov11, LM05, MSFL17, MNP96, Man04, Mia96, MN96, MGR18, MT03, NS14, NY02, O'D21, OF03, PS10a, Pan05, PS21a, Peñ00a, PVZ07a, PR20, PTZ05, Per23, PW17, Pot08, PW19, Pul00, QW00, QW01, Qi16, QY14, RFNP14, Roo06, Roo15, Rot92, RP12, Sch16, Sch98, She14, SYZ19, SW14, SW15, Sim11, SS97, SL21, SX24, Stu00, SZ98, SSY24, TBZ16, TN21, TAW06, THZ23, WLWY15, WLLY16,

WX17, WX19, WLKK23, WLS23, WBME14, WCP17, Wri99, XS16, XA18b, YLQ03, YT02, YW02, YM14]. **Linear** [ZCH⁺23, Zha98a, ZC09, Zha98b, ZL02, ZL12, ZK15, ZN05, ZN08, ZN14a, Zua03, dSTVB18, AB95, Ans96, Bar93, Bos93, CH93a, DL91, DG23b, Fre95, GLT97, GV94, Gon91b, Gon91a, GT92, Gow92, Kan96, KSW94, KK92, KKM93, Lag93, Li93a, LS98a, LMS92, MN93, Man91, McS94, MS94a, Mit94, MKT95, Naz91, O'L95, Pot96, Pow95, Ren95, SG94, Tod92, Tre95, TM95, Ver96, ZTD92, ZT93, Zha94b, Zha96, ZR93, Zhu95, dRV92]. **Linear-Quadratic** [BGNW05, HS21, LTY12, PW17, XA18b, ZR93, Zhu95]. **Linear-Time** [JL20, PW17, SL21, WX19]. **Linearization** [DLR17, KLLM22, KRR99, RQMG12, Vel15]. **Linearizations** [Kiw06, Kiw08]. **Linearized** [HLY16, LM16]. **Linearly** [AFS14, Bom15, BMSS19, BP97, CPRZ20, DGN12, Fle14, FS05, GH16, Gou99, JST12, KLT07, KMM19, KM24, LT00, LT10a, LST16, LCPS20, LLC22, LLS06, NR20, PC03, QLSZ18, Xu17, Xu18, ZL20, ZC20, ZL22a, FMS94, NN91b, Wri92]. **Linesearch** [ATP21, CYZ22, DO19a, FLLR14, MP18, TSP18, Mel96]. **Linesearch-Based** [FLLR14]. **Link** [BO17, SCRS00]. **Link-Installation** [SCRS00]. **Linked** [DW11]. **Links** [MS03]. **Lipschitz** [BR19a, BNL⁺18, BBH24, BSTV18, BM98a, BM98b, CLP16, CDM20, CGT10b, Gri19, HHY18, JKM23, JLL23, KK05, LTAP22, LS13, LM23, Mon23, NT06, Nem04, NT02, QZ08, RW16, RS96, SK06, VIT22, WC24, YY23, ZC20]. **Lipschitz-Continuous** [NT06]. **Lipschitz-Like** [BR19a, QZ08, CGT10b, YY23]. **Lipschitzian** [BC14, CTW19, CS15, GO16, KK02, MN13, MN14, MPA21, PHR91, War96, ZCT10]. **Lipschitzness** [nnSnPm24]. **Liquidation** [YLZ02]. **LMI** [ZVP06]. **Load** [KS05a, SKL09b]. **Load-Dependent** [KS05a]. **Local** [ATP21, AIMM24, Bol14, CX99, CC99, CY99, DLT03, EH20, EM91, FS12, FLRS06, For05, GR10b, GLR15, GHS95, Gur94, HS21, Har98, HKP24, Hu07, JPS99, JL23, KFF09, LYP23, LLAN22, LFP17, LM05, MS11a, Mar94, MER18, MN16, NT16, Pap16, Pha20, PR98, SB18, SLWX23, SZ98, TBZ16, TWB⁺03, WB05a, WX20a, Wri05, XFLP21, YZS19, GK95a, Ser95, Vav93]. **Local-Nonglobal** [For05]. **Localization** [BTC08, BP12, CJSY07, KKW09, KW10, Tse07, WZYB08, ZSY10]. **Localized** [RW16]. **Locally** [BNL⁺18, BDSS22, CDM20, FLY11, HHY18, JLL23, LPR00, LFLL09, LM23, Mon23, MOS14, QQ00, Qi16, WZZ22, ZL03, PHR91]. **Locating** [DST23, Lin08, ZL02]. **Location** [TMHP06]. **Loewner** [BBW17]. **Log** [WST10, YST14, Pow95]. **Log-Determinant** [WST10, YST14]. **Logarithmic** [JR10, TY12, GLW91, MW94]. **Logarithmic-Quadratic** [TY12]. **Logical** [BCWP21]. **Lojasiewicz** [SU15, BDL07, JKM23, LMQ23, QP23]. **Long** [Gri24, Sau20, SZ98, XA18b, Ans96, TM95, dRV92]. **Long-Horizon** [XA18b]. **Long-Step** [SZ98, TM95, dRV92]. **Look** [HN05, KF18a, Las11, LV08, Pat17]. **Lorentz** [Sen07]. **Loss** [DJV06, ZPXQ21]. **Lovász** [Che05, Lau01]. **Low** [AP22, BDdSM15, CGO22, CV17a, DU21, DV16, FRW11, FGM17, Gar21, GG18b, HLB20, HU19, HPW23, JBAS10, LRWW98, LYP23, LdQ11, LZSV20, LL23, LZ24, LWZ15, MSFL17, MB24, MMBS14, MKU21, SU15, SL21, TT24, TY11, TQP22, Van14, WDLW23, GMS92, Tod92]. **low-connectivity** [GMS92]. **Low-Diameter** [AP22]. **Low-Dimensional** [HPW23, MB24]. **Low-Memory** [MKU21]. **Low-Order** [SL21]. **Low-Rank** [BDdSM15, CV17a, DV16, FGM17, Gar21,

GG18b, HLB20, HU19, JBAS10, LYP23, LZSV20, LL23, LZ24, LWZ15, MMBS14, SU15, TT24, TY11, TQP22, Van14, WDLW23, FRW11, LdQ11, MSFL17].

Lower [ABMS08, BDM16, BM16b, BDDM19, Chr20, CH13, CPRZ20, DLV10, FLP19, FL98, GM12a, GL08a, IdW16, Jan04, NZ01, PZ98, PRRL97, dKP12, MLRR93].

Lower-Level [ABMS08]. **LP** [BM18b, FHIS16, Fle98, Las04, LT96, PW19].

LP-Relaxations [Las04]. **LQP** [YL11].

LQP-Based [YL11]. **Lyapunov** [CPS07, MTB23].

Machine [BCNN11, CKL97, CJK98, CP01b, KB08, LM20b, Mai15]. **Machines** [FM03, GLHZ11, DT91, Onn94]. **Maciel** [EA99]. **Made** [McB98]. **MADS** [AADD09].

Majorant [FGO14]. **Majorization** [Mai15].

Majorization-Minimization [Mai15].

Majorized [LST16]. **Majorizing** [LN07, WHY⁺19]. **Making** [JNN21, JX24].

Malitsky [BSW23]. **Malitsky-Tam** [BSW23]. **management** [CSY23].

Mangasarian [CX99, GVJS10].

Manhattan [MP10]. **Manifold** [CMSZ20, GSAS21, HSS93, KLW18, LMW16, LMZ21a, LCD⁺21, SX24, SH15, XLxY21].

Manifolds [AM12, ACFH24, BR23b, BH19, FLP19, HMJ⁺23, HU17, HHY18, LMWY11, LL23, LBH22, OOT22, RW12, SO21, WLWY15, WLLY16, WWLY21].

Mann [CG17, DP23]. **manufacturing** [AEGS93].

Many [Sab11, TAW06, Xu20, XLD99, ZT98, GK95a, GK94, ZT96]. **Map** [HY16, LM04, Lu14, Gow92].

Mapping [BH18, Bla23, FKP10, HV05, IY09, LSdZ18, TY04, GLT97].

Mappings [AK21, CH17, DPS17, EL09, Fay06, FBO21, Gfr11, GTdS06, JBS⁺23, KL97, KT08, LMV23, LW08, LSZ04, LWY24, MPA21, NT06, Sab11, SY13, ZL01, Tse92].

Maps [AGH10, AG14, DQ24, LPT07, LP22, LS21, NZ16].

Marginal [CHY10, Las10, LSdZ18, QW20, War96].

Marginals [HP07, TSAKN23].

Markets [LSF⁺23].

Markov [AP18, AH16, BDPX09, Gha23, GS01, HG16, LYYD24, NJS21, RG22].

Markovian [KLL22b].

Marquardt [Kiw96].

Mass [CAFO24, GHGHL06, MRT15, WWLY21].

Massive [FM03].

Massively [ZC91].

Matching [DL17, INT17, MP14b, Bar93, Gro95, Ris94].

Matchings [CZZ19, HL08a, HL11].

Material [BTKNZ99, KNX16, SKL09a, SKL09b].

Materials [BGG⁺12, Sta99].

Mathematical [ASS18, AHSS19, Ani05a, Ani05b, Bon97, BKS16, CSW15, CO12a, DFNS05, DR13, Dol20, FGM12, FLRS06, FBM15, FP98, FT02, FT07, Gfr13, Gfr14, GY17, GLY12, GYZ14, GLYZ14, GXZ17, HK09, HS11, IK16, IS08, JR00, JRS10, KDB09, KS10, KS14, KLLM22, LLCN06, LXL11, LX14, MU18, MX06, MN14, PS21b, RB05, Sch01, SU10, Voi08, WJ00, Xu06, YZ16].

Matrices [AT03, BA24, BDSS22, BFM98, Bur03, CHS06, DDW20, DSST20, DPW15, GMO14, JLW16, JL16, JBAS10, KSH97, KT00, Lim11, MP10, NZ16, NYZ18, SPW15, SU15, Shi18, SH15, TY11, Fle95, JYZ94, Lew96, LS91, Van95].

Matrix [AM12, BBN14, BQX15, Bec07, BTN02, BH15, BGH18, BGH19, CCS10, CHS06, CSPW11, CV17a, CY00, CQT03, CX08, CWY11, CCF⁺20, CSW12, Chu18, CDZ17, CNW10, DZ07, FCF07, FRW11, FGM17, GV15, GO12, HH96a, HR14a, HNE16, KN20, LdQ11, LZSV20, LL23, LZ24, LWZ15, MSFL17, MN96, MOT04, MPR10, NTA04, PS97, Qi16, RO18, RFNP14, RSS00, STKI17, SI13, See97, Shi17, Stu00, SSQ04, iT17, TQP22, ULC20, Van14, Vav10, XLZH19, YPC18, ZY14, FKMN00, Gur94, KK92, Li93a, LT92, Man91].

Matrix-Fractional [BGH18, BGH19].

Matrix-Free

[CNW10, HR14a, RSS00]. **Matters** [RSKW19]. **Max** [BL22, CGC15, CPS18, DGR17, DW22, GKPV01, HMJ⁺23, KNP98, KM21b, Kur24, LPW23, Lau01, OLR21, PQS01, RPK03, BMZ01, RN98]. **Max-Cut** [Lau01, BMZ01]. **Max-Facet-Width** [DGR17]. **Max-Min** [GKPV01, KNP98]. **MaxCut** [dCST19]. **Maximal** [ABT00, Alv04, BGW07, BCH14, DF19, GY20, Lim23, Pen00b, Sab11, MOT95, ZT92]. **Maximality** [CM10]. **Maximally** [AL20, DST23, IPRT00]. **Maximin** [WX16]. **Maximization** [DZ07, HKMS20, WZZ22, XLZH19, Xu24, DHLN92, FM94b, GMR91]. **Maximizing** [Ete22, WX19]. **Maximum** [Ans02, BCM03, BMP22, CHLZ12, HL11, LUZ15, Lim11, MPB02, Ous99, Pfe08, RK19, SLS24, SW07, WN16, WPD22, YP20, ZG03, BL93]. **Maximum-Entropy** [SW07]. **Maximum-Volume** [Lim11]. **Maximum-Weight** [RK19]. **Maxmin** [HLTW14]. **may** [Wri95]. **McCormick** [BCT19, MCB09]. **McCormick-Based** [MCB09]. **MDPs** [RG24]. **Mead** [Kel99, LRWW98, LPW12, McK98]. **Mean** [ABGJ14, AP22, ACL99, CG17, HST24, MS10, OR02, Wan24, ZJS18, ZFL06]. **Mean-Covariance** [ZJS18]. **Mean-Risk** [OR02]. **Means** [Bac14, DK22, SPM18, PW07, PH18]. **Measurability** [BCCL22, CCL09]. **Measurable** [PZ00]. **Measure** [EF02, HKKRZ24, KTSB21, MPR10, NF01, SGK21]. **Measurements** [SDGM99]. **Measures** [Cal07, DMM06, ET19, ER05, EF02, GSU21, GZ17, GR12, LMMZ21, MS06b, OF03, Pic13, RR15, VD06, Ren95]. **Measuring** [Che01, DLR14]. **Mechanical** [ABT00]. **Median** [CCFP05, Cap02, HL17, HL20]. **Medians** [Bac14]. **Mediated** [Wan24]. **Mehrotra** [SPT08, LMS92, TZSW96]. **Mehrotra-Type** [SPT08]. **Memory** [AP22, BB19, GL03, GST11, HZ14, KON98, MN00, MKU21, NN91a, ZNB⁺93]. **Merit** [FS97, GV14, SW99, TF96]. **Merrill** [YG91]. **Mesh** [AA06, AD06, ACD08, ADL08, AILT14, ALT19, Hei93]. **Metal** [FGM12]. **Metamodeling** [HPD14]. **Metamodeling-Based** [HPD14]. **Method** [ACN15, AZ05, AD10, ASS18, ACFH24, ADV24, AP21, Ans98, AKR23, ANP08, ABO22, AO18, AFFG14, AP16, AF22, AD04, ADR22, AST10, Aus15, AI11, AI12, AH19, BBN14, BER03, BCL07, BJKJ17, BC05, BBG⁺20, BBTT12, BPS15, BT21, BBCT⁺24, BTMN01, BNL⁺18, BGR20, BPT97, BHG07, BCD⁺18a, Bol14, BH14a, BDL23, BR19b, BSR17, BCN24, BV18b, BDL⁺16, BFMS14, BM20b, BKS16, BK10, BKS96, BCN08, BHNS16, Ceg15, CNQ97, CX99, CC99, CWH06, CNY14, CMSZ20, CDM20, CY10, Chu16, Chu21a, Chu21b, CMV19, CL96b, CO12a, CR21, Cri22, Cru14, CDR22, DSP10, DO19a, DY99, DD98, DG19, DG23a, DJV06, DNSD13, DMN24, DT98, DQQY02, DFR18, DLR17, Eic09, ES22, EL10, EI06, EN14, EG10, FP97, FGO14, FS17, FLP19, FHS16, Fle98, Fle14, FDS09, FV16]. **Method** [FS08, FGM17, FS05, FLT03, GB22, Ger08, Ger11, GO21, GRW20, GRS21, GR14, GKR20, GLY96, GV00, GL15, GG03, Gon14, GKV03, GLHZ11, GDG22, GLRT99, GST05, GR10a, GR10b, GLR14, GLR15, GK96, Gri18, GR10c, HCH12, HZ05, HZ14, HMW21, HS10, HN05, HYF05, HTY12, HLWY14, HHY15, HZZC22, HL23b, HLP23, HR14a, HR00, HIK03, dMM10, HLR16, HU19, HY15, HAG18, HDL21, HR15, IH14, IK00, IK16, IJOT17, IS08, IS10, JR08, JPS99, JW21, JKM23, JFQS98, JST12, JRJ10, JS00, JKW15, JBK⁺18, JLL23, JL24, KN05, KS14, KKS19, KV17, KY21, KS99, KF18b, KPZ19, KLLM22, Kiw97, Kiw06, Kiw07b, Kiw08, KSdM01, KNX16, KSX08, KMM19, KM21b, KMM23, Krä24, KR03, KS05b, LRO05, LRWW98, Lau00, LM02, LF01, LSW06, LN07, LdQ11, LM12].

Method [LUZ15, LST18b, LST18a, LST20, LZCW23, LSY24, LM21a, LST21, LM99, Lin08, LLX15, LNS18, LX23, Lin22, LZ03, LY11, LYS17, LMZ21b, Lu17, Luo97, LB00, MT20, McK98, ML05, MX06, MU14, MXC⁺19, Mis23, MER18, MGR18, MG98, MP99, MS10, MS12, MS13, MS14, MSS15, Mut01, NT06, NYF11, NS98, NC16, Nem04, NS14, NS17, NLZ10, NWXYZ21, NTA04, NR20, OHF12, OG03, OLM24, PS20, Pat16, PMR19, Peñ23, Per23, PS97, Qi99, QZ00, RB05, RB18, RCGR18, Ray97, Ren96, RK20, Roo15, RSE18, hRK14, SS17, SS05, SSN04, SÖ17, SO21, SOT09, SKC12, ST14, SAH⁺24, SS97, SY13, SS00, Sol07, SY19, SK98, SZ98, SW99, SSQ04, SXMW13, STY15, STY16, SS24, TT24, TY12, TWB⁺03, TZS02, TK02, Tse97b, Tse98, Tse99, WY15, WDLW23, WLS23, WG10]. **Method** [Wri00, WPY23, XZ14a, XZ14b, XBN20, XF24, Xu20, Xu24, YY03, YT10, YLQ03, YPC18, YPL21, YL11, YZS19, Zas10, ZY96, ZC09, ZWL10, ZY14, ZSL17, ZL20, ZC20, ZL02, ZST10, ZK15, ZC10, ZCT10, ZPXQ21, dSTVB18, vdLTY07, And96a, And96b, Bel94, BTB93, BTN94, BNS95, BH95, Bur92, CH93a, Dav91, Gon91b, Gon91a, HRVW96, HK92, Ius91, JS95, KS91, Li93b, LS93, LMS92, Meh92, Mit94, NN91a, NN91b, O'L95, Pow95, Ral96, RS94, SM91, SG94, TZSW96, YG91, ZT92, dRT92]. **Methodology** [HYZ08]. **Methods** [Abs05, ABCFR20, ANRV04, AHO98, AMS16, ABMS08, AB08, AD19, ASSS23, ACP11b, ACR19, Aus99, AT00, AT06, AFGO20, AIMM24, Bac15, BSV14, BT12, BT14, BV18a, BH20, BTZ97, BBN19, BHHK00, Ber96, Ber97, BH03, BC14, BMR00, BM18c, Bla21, BGP09, BSTV18, BRB19, BBR16, BLPP16, BIS05, BK21b, Bou97, BR19b, BL22, BD10, BCGH08, BCN10, BCNN11, CC19, CDHS18, CGT10a, CGT14, CGT19, CAFO24, CS08a, CY00, CM11, CW14, CLO14, CLP16, CLYZ22, CN23, CV17b, CG17, CP01a, CH16, CV07, DO19a, DHL⁺99, DDPR24, DL15, DIS04, DGT20, DO19b, DJ21, DG23b, DN20, DN22, DR18, ET19, EGG09, FK10, Far20, FK00, FS96, FIS10, FS12, FM03, FLRS06, FM97, FG98, FGG07, Fra02, FKS02, GG18a, Gar21, GJV16, GMSS17, GL14b, GL01]. **Methods** [GL03, GG08, GLTP98, Gor22, GN17, GN19, GN20, GN23, GLN07, GST08, GMO14, Gri19, Gu00, GR12, Gui16, GOP19, GP19b, HMJ⁺23, HSX24, HS21, Har98, HM15, HK06, HSW14, HSK15, HM02, HR22, HGA15, IJOT19, IS04, ISU12, JKZ98, JR00, KP99, KN02, KN04, KFF09, KS16a, KS19, KRS11, KL97, Kiw04, KSH97, KLL22a, KLL22b, LRZ21, LZ23a, LSS14, LR10, LT00, LLCN06, LP15b, LCD⁺21, LYD24, LFP17, LH04, LLST19, LP06b, LLS10, LLRV19, LZ14, LJ16, LFN18, LM23, LZ23b, LM24, LRR98, LS02, LSL08, MM08, MPRW09, Mal15, MS11a, MÖ07a, MZ99, MSQ98, MB14, MOP20, MOT04, MS11c, MS14, NRP19, NB01, NO09, NT98, NV99, Nes12, NT16, Nes21, ND10, NW12, NWW17, NWW09, OSS11, PT18, PRT02, PP18, Pot08, PS10b, Pot14, QW00, QW01]. **Methods** [QQS03, QP23, Ran06, RHL14, RZ01, Ren16, RKG08, RVZ24, RW12, RN21, RR08, ST22, ST13, Sat22, Sch08, Sch09, SW11, SU15, Sch16, SK22, SDGM99, ST14, SBT16, SLS24, SSPY24, SAW99, Sta04, SH97, SSY24, Sva02, THG17, Toh00, Tse97a, Tse02, Tüt03, Ulb01, Ulb03, VGO18, WB05a, WB05b, WN16, Wal08, WB16, WMGL17, WHY⁺19, WLM22, Wri98, Wri01, XXS21, XYZ15, Xu17, Xu18, Xu22, YWF19, YW02, YNS20, Yun14, ZA14, ZX99, ZCD00, ZWHZ23, ZAG24, ZU11, Zie14, dF09, dEH01, dKV16, dBdH07, vAS14, vAF18, Ali95, BT00b, BLN92, CLMS93, DHLN92, DT91, DMZ94, EW94, EM91, Gar93, GN92, Gil97, GW93, Gon91b, Gon91a, GHS95, Gro95, Hei96, Hus94, IK96, Kan96, KS93, Kiw96, Kup96,

LN93, LP93, MS94a, Mel96, RHW93]. **methods** [RD95, Sar95, SC91, WZ95, Zha94b, Zha96, ZNB⁺93]. **Metric** [AAI07, AZ19, AK21, BYZ19, BLPP16, CKLP07, CCFP05, CHNT21, DL13, Fus14, Gfr11, Gfr13, KK02, LP22, LLAN22, LLAN24, Li97, LM12, LMH19, MRT15, MPR10, NT08, Och19, PLS08, RW21, Sal17, WLN23, ZZS23, ZN04, ZN07b, ZN10, ZN14a, ZZ16, ZN21, Dav91, Dix91, Sha94, ZN15]. **Metrics** [Bla21, SSW16]. **MG** [VV21]. **MG/OPT** [VV21]. **MGProx** [ADV24]. **Mild** [Sal17]. **MILP** [GACD14]. **MIMO** [LLZZ19, ZLCL21]. **Min** [AP22, BL22, CGC15, DW22, GKPV01, HMJ⁺23, KNP98, KM21b, Kur24, LPW23, MN09, OLR21, PQS01, RPK03, RN98]. **Min-Max** [BL22, CGC15, DW22, HMJ⁺23, KM21b, OLR21, PQS01, RPK03]. **Min-Max-Min** [Kur24, LPW23]. **Min-Mean-Cycle** [AP22]. **Mini** [DR23]. **Mini-Batch** [DR23]. **Minima** [ATP21, DY04, JL23, KK02, LYP23, Lev00, LMWY11, LMP⁺18, ZY07, GK95a]. **Minimal** [CBJF97, GU22, IT18, LB18, MM05, MBG24, RO18]. **Minimax** [BB23, BR19b, JL18, KB08, Lás17, LLS06, QZ08, SA04, THZ23, XWSD24, Xu24, ZZS23, ZT98, ZLTD22, CL92, ZT96]. **Minimization** [AAJN16, AUU24, AGJJ00, AFS14, Att96, ARS07, APR14, Aus10, AST10, BIM23, BTC08, BBT12, Bec15, BGR20, BLP23, BCN19, BDPP14, Cab05, CGT11, CGT12, CWZ12, Che15, CP08, CGST96b, CDR22, DD19, DK10, EG10, FRW11, FM97, FQ96, FLT03, Gar21, GPR02, HYZ08, HKMS20, HK06, HR12, KKS03, Kal18, KF18b, KL10, Kiw97, LW11a, LTAP22, LTY12, LT99, LT00, LT10a, LLX15, LBP20, Lu17, Mai15, MT24, MST11, Mut01, MW06, NC16, Nes05, PHR91, PY97, QWY04, Ray97, RHL14, RW21, Ric11, Sch16, See22, ST14, SV07, SFMF20, Sol07, Sor97, SBFA17, SW24, TDKC14, TDFC18, Tse02, WLS23, WCP17, XLxY21, XF24, XLZH19, XFLP21, YZ03, ZYP21, ZX99, ZCS10, ZL20, ZL12, dGJ18, dAGL24, dKL10, BT94a, CT93, CL96a, Dav91, FMS94, Gül92]. **minimization** [LT93, TK96, TYF96, Vav93, Zhu96]. **Minimization-Based** [AUU24]. **Minimize** [CKL97]. **Minimizer** [For05, KPV18, WX20a]. **Minimizers** [AZ19, BGM19, CGTZ14, MS21, Pha20, PW16, SLWX23, YZZ17, ZN15, Mar94]. **Minimizing** [BM20a, BCU00, CWY11, CCR17, CL96b, DW22, DIL16, FGG04, FHN09, GHR14, GN17, GN19, GN20, Hag01, HNP00, HPW23, Kuč08a, LRO05, LMMZ21, LSS14, Mon23, ND09, Phu10, QZ00, WZ24, XY97, XY00, YZ13, And96a, SZ92]. **Minimum** [AY08, AHLN16, BGV20, Dax09, HG16, JPT13, MBW09, PR98, Wan24, XFLP21, XLD99, Yil06, Yil08, ZZN18, GIJT96, RV93, War92]. **Minimum-Concave-Cost** [AHLN16]. **minimum-cost** [RV93]. **Minimum-Rank** [XFLP21]. **Minkowski** [LZH14]. **MINLPs** [WA15]. **Minmax** [ACB20]. **MINRES** [LR22]. **MIP** [HT24]. **MIPs** [DW10]. **MIQP** [FL98]. **Mirror** [BBN14, BTMN01, DL15, DAJJ12, FMP18, LLZ23, NL14, ZCH⁺23, ZMB⁺20]. **Mirror-Descent** [NL14]. **Mirror-Prox** [BBN14]. **Mirror-Stratifiable** [FMP18]. **MISO** [LTAP22]. **Mixed** [AWW09, AD00, BHM18a, BHM18b, BMFY24, BCWP21, BNP24, Bil02, BW02, BEET12, BCD⁺18a, BG22, BJS07, BDL⁺16, BR21, CF01, CMY15, DLM21, DIS04, DENR20, EG24, GMSS17, GNS08, Góm21, GAD20, GNL11, GACD14, HPU19, HAN11, Hyn23, Jan06, Kan14, KPZ19, KM19, LPS05, MDV12, NS21, NRS21, RSvdVH16, ST03, SKR16, SSY24, Trö05, Ulb01, XHL14, Zas13, Boy95, Eck94]. **Mixed-Integer** [AWW09, BMFY24, BCWP21, BCD⁺18a, BG22, BDL⁺16, DLM21, EG24, GMSS17,

GNS08, G6m21, GNL11, HPU19, HAN11, KPZ19, MDV12, NS21, NRS21, RSvdVH16, ST03, SSY24, KM19, Boy95]. **Mixing** [BDPX09, DG09, DW11, RTM23]. **Mixtures** [BH14a]. **Mizuno** [Bos93, GT97a, GT97b, KT14]. **Mode** [Ani05a, Ani05b, SZ98]. **Model** [And00, AKK14, BAC11, DD19, HR22, LPS05, Mar17, Ni05, ST10, TQP22, Yos07, YM14, dKV16]. **Model-Based** [DD19, HR22, ST10]. **Modeling** [BLS21, DDP24, FFG99, VJFC18, ZM06]. **Models** [BSV14, BV10, BGM⁺16, BCD20, CSW15, DR14, FWKS15, FGM12, FHKM06, HHP18, HP18, KKT15, MTB23, OR02, PP12, PP16, RR15, RvdVH15, RSvdVH16, SLS24, YZ13, ZYP21, vAF18, vBRM24]. **Moderate** [GY23]. **Modern** [CPS18]. **Modes** [LV07]. **Modified** [Gou99, MS11c, SE99, SXMW13, Wri99, WX22, Pow95]. **Modifying** [Wri02]. **Modulation** [RADK05]. **Modulus** [CKL⁺14, GVJ06, LSxY24]. **Molecular** [ANRV04, AT03, Wu96]. **molecule** [Hen95]. **Moment** [CCH05, LM18, LMX17, MN09, MP14a, MP14b, NJS21, STKI17, WML21b, ZXZ16, BH95, WML21a]. **Moment-Based** [NJS21]. **Moment-SOS** [WML21b, WML21a]. **Moments** [BNT04, Las01]. **Momentum** [DJ21, JLL23, Tse98]. **Momentum-Based** [DJ21]. **Monge** [HP07]. **Monomial** [BMW10]. **Monotone** [AZ05, ACS14, Alv04, AMS16, AL20, AG14, BMW16, BBW07, BWY10, BPSF24, BW07, BH14a, BCH14, BAC11, BAD18, BAR21, BL22, CC99, Com14, DST23, GY20, HYF05, Hyn23, KS12, KSH97, Lin08, LB00, Mal15, MT20, McS96, MS12, MSS15, NT06, Nem04, Pen00b, Rob07, Sab11, SSK98, SS00, SZ98, Tse97b, Wan11, YF00, AVS19, MOT95, Man91, McS94]. **Monotonic** [Tuy00, TMHP06, Ris94]. **Monotonicity** [BGW07, IPS03, Lim23, LR22, LMV23, MP97, MTT94, MN16, ZL01, CH94]. **Monotropic** [Gha17]. **Monte** [SdM00, VV21]. **Monteiro** [BDK⁺24, Mon98, Sim11, WW20]. **Moore** [HH96a]. **MOP** [TLT⁺18]. **Moreau** [BBW17, BDL18, BHHK00, CHLC19, DDD22, HSW14, LS97a, MZGS08, PAV21, PW16, WDST14]. **Mosco** [ZW12a]. **Most** [SLWX23]. **motions** [GK95b]. **Motivating** [JW14]. **Motivation** [WB05b, PQ93]. **Move** [ARS07]. **Moving** [AST10, BR19a]. **MPCC** [JRS09]. **MPCCs** [RB05]. **MPEC** [YZ10]. **MR** [MZ00, QW01, ZT98, LR21a]. **MTY** [MT04]. **Multi** [ABDL21, HF14, PTJY10, RHW93, ZWHZ23]. **Multi-block** [ZWHZ23]. **Multi-Leader-Disjoint-Followers** [ABDL21]. **Multi-Leader-Follower** [HF14]. **Multi-objective** [RHW93]. **Multi-Task** [PTJY10]. **Multiblock** [DLR17, LY19, LMZ15]. **Multibody** [GAP08]. **Multibranch** [DGR17]. **multicategory** [BM94a]. **Multicommodity** [Cas00, McB98, Vil05, Zen91]. **MultiComposite** [CHP20]. **Multiconjugate** [Lim23]. **Multicoordination** [MZ99]. **Multicriteria** [DD98, DY04]. **multicriterial** [Sta92]. **Multidimensional** [GLT04, HN19, HHP18, MU14, Qi16, TP16, PR93]. **Multidirectional** [ACL99, Tor91]. **multidisciplinary** [CDF⁺94]. **Multifold** [CCP08]. **Multifunctions** [GO16, HJO02, SYZ19, ZN07a, ZN09, ZN14a, ZN21, Den00]. **Multigrid** [ADV24, CP18, WG10]. **Multilevel** [BGN22, CGRV21a, GKT23, VV21, YWF19, ZX21, ZU11, Zie14]. **Multilinear** [DK18]. **Multiload** [BTKNZ99]. **Multimarginal** [Car22]. **Multiobjective** [AP21, ASZ08, BNL⁺18, Chu18, Chu20, CMVV11, DENR20, Eic09, FDS09, FV16, FBLV24, HY02, LLR16, Luc02, LPV05,

MTZ03, MGGS09, NE19, SP24, TLT⁺18, TE19, WHY⁺19, ZN14a, GJLVP14, ZÁC17]. **Multiple** [AWW09, BMS23, BS98, CKP00, CKS15, Don16, FMW96, GV00, GM12b, GST11, HCH12, HL08b, Luo97, MWDS18, SFM14, SKL09b, TZS02, YLS⁺15]. **Multiple-Choice** [BMS23]. **Multiple-Cut** [TZS02]. **Multiple-Load** [SKL09b]. **Multiple-Splitting** [GM12b]. **Multiplier** [AT00, BTZ97, DT98, GJ99, JLD03, KKS15, Luc02, NWWZ21, QT24, WJ00, Ye04, ZL20, ZN07a, Dun93]. **Multiplier-Penalty** [KKS15]. **Multipliers** [Bol14, FIS20, HLR16, JS20, MS13, MS19, Pen19, Sha97, ST14, STY15, SS24, Trö05, Tre95]. **Multipoint** [HL23a]. **Multirate** [ZHE23a]. **Multiscale** [Far20, GST08, MB14]. **Multisearch** [CMVV11]. **Multispectral** [RSMB19]. **Multistage** [AP18, BMFY24, CCD24, FGL24, GS21, GR12, Gui16, GMS21, HRS06, Küc08b, LZ03, MP16, MP19, Pfl10, PP12, PS21b, RBDM22, SÖ17, Sch98, SZ14, SD20b]. **Multistart** [Har98]. **multitarget** [PR93]. **Multiuser** [KNS11]. **Multivalued** [AGH10]. **Multivariable** [CH09]. **Multivariate** [CM24, DW15b, HP07, KdK23, LSZ04, LZ10, MN09, dKLS15]. **Mumford** [Wan95].

Nanoporous [BGG⁺12]. **Narrowing** [YWAS17]. **Nash** [AVS21, BK21b, BHR19, CCM20, CK99, DJS13, DFKS11, Ete20, FK10, GXZ21, HM15, HSK15, HST24, HF14, KS12, KS16a, KKS15, LFKCT23, LS22, NTZ23, OLR21, RS11, Sag16]. **Natural** [CHS24, HZZC22]. **Nature** [PW16]. **Navier** [HH06]. **NCP** [CC99]. **NCPs** [CL14]. **nCUBE** [GR94]. **Near** [AP22, GV15, PW17, ZB18]. **Near-Optimal** [AP22, ZB18]. **Near-Separable** [GV15]. **Nearest** [LdQ11]. **Necessarily** [BM16a, BD17]. **Necessary** [AZ09, Aus10, BT04, CLMP10b, CT02, CLPA21, DZ14, Gfr07, HN09, MM11, Sta92, WX20a, XY10, YZZ97, Ye00, YZ10, Zhu02, NT02, War92]. **Negative** [LR22]. **Neighborhood** [Gon99, LT10b, LP06b, Pot14]. **Neighborhoods** [AZ05, HY96, Zha98b]. **Nelder** [Kel99, LRWW98, LPW12, McK98]. **Nested** [BH96, GRW20, Pfl10, VJM16, YWF19, ZX21]. **Nesterov** [AP16, AF22, ADR19, NARS14, TTT98]. **Network** [ALSV18, AKT17, Bar96, BPT97, BRU97, CJSY07, Cas00, DRT17, DHP24, EB20, Ete22, FG04b, GHK17, HPU19, lid12, KKW09, KW10, LM16, MPSU19, MBW09, NMU18, PW05, Pul97, Rag13, RCGR18, RSE18, SCRS00, SK98, Tse07, WZYB08, XLD99, ZZ96, ZSY10, Sar95]. **Networked** [lid13, JRJ10]. **Networks** [AH19, BPS06, CHP20, Ete20, FHKM06, GKT23, LdF08, LDS22, LSS22, LXB19, Wen97, Bon97, GMS92, RV93]. **Neumann** [PRS16]. **Neural** [CHP20, DHP24, GKT23, LDS22, LSS22]. **Neutral** [MU24]. **Newton** [Ger11, ACN15, AD10, And96a, ABO22, AL20, BS15, BJKJ17, BK21a, BFO19, Bel94, BBN19, BU22, BS94, BK10, BLN92, BHNS16, CD19, CGT10a, CAFO24, CNQ97, CNY14, CH15, CL96b, CRRW21, DIS04, DGT20, Dix91, DMN24, DQQY02, EW94, EM91, FJS98, FLP02, FGO14, FS17, FHIS16, Fle91, FDS09, FM97, Ger08, GO21, Gil97, GL01, GW93, GN17, GN19, GLN07, GOP19, HMW21, HN05, HL23b, HLP23, HIK03, HH06, HGA15, IdW16, IK00, IS04, IS08, KN05, KFF09, KV17, Kau99, KSX08, LN93, Lau00, LSS14, LS93, LN07, LdQ11, LST18a, LST20, LM99, LLST19, LMH19, LV08, LWZ15, LR21a, Lu17, LRR98, MSQ98, MU14, MXC⁺19, MSU24, Mis23, MER18, MP99, MS12, MN00, MS21, NN91a, NLQT06, PMR19, PCA19, PW17, Qi99, QZ00, QGD18, RN21]. **Newton** [Roo06, Roo15, Sch08, SXBN22, SAH⁺24, SS00, Sta04, SH97, SK98, SW99, SSQ04,

TZSW96, Ulb03, WN16, WST10, WMGL17, WHY⁺19, Wri95, WPY23, XS99, YNS20, YLG22, ZA14, ZZST20, ZST10, ZC10, ZPXQ21, ZNB⁺93, dPRT01]. **Newton-Based** [PMR19]. **Newton-CG** [HL23b, HLP23, WST10, ZST10, CRRW21]. **Newton-like** [AL20, BJKJ17, CAFO24]. **Newton-MR** [LR21a]. **Newton-Type** [IS04, KN05, LSS14, NLQT06, QGD18, SS00, HH06]. **Newtonian** [FIS10, IK14]. **Nice** [LRS22, Ros14, RT19]. **Nikaido** [HSK15]. **NLP** [Fle12, LXL11]. **No** [CW18, LYP23, EH20, MZ00, QW01, ZT98]. **No-Gap** [CW18]. **Noise** [BCS21, JBS⁺23, KLL22b, OBN23, SXBN22]. **Noise-Tolerant** [SXBN22]. **Noisy** [AF01, BBN19, CCF⁺20, DKVW17, MS18, Nol98, TY11]. **Non** [BC14, CLP16, CTW19, GMM17, HKMS20, LTP23, She14, TDZ20, WC24, ZC20, ZCT10, GK99, NT02, War96, ZL03]. **Non-Euclidean** [GMM17, LTP23]. **non-Gaussian** [GK99]. **Non-Lipschitz** [CLP16, WC24, ZC20, NT02]. **Non-Lipschitzian** [BC14, CTW19, ZCT10, War96]. **Non-stationary** [TDZ20]. **Non-Zenoness** [She14]. **Nonasymptotic** [Krä24, ST13]. **Noncoercive** [FB00]. **Noncommutative** [HKP24]. **Noncommuting** [CKP12, PNA10]. **Noncompact** [GWZ15, VS10, ZT92]. **Nonconvex** [ATP21, ABCFR20, ANP08, AFS14, ACB20, Aus15, BB21, BE06, BT21, BGMT19, BGY⁺23, BM14, BLP23, BLO⁺23, BCN19, BB23, Bou16, BDPP14, BL09, BLO05, CD19, CGT10a, CGT11, CGT12, CGT20, CCF⁺20, CLL23, CMV19, CHP20, CO12b, CRRW21, CW23, DKL21, DG19, Don16, EQR22, FI08, FK00, FB03, FBM13, FBM15, FBO21, FG98, FGG04, GL14b, GNRPT16, Har09, HS10, HS23, HL23b, HLP23, HL14, HLR16, HZZS22, HAG18, Iid12, JL18, JJ15, KM09, Kas10, KLV18, Kiw07a, Kiw10, KT00, KMM19, KM21b, KM24, KRT07, LY19, LMW16, LMZ21a, LTAP22, LF01, LN02, LP15b, LZSV20, LC24, LZ24, LM21a, LXB19, MT24, MXC⁺19, uDR15, MN13, NEYL24, NE19, NT19, NR20, OP19, OLR21, PS11, PT18, PMR19, RW18, SBT16, SLWX23, SLM05, TSP18, TP20, THDL22]. **Nonconvex** [Tse03, WMGL17, Wan17, WCP17, WLZY07, XSLZ11, XKK22, XY15, XWSD24, Xu24, ZL20, ZC20, ZL22a, ZN10, Kiw96, Tha94, Tre95, CDHS18, HFD16]. **Nonconvex-Concave** [BB23, KM21b, OLR21]. **Noncooperative** [vdLTY06]. **Nondegeneracy** [BS98, CS08b]. **Nondegenerate** [Vui14]. **Nonderivative** [Kiw10]. **Nondifferentiable** [GMS21, MSQ98, NB01, Ye04, Kiw96]. **Nondiscrete** [MP19]. **Nonemptiness** [MZH20]. **Nonempty** [BP07]. **Nonexpansive** [Ceg15, CRZ18, CG17, IY09, KL97, KT08, LMV23, NT06, SY13, Tse92]. **Nonexpansive-Type** [KT08]. **Nonexpansiveness** [LWY24]. **Nonglobal** [For05, WX20a]. **Nonindependent** [dM08]. **Noninterior** [CX99, CH93a]. **Nonisolated** [ATP21]. **Nonlinear** [AFS01, ASS24, Ani00, Ani02, Ani05b, AD04, AD09, Aus15, BE14, BCRZ21, BH03, BPC11, BGM⁺16, Bla21, BKT99b, BHN99, BCN10, BCT19, CGT11, CGT14, CH97, CX99, CWH06, CRY99, CHN18, CY10, CV17b, CVV99, CR04, CJRW14, CWZ18, DHL⁺99, DY99, DK13, DD98, DEAW99, DSD12, FS97, FJS98, FP97, FGL⁺02, FG98, FS05, FSF12, Fus14, GLM98, Gfr07, GM15, GKR20, Gis21, GKV03, GOST01, GLT04, GLR14, GLN07, GST08, GNL11, GSW97, GKT24, Gün14, HH96a, HHP18, HP18, HZ06b, HY02, JBS⁺23, JR00, JZZ20, KP99, KFF09, Kas10, KKT15, KK05, Kol05, LPT07, LRZ21, Las02, LM02, LSW06, LZ03, LS04, LY11, LL09, LLS10, LDLS20, Mal07, Mat05, MU20, MS11b, MG98, NA20, NWW09, OOT22, OW06, OS17, Pat98,

POLW20, PP18, Pyt98, Rag13, RKG08]. **Nonlinear** [RM08, SD00, SW11, SAZ22, SL14, SS00, SKB18, TWB⁺03, Ulb01, Voi08, WB05a, WB05b, WDZZ23, Wat00, WG10, Wri98, Wri01, Wri05, YY03, YT10, YH01, Yos07, ZA14, ZCD00, ZC10, ZLTD22, vAH14, AW93, BKT99a, BS94, Bur92, CL96a, CL92, DvTY91, Dan93, DMZ94, Dun93, Hei93, Hus94, Iof94, IK92, KSW94, LP93, MPW95, Sar95, YY95, YG91, ZC91]. **Nonlinearly** [LJ02, Sta99, GR94]. **NonLipschitz** [CNY14]. **Nonmonotone** [AFFG14, BMR00, GLR15, LN09, LZ19, NEYL24, QP23, TSP18, Ulb01, YPC18, ZH04]. **nonmonotonic** [EA95]. **Nonnegative** [CHLZ17, CST19, Erg19, GV15, Las05, Las06b, LSZ04, RV06, Vav10, ZCTW12]. **Nonnegativity** [KVZ24, Las11]. **Nonpolyhedral** [PR95]. **Nonseparable** [CN23, FB19, KM24]. **Nonsingular** [BM07]. **Nonsingularity** [BPC11, CS08b]. **Nonsmooth** [ADV24, ABO22, AV20, AFS14, ACL99, BRA⁺20, BIM23, BR23b, Bet19, BW02, BDL07, BLP23, BPSF24, BLPP16, BCN19, BDL23, BLO05, BK10, CD00, CNQ97, CQT03, CMSZ20, Chr20, CDM20, CV17b, CO12b, DL15, DSS09, DG19, DDD22, DZ14, Dol20, EW09, FLLR14, FH14, FGG04, FKP10, FQ96, GAP08, Ger08, Ger11, Gfr13, GL18, Hab98, HL23a, HSS20, HU17, HU19, HNP00, JL03, JY04, JBK⁺18, JS11, Kan14, KN05, KT18, Kiw07a, Kiw08, Kiw10, LMZ21a, LN09, LLC22, LLR16, LLRV19, LZ19, MX06, MS23, MXC⁺19, MS21, NARS14, Nes05, NT19, PQ93, PT18, PR96, PC03, RS11, RHL14, SS05, Sen07, Sol07, SH97, SSQ04, SW24, TDFC18, WJ00, WP23, WC24, WCP17, XYZ15, ZOB20, ZLTD22, Jey91, Pan94, Qi95, SZ92, Sta92, GJV16]. **Nonsmoothness** [Lew02]. **Nonstationary** [Gha23, GS01, McK98]. **Nonstrongly** [FRMP18, YNS20]. **Nonsymmetric** [BPS99, DZ07, O'L95, SW95]. **Norm** [AUU24, Dax09, DV14, DV16, Gar21, Lin08, MMBS14, PTJY10, SM18, TQP22, WLS23, WDST14, WPY23, XLxY21, XFLP21, ZL02, AB95, Dax92, Hei93, JLW16]. **Normal** [AH05, BSW23, CH17, DD98, GJ17, LN14b, LL23, Lu14, MOT04, QWY04, ZL01, ZW12a, ZN14b]. **Normal-Boundary** [DD98]. **Normality** [BYZ19, AFSS19]. **Normed** [BU22, FBH22, LN05b, LNP07, LMP⁺18, LNYZ21, MM21, NZ01]. **Norms** [AdKH19, GG18b, HHJL23, QZ00, Sch12, XY97, XY00, And96a]. **Note** [AW00, Bie16, LM05, MZH20, WD05, SM93]. **Notion** [Chu06]. **Notions** [HL14, LWY24]. **Novel** [JL19, LZ24]. **NP** [PW19, RK19]. **NP-Hard** [PW19, RK19]. **NT** [JH14]. **Nuclear** [DV14]. **Null** [BM98b]. **Number** [AB12, AILT14, BV21, CWY11, CCH05, CCP08, GL08a, GL08b, LV22, OHF12, PVZ07a, See22, SS22, YZ13, Zol03, dP02]. **Numbers** [AL14, MY09, Ren96, WZ24, dKP12]. **Numerical** [AHO98, AFGG11, BV10, BLO⁺23, FL98, GLR15, Har14, HKK11, INT17, KN02, KN04, LP93, RFB⁺11, ZG03, ZNB⁺93, NN91a, SZ92]. **Objective** [ASZ08, GJT23, GKT23, HL08b, KT14, Kur24, LSW06, MS23, RP12, TM15, WP23, ZT98, AW94, MTT94, RHW93, ZT96]. **Objective-Function-Free** [GJT23, GKT23, KT14]. **Objectives** [CC19, LPW23, ZW18, CLMS93]. **Observable** [NJS21]. **Observations** [OS17, PP16, TY11]. **Observed** [LZ24]. **Obstacle** [HKK11, Wac14]. **Obstacles** [Xu19]. **Obtaining** [DMS22]. **Occupancy** [BLS21]. **Occupation** [HKKRZ24]. **ODE** [HPU19]. **Off** [BBH24, WLZY07]. **One** [BW02, BR08, BKS96, DV14, JRW94, JS97, RW16, Wat00, WBME14, XLD99, Bos93, KBS93, WA15]. **One-Parametric**

[JS97, JRW94]. **One-Sided** [RW16]. **Online** [GH16, MMN⁺22, SY13]. **onto** [BBW18, BSW23, HZ16, Rut17]. **Openness** [DS12, LP22]. **Operating** [GLM98]. **Operations** [Ans99, ALSV18, BP15]. **Operator** [AB18, AH05, BGW07, GL08b, KLL22a, LMV23, O'D21, RSMB19, RTBG20, SU14, Ulb03, WLN23, XC21, MOT95]. **Operators** [Alv04, AL20, AVS19, BBMW16, BBW07, BZ04, BW07, BH14a, BCH14, BU22, Ceg15, CRZ18, DP19, DST23, DSST20, MBG24, Nem04, Wan11, CH94]. **OPT** [VV21]. **Optical** [ZM06]. **Optim** [MZ00, QW01, ZT98]. **Optima** [EH20, MM11]. **Optimal** [ADE⁺18, AP22, AO06, ADR19, BK21a, BDM16, BM16b, BM18a, BHHK00, BP05, Bet19, BGM24a, BGM24b, BBV02, BPS06, Cal07, Car23, CT12, CD92, CLO14, Chr20, CF99, DK13, DG23a, DYC⁺21, DHP24, DK10, DFR18, Ete20, FS23, Fie00, Ger08, Ger11, GL12, GL14a, GCPT18, GK99, GKR14, HTT⁺15, HHP18, HP18, HBM21, Her09, HMW13, HV05, HSW14, IK00, IT18, JNN21, JKZ98, JS20, KS00, KLL22a, KLL22b, KU15, KR02, KGM23, LZ23a, LM18, Lau00, LPR00, LM21b, Lim11, LLLP24, Mal07, MRT15, MCL10, MN14, MOS14, OR16, PZ03, RS97, RT06, RFB⁺11, RTBG20, Sch09, SW11, SU14, SKC12, SdM00, Sta99, TSAKN23, TM15, TW14, VZQD17, Wac14, Wan24, WZZ22, ZML21, Zha20, ZB18, dGJ18, dAGL24, BTB93, Bon97, Dun93, Fle95, GHRT98]. **optimal** [MS94b, Ral96, Wri91]. **Optimal-Storage** [DYC⁺21]. **Optimality** [AAS17, APX17, AXY23, AMS10, AHSS19, AFSS19, ASS24, AD19, Aus10, BT04, BT00a, BE14, BGY⁺23, BCS99, BH96, BHR19, CLMP10b, CT02, CdlRT08, CHW12, CNY14, Che15, CM21, Chu20, CLPA21, DZ14, DKM18, DMM06, Dol20, EW09, FS12, GW21, Gfr13, Gfr14, GG18b, GYZ14, GJN06, HSS20, HS11, HKP24, JLD03, LL23, LP06a, MY10, MOR15, Ni05, PY97, Pen17, RT06, SN07, SPM18, SKR16, VJFC18, WW20, XY10, YZZ97, Ye99, Ye00, YZ10, YZ16, ZN11, nnSnPm24, Di96, GIJT96, JSC95, NT02, Sta92]. **Optimistic** [MOP20]. **Optimization** [ABT00, AK08, ANT16, ABCdC23, AFH⁺13, ASNP16, ATP21, ABCFR20, AKS00, AABL21, AD10, AMHL05, AT03, And00, AF01, AMS10, ASS24, ADV24, AB08, AP21, AKR23, ANP08, ATU23, AUU24, ABO22, AKK14, AO18, ACB20, AFGG11, ASSS23, AO06, AD06, ACD08, ASZ08, ABK22, ADR22, AT06, ACL99, AZ08, BER04, BQX15, BJKJ17, BGN22, BRA⁺20, BRÖA24, BB21, BBW05, BO17, BMFY24, BT00a, BE06, BE14, BPS15, BR23b, BGMT19, BTMN01, BGY⁺23, BYZ00, BNL⁺18, BBN19, BCRZ21, BHKO02, BHK⁺09, BFS16, BY11, BNT04, BP05, BdHP21, BCWP21, BNP24, BC14, BG08, BM14, BM18b, BLG13, BGM⁺16, BM17, BM18c, Bla21, Bla23, BKT99b, BGG⁺12, BB19, BBN18, Bom15, BMSS19, BG22, BLPP16, BP97, BS98, BLO⁺23, BIS05, BKMW20, BHP23, BDL23, Bou97, BR08]. **Optimization** [BFMS14, BM20b, BBNT24, BL22, BR21, BLO05, BCW14, BCWW20, BCN08, BCN10, BCNN11, BHNS16, CKP12, CMYZ22, CGRV21a, CP18, CLPT06, CKLP07, CGC15, CDHS18, CCL09, CCD24, CGT10a, CGT14, CGT20, CT02, CM20, CM22, CM17, CS16, CM11, CHLZ12, CNY14, CLP16, CJ18, CTW19, CCF⁺20, CMSZ20, CLL23, CR23, CSY23, CRY99, CCN⁺18, CCFG23, CSW12, CN23, Chr20, CDM20, Chu16, Chu21b, Chu20, CV17b, CGST96a, CVV99, CHP⁺09, CP01a, CH13, CPRZ20, CV24, CR21, Cru14, CDZ17, CHP20, CNW10, CO12b, CJRW14, CRS18, CWZ18, CRRW21, CW23, CMVV11, DDPR24, DL15, DHP16, Dan21, DD98, DP22, DDD22, DKS22, DENR20, DZ14, DKM18, DV97, DEAM97, DR03, DR07,

DHR07, DR14, DW15b, DL22, DGN12, DW22, DLV10, DGL10, DSD12, DNSD13, DMVV17, DN20, DN22, DIL16, DLR17].

Optimization [DBW12, DR18, DPS17, EH20, Eic09, EQR22, EA99, EL09, EAV10, EN14, FWKS15, FLP02, FLY11, FNMK24, FIO8, FLLR14, FRMP18, FV07, FS96, FIS10, FGO14, FLP19, FLS03, FH14, Fle14, FDS09, FV16, FB03, FBM13, FBO21, FBLV24, FHPS22, FV99, Fre03, FS05, FMP14, FHKM06, FPT22, Fuk98, GB22, GLCxY18, GSAS21, GC23, GL16, GSU21, GW21, GLRW21, GMSS17, GHKL17, Gfr07, GL12, GL14a, GRW20, GL01, GMS02, GL03, GKR20, GSG12, GLT03, GLdS05, GM12b, Góm21, GHZ99, GKR14, GHHL05, GDG22, GJ99, Gou99, GST05, GLR14, GH15, GN23, GST08, GJT23, GKT23, GE14, GW19, GKPV01, Gün14, GJN06, GHNS19, Hab98, HPU19, HZ06a, HP09, HdR02, Hal24, HMJ+23, HL23a, HS21, HPD14, HS10, HKP18, Har98, HSS17, HXH22].

Optimization [HLNZ08, HP18, HL23b, HLP23, HR14a, HSS20, HBM21, HK10, dM08, HZZS22, HWWY23, HU17, HU19, HM02, HR22, HFD16, HKP24, HLY16, HS17, HCH20, HXLT23, HY15, HNP00, HY02, HY06, HGA15, HAG18, IY09, lid12, lid13, IH14, Iof09, IS02a, IS04, ISU12, JHR23, JBS+23, JFX17, JAL15, JY04, JLL09, JLLP16, JL18, JLW16, JS16, JLZ20, JX24, JL05, JRJ10, JS97, JYK24, JM18, JBAS10, Kas10, Kau99, KY21, KLW18, KT18, KQ19, KMP23, KKW05, KKT20, KNP98, Kiw04, Kiw07a, Kiw08, Kiw10, KPV18, KSdM01, Kol05, KLT07, KNS11, KS16b, Kuč08a, KJ17, KS05b, Kur24, KBGY22, KGM23, LNP98, LPW23, LZ16, LZ18, LY19, LRZ21, LOZ23, LZ23a, LMW16, Las01, Las06a, Las09, Las10, LP10, Las11, Las16, LM19, Las22, LP15a, LJ20, Lem98].

Optimization [LS13, LRP16, Lev00, LT02, LF01, LN07, LNP08, LFL09, LT10b, LP15b, LST16, LMP+18, LL20, LCD+21, LBT22, LL23, LSY24, LM21a, LM99, LNS18, LX23, LNQY10, LXB19, LU97, LY11, LMX17, LLC22, LLZ24, LLS10, LLR16, LLRV19, Lu09, LFN18, LM23, LM24, LSdZ18, LV19, LRR98, LS02, Lue08, LA08, LSW20, LSTZ07, LSL08, LZ10, MMN+22, MSFL17, MU18, MWDS18, MP19, Mai15, MPP+17, MC05, MS11a, Mar05, MRS16, Mar17, MP14a, MP14b, MLC22, Men17, MS23, MSQ98, MM05, MU20, MU24, MU14, MXC+19, MMBS14, MS20, MM21, uDR15, MS11c, MS14, MTZ03, MO07b, MR12, MRS14, MN14, MS21, MW09, MA00, MS06a, MARS10, MTB23, MNR+22, MGGS09, MS02, MKU21, NYF11, NB01, NOS17, Nes12, NT16, NS17, ND10, NS21, NLZ10, NEYL24, NR09, NW12, Nie14].

Optimization [NWYZ21, NE19, NS18, NRS21, Nol98, NMU18, NR20, OOT22, OP19, OF03, OS23, OBN23, PS10a, PARN22, PT18, Pap16, PY19, PMR19, PRT02, PTZ05, Pen19, PP18, PFA17, Per23, Pfl10, PP12, PP16, PS21b, PW17, PMDL10, PNA10, PC03, QQ00, Qi16, QP23, QT24, QGD18, Rag13, RBDM22, RNV09, RHL14, RC22, Ren16, RW12, Roo06, Roo15, RW18, RW17, Roy20, RR08, RSKW19, hRK14, SS17, ST22, SS05, SBD+11, STKI17, SI13, ST10, SO21, SSW16, SOT09, Sch05, Sch06, SFP11, SK22, SDGM99, SSSZ10, Sha97, SZL23, SHP18, SZY16, SM18, SLWY15, SXBN22, dCST19, Slo22, SL14, SLWX23, SVD12, SVD14, SH15, SGK21, SMG14, SKL09a, SKL09b, SSQ04, SLM05, SAV14, SSD22, Sva02, TLT+18, TA98, THG17, TW14, TP20, TE19, TSR22, TPF22, TDFC18].

Optimization [Tse03, Tuy00, TMHP06, VV21, VVM+09, Van14, VD06, VIT22, Vog08, VS08, VS10, WUR+23, WKKM06, WG19, WST10, WMGL17, Wan17, WHY+19, WX20b, WC24, WG10, WTKR13, Win08, Wri12, Wu96, WZZ18, WPY23, XA18a, XKK22, XY15, XYZ15, XA18b, YY03, YT10,

YmZS15, YTY24, YH01, YLQ03, YST14, YFHS16, YWF19, Ye99, Ye00, Ye04, Yin99, YLZ02, YKI04, YNS20, YPL21, YCST22, YM14, Zas00, Zas05, Zas13, ZDR24, ZZ96, ZH04, ZH06, ZXZ16, ZC20, ZAL21, ZX21, ZL22b, ZL22a, ZHE23a, Zha20, ZY07, ZN11, ZN14a, Zhe20, Zhe23c, Zhe23b, ZCTW12, ZPXQ21, Zhu02, ZU11, Zie14, Zol03, ZÁC17, d'A08, dPRT01, dKL11, dKLS15, dKHL17, dMS24, vBRM24, vdBF11, Ali95, And96b, AM94, BNS95, BKT99a, BD93, BL94, BTZ92, CGST93, CDF⁺94, DEG⁺91, EA95, GN92, Gil97, GK95a, GR94, GW93].

optimization [Hen95, Iof94, JRW94, Kiw96, LS91, NS91, NN91a, NT02, Onn94, Out94, Ove92, PZ94, PY93, RHW93, RS94, RD95, Sar95, Sch92, SC91, SM91, Ser95, SF95, Sta92, Wri92, Zha94a].

Optimization-Based [SVD14]. **Optimize** [BVG⁺20]. **Optimized** [KF18b, QCLP19, WX22]. **Optimizing** [BLS21, HL06, LMZ21a, MY09, PCA19].

Optimum [PZ98, PZ00]. **Option** [BCM03].

Oracle [CGT12, WK19, Onn94]. **Oracles** [Chu21a, JSX24, vAS14]. **Orbits** [CG17].

Order [Abr05, AA06, AXY23, ASS18, Aus10, Aus15, AI11, AI12, BT04, BDS10, BBW17, BT12, BV18a, BF08, BGM19, BGY⁺23, BGM⁺16, BSTV18, BCS99, BCD18b, BL22, BA13, BCT19, CT06, CMYZ22, CGRV21a, CGT12, CGT20, CT02, CdIRT08, CT12, CM20, CM22, CB14, CYZZ19, CW18, CMV19, CS15, CSV09, CRRW21, DDPR24, DSK20, DHR07, DO19b, DN22, DFR18, EI06, FS12, FSF12, FLT01, GLC_xY18, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL14b, GL15, GNS08, GN20, GN23, HYF05, HW10, HS06, HM15, HL23b, HLP23, HMN10, Her09, HS11, HNKK17, HN04, HZ22, JL18, JYK24, KP22, KFF09, KT18, KM21a, LST21, Lin08, LJ16, LFN18, LM23, LZ23b, LM24, MMN⁺22, MP18, MFBR24, MLC22, MS03, MS14, MO01, MR12, MOS14, MOR15, MS06b, Nes21].

Order [NR20, OOR17, OLR21, OR11, PC08, PRT02, Pen17, PQS01, RT06, RW18, RR08, SS17, SLWY15, SL21, SKR16, SJM21, SXMW13, THG17, TW14, TDZ20, Tse07, Wal08, WB16, Wan24, WH24, WY03, Xu17, Xu22, YZ16, YM14, ZY14, ZL22b, ZWHZ23, BRB19, CLMS93, CJ18, Dun93, Mar17].

Ordered [BP07, BTMN01]. **ordering** [AEGS93]. **Orderings** [Ort91]. **Orders** [BBW17]. **Orthogonal** [AADD09, Che01, Lin22, MB24, MW06, WZZ22].

Orthogonality [GLC_xY18, MP97].

OrthoMADS [AADD09]. **Orthonormal** [CP08]. **Other** [BMZ01, DGR17, ZT98, ZT96]. **Out-Forest** [Rot09]. **Outcomes** [QCLP19]. **Outer** [BGM24b, CNQ97, GHKL17, GL10, HP94, LW08, MS23]. **Outer-facial** [HP94].

Outlier [Góm21, RSKW19]. **Outliers** [JX24]. **Output** [RS97]. **Over-Relaxations** [AD15]. **Overcomplete** [AAJN16].

Overlapping [INT15]. **Overton** [KSS99, LM05].

Pack [AKT17]. **Packing** [BDDM19, DFO20, DdLM21, EMN22, EL08, EL10, EL14, IPS11, Jan06, MC05, MS02].

Page [dKP12]. **Pairs** [GU22, Luk08].

Parabolic [BCS99, BGM24a, BGM24b, HR14b, KS99].

Paradigm [Pot12]. **Parallel** [ACP11a, ADL08, BH14a, CCT21, Eck94, Ent96, FR15, FM91, FM94a, FH14, Fuk98, GPR02, Gar93, GMR91, HM02, JYZ94, JSV91, KT04, Kol05, NC16, NS21, Sol98, SAW99, YN17, AM94, BM94a, DT91, Dix91, Lau94, MMZ95, NS91, Pan94, Ral96, ZC91].

Parallel-Sum [BH14a]. **Parallelism** [CCT21, LW15]. **parallelization** [NN91b].

Parameter [BBTT12, BH03, BCWW20, HCH12, MT24, OS17, QZ08, RTBG20, SNTI16, ZZN18, EA95, IK92].

Parameter-Free [MT24].

Parameterization [DR01]. **Parameterized**

[BS98, Lev00, QZ08, LCPS20]. **Parameters** [AO06, LP15a, MCL10, SFP11, HSS93]. **Parametric** [BPSF24, DSD12, GM17, GM19, GLY12, GLYZ14, HP24, HHP18, HP18, JS97, KJ17, Las10, MS11b, MN16, QW20, YY23, YM14, JRW94, LP93, MS94b]. **Pareto** [BKR17, DW15a, DD98, DKVW17, EL09, HHI⁺20, Lov11, MGGS09]. **Parsimony** [Las16]. **Part** [BLMH06, BGM24a, BGM24b, YmZS15]. **Partial** [BT94a, Bur03, GW93, HV05, KYYZ22, LZ13, LLT22, LMT18, QW20, WK19]. **Partial-update** [GW93]. **Partially** [BL93, CTW19, NJS21, NTA04, SAV14, EM91, GW93, Tse91, YG91]. **Partially-finite** [BL93]. **Particle** [YTY24]. **Particular** [Aus15]. **Particularly** [LRS22]. **Partition** [HOR99, SL15, TW14, GHRT98]. **Partition-Based** [SL15]. **Partitioned** [Wri91]. **Partitioning** [GSZ14, PR07b]. **Partitions** [BH96, SK06]. **Partly** [MS03]. **Passive** [ALSV18]. **Path** [AZ05, AKT17, BDK⁺24, BK10, DNSD13, Fay96, Gon99, HdR02, Hal24, HK06, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LNS18, LP06b, LMO06, LSZ98, Mon97, MBW09, Pot14, SLS24, Sim11, TDKC14, Tse97b, ZX99, Zha98b, ZL02, AB95, Ans96, Gon91b, Gon91a, NN91b, SG94, Zha96, dRV92]. **Path-Based** [Hal24]. **Path-Following** [DNSD13, Fay96, HK09, HSW14, HSK15, HY96, KJ17, LT10b, Lin08, LMO06, Mon97, SLS24, Sim11, TDKC14, Tse97b, ZL02, AZ05, HK06, Gon91b, Gon91a, NN91b, SG94, Zha96, dRV92]. **Pathological** [DD20]. **Paths** [DW11, LSS22, LM04, MUPT24, QLSZ18, Ber91]. **Pattern** [Abr05, ANRV04, AD00, AD03, AD04, CV07, DLT03, KT04, Kol05, LT99, LT00, LT02, PW06, Tor97]. **Payoff** [ABGJ14]. **Payoffs** [DG20]. **Payoffs-Beliefs** [DG20]. **PCA** [AP23]. **PDE** [Bet19, Bla21, Bla23, CM20, CM22, CR23, CV17b, GSU21, HCH12, HK10, KS16b, MU24, SSW16, ZU11, Zie14]. **PDE-Constrained** [CR23, CV17b, GSU21, HK10, KS16b, MU24, ZU11, Zie14]. **PDEs** [DHP24, VV21, Voi08]. **Peaceman** [HLWY14]. **Peeling** [WLZY07]. **Penalization** [ACP11b, HY02, RPK03, RGY99, SXMW13, YZZ97, BL95]. **Penalties** [CKL97, KK02, SBFA17]. **Penalty** [ACP11a, Aus99, Aus15, AI11, BC09, BH18, BTZ97, BCWW15, BCWW20, Cha02, CLP16, CC02, FK10, FSF12, GMSS17, GKR20, GYZ14, HN03, KS10, KKS19, KMM19, LY11, LMZ21b, LL09, LLS10, LZ14, LM24, MY10, MMBS14, SS05, TN21, XLxY21, YY03, Zas05, Zas13, ZA14, EA95, Li96, Luc92, PZ94]. **Penalty-Barrier** [GKR20]. **Penalty-Gradient** [BC09]. **Penalty/Barrier** [BTZ97]. **Pennisi** [BCT19]. **Penrose** [HH96a]. **Perceptron** [SP12]. **perfect** [Ris94]. **Performance** [CR23, DGT20, DMM06, Lin22, LYS17, RTBG20, THG17, Ans91, Dix91]. **Periodical** [SD20b]. **Permutation** [JLW16]. **Perspective** [ABD⁺18, AF22, CHP⁺09, DJ21, Har09, LXB19, ZHE23a]. **Perturbation** [CX08, LN02, NT08, ZN05, ZW12b, ZN21]. **Perturbations** [BGJ12, CKLP07, CSW12, Don16, Hol04, Peñ00a, Phu10, SDR20, ZZN18, GHRT98, SW95]. **Perturbed** [AL21, DNSD13, LN18, MPP⁺17, OOR17, OR11, TZSW96]. **Pessimistic** [LSS19, WTKR13]. **Phase** [Bou16, LYS17, RSMB19, ZB18, dSTVB18, Fre95, JSC95]. **piece** [Gur94]. **Piecewise** [AFGG11, BGP09, Fus14, Gor22, GW19, HS21, KLW18, LM16, Lov11, She14, SL21, WG19, ZN14a, Li96]. **Piecewise-quadratic** [AFGG11]. **Pipe** [XLD99, ZZ96]. **Pitchfork** [RM08]. **Pivot** [DKS22, Pan05]. **Pivoting** [MPB02]. **Planar** [MW06]. **Plane** [Ans98, BCDJ21, DSP10, DG09, DKLM22, GLY96, GV00, Kiw97, Luo97, Mit00, MG98, NV99, OG03, SXMW13, TZS02, AEGS93, KN93].

Planes [AWW09, BM14, BLST19, FMW96, FGG04, Por20, Boy93, Boy95]. **Planning** [FLS03, RADK05]. **Planted** [CC18]. **Plasticity** [HMW13]. **Player** [HM15]. **Poincaré** [Bla21, SSW16]. **Poincaré-Type** [Bla21, SSW16]. **Point** [AHO98, Alv04, AB08, AGJJ00, AD19, BBN14, BER03, BER04, BNL⁺18, BHHK00, Bia16, BP97, BLT17, BCLN22, BI98, BD10, BHN99, Cab05, CD00, Cas00, CKS15, CM11, CLO14, CMY15, Chu09, CL14, CP15, CC02, CY14, CO12a, DIPR20, EAV10, FFK00, FM03, FS08, FKS02, FT02, FT07, GSU21, GP04, GLdS05, GS98, GG03, GG08, Gon14, GLTP98, GLHZ11, Gor22, GOST01, GMO14, GK96, Gu00, GR10c, GY20, Gün14, HYZ08, HA21, HM15, HM16, HL23b, HLP23, IY09, Iid13, IPS03, IS10, JKZ98, JRS09, KSH97, KSS99, KRZ17, KMM19, KM21b, Kor00, KU15, LM02, LR10, LT10b, LM12, LMH19, LS04, LM05, LY07, McK98, McS96, ML05, MÖ07a, MÖ09, Mia96, MSU24, Mit00, MOP20, MT03, MOT04, NS98, Nem04, NT98, NT16, Nes21, PLS08, PRT02]. **Point** [Per23, PS97, PS98, Pot08, PS10b, Pot14, RB05, RB18, RO18, Ran06, Roo06, Roo15, SOT09, SP97, SSK98, Sim11, SS97, SZ98, SW24, TWB⁺03, Toh00, Tse02, WST10, WLLY16, WLN23, WD23, Wri99, Wri01, YF00, YY03, YT10, YST14, YT22, YT02, YW02, Yos07, Zas10, Zha98a, ZOB20, ZZST20, ZWHZ23, Zha98b, ZL01, dKV16, vdLTY07, Ali95, BF96, CLMS93, DvTY91, Gro95, Gül92, HRVW96, HZ06b, JS95, JY94, KKM93, LMS92, McS94, Meh92, Mit94, MTT94, MKT95, MW96, MS11c, NN91b, Pot96, SM91, SG94, TZSW96, Tod92, Wri92, ZTD92, ZTP93, ZT93, Zha94b, Zhu96, ZL03]. **pointed** [BD02]. **Points** [AA06, AY08, ANRV04, AAZ15, Aus10, BWW12, BH20, BGR20, CSV09, DDD22, EZ10, GLM98, GTdS06, GHHL05, GER23, HLB20, HW07, JBK⁺18, JR10, KL97, KT08, LBP20, NS21, OOR17, OR16, OR11, PMR19, Spa14, SLM05, TY04, Win08, Xu19, YZ13, ZAG24, vdLTY06, BF96, Pan94, Sch92]. **Pointwise** [AMS16, CdlRT08, CBFG23, GMM17, HLZ08, HK10, KS93, RT06, SKR16, Trö05, GIJT96]. **Polar** [FMP19]. **Policies** [Ber17, BPS06]. **Policy** [CHS24, KLL22b, LLZ23, ZCH⁺23]. **Polyadic** [SVD14]. **Polyak** [HY06]. **Polyhedra** [ACHW21, ABP18, BM02, DGR17, Boy93, GMS92]. **Polyhedral** [BR19a, BY11, CP01b, CST19, DR96, ER05, FGM12, GR12, HL08a, HMN10, dMM10, Man99, MB14, Nga15, Rut17, Sch12, LT93]. **Polyhedrality** [BRS15, DGR17, LMT18]. **Polyhedron** [DLW99, HZ16, DvTY91]. **Polymatroids** [HKP18]. **Polynomial** [AdKH19, BK12, Bie16, BM18b, BR08, BMP22, CKP12, CP18, CHLZ12, Chu16, Chu18, CV24, DHP16, DP22, GVA11, GPT10, GE14, HKP24, HYY16, HOR99, IPRT00, JRT97, JPT13, JLLP16, JL05, JM18, KKW05, KKT20, KdK23, KPV18, LMT09, Las04, Las06a, Las09, Las10, Las11, LZ10, MHL15, Mon98, MT99, NT16, NR09, NW12, Nie14, NWY17, NWYZ21, Pap17, PR07a, PNA10, PS10b, QT24, Ran06, STKI17, SOT09, SP97, Slo22, WKKM06, YZ13, ZCTW12, dKL10, dKL11, dKLS15, dKHL17, Bar93, BTN94, BH95, DL91, LL94, PY93, ZT93]. **Polynomial-Time** [Chu16, NT16, SOT09, DL91]. **Polynomially** [PH23]. **Polynomials** [BR23a, BS15, BLS21, Erg19, GM12a, GN11, IdW16, KN20, KS15, Las01, Las05, Las06b, Li10, MEV23, Mar05, Nga15, ND09, NTP24, QWY04, RV06, Sch05, Sch06, SL21, VS08, VS10, Vui14, Yan09]. **Polytope** [BM02, BMS23, DK22, DK18, JK00, PW98, RT05, SD20a, Ris94]. **Polytopes** [BS15, Dah99, DRT17, IdW16, KTT14]. **Pooling** [LDLS20]. **Population** [FV07]. **Porous** [RZ01]. **Portfolio** [MCL10]. **Portfolios** [Cal07]. **Posed** [FI08, JZZ20, MS06a, Zhe20]. **Posedness**

[BBH24, CLPT99, DHP16, HY06, Rev97, ZML21, Ver96]. **Positive** [AKK14, ACB20, BDSS22, Bur03, Chu03, Don14, GN11, JRT97, JBAS10, KS15, Las02, LP15a, Lim11, LW08, Mat05, NZ16, QW00, QW01, Shi17, SH15, iT17, TP16, VS10, ZVP06, BF96, Fle95, MPW95]. **Positivity** [LP10]. **Positivstellensatz** [KN20]. **Possible** [CCT21]. **Possibly** [FB19, MS94b]. **Posteriori** [SLS24, WPD22]. **postman** [SM93]. **Potential** [BTN94, DW22, MP99, RD95, Tüt03, Fre95, JY94, MKT95, Ye92, Gon91b]. **Potential-Reduction** [Tüt03, MKT95]. **Potentially** [AFFG14, CGT14]. **Powell** [GL18]. **Power** [BV10, CGT19, DKL21, KGM23, LLLP24, Lin22, LYS17, PMDL10, Sau20, Bon97]. **Practical** [Ans98, BKT99b, BHR19, GR10b, LS97a, MGS09, NS98, XB99, JS95]. **Pragmatic** [vBRM24]. **Preassigned** [BBF⁺04]. **Precision** [AABL21, CP01b, DFS03, Gu00, PW06, Wri01]. **Precomposition** [BGW07]. **Preconditioned** [BCLN22, MOT04]. **Preconditioner** [CK99]. **Preconditioners** [ABCFR20, BDdSM15, CN17, EF02, FG04b, GST11]. **Preconditioning** [GV15, MPTD21, MS16, MN00, SU14]. **preconditionings** [Ort91]. **Predicting** [ABT00]. **Predictor** [DIPR20, DSD12, Gon99, JPS99, KT14, KSS99, KJ17, LMT09, LP06b, LM05, MS94a, Mia96, MT04, PTZ05, SPT08, Sim11, CLMS93, DL91, LMS92, Pot96, TZSW96]. **Predictor-Corrector** [DSD12, Gon99, JPS99, KT14, KSS99, LMT09, LM05, Mia96, MT04, PTZ05, SPT08, Sim11, MS94a, CLMS93, DL91, LMS92, Pot96, TZSW96]. **Preference** [HXH22, HS17, WX22]. **Preferences** [BG22]. **Preliminaries** [LS97a]. **Prepackaged** [KS00]. **Preprocessing** [KH05, Kea11]. **Presence** [BT04, FIS20, JKM23, OBN23, Zas10]. **Preservation** [ANT16]. **Preserve** [BP15]. **Preserving** [BBG⁺20, DQQY02, VZQD17]. **Price** [MCL10, Wan17]. **Prices** [BCM03]. **Pricing** [BPS06, HS23, MRS16]. **Primal** [AZ05, AFC22, AHO98, And00, ADLL24, BER03, BER04, BF08, BH14a, BCH14, CERS18, CYZ22, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DG23b, FB19, FIS10, FG98, Fre03, Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HA21, HSS17, HHJL23, HIK03, HSW14, JR08, JS00, KR02, LYYD24, LS04, LMO06, LJ16, LSZ98, MP18, ML05, MS00, MS03, MT99, MSS15, NO09, NT98, NS14, PRT02, PS98, Pot08, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, WST10, Wri00, Xu17, Xu20, YY03, YT10, ZWHZ23, ZAG24, ZR93, ZLTD22, dPRT01, GT92, Ius91, Meh92, MTT94, MKT95, Mon98, Wri95, ZTD92, ZT93, Zhu95, Mon97, Zha98a]. **Primal-Dual** [AFC22, AHO98, ADLL24, BER03, BER04, BF08, BH14a, BCH14, CERS18, CLO14, Chu09, CV17b, CMV19, CP01b, CH16, Dav15a, DG23b, FB19, FG98, Fre03, Gha23, GKR20, GG03, GLTP98, GOST01, Gre00, Gu00, HA21, HSS17, HIK03, HSW14, JR08, JS00, KR02, LYYD24, LS04, LMO06, LSZ98, MP18, ML05, MS00, MS03, MT99, NT98, NS14, PRT02, PS98, Pot08, TWB⁺03, Toh00, TDFC18, TDZ20, Tüt03, Val20, Wri00, Xu17, YY03, YT10, ZWHZ23, ZAG24, ZLTD22, dPRT01, AZ05, ZR93, GT92, Meh92, MTT94, MKT95, Mon98, ZTD92, ZT93, Zhu95]. **Principal** [CCN⁺18, DKLM22, EH20, WLS23]. **Principle** [BP07, BCCL22, BCM03, ILR01, LN11b, MTZ03, RSS14, Naz91]. **Principles** [AZ19, GY23, GJ17, GKNRP17]. **Privacy** [BBG⁺20]. **Privacy-Preserving** [BBG⁺20]. **Private** [KBGY22]. **Probabilistic** [BSV14, BNT04, BdHP21, DSP10, GRVZ15, GE14, HAN11, Hen15, KL10, LA08, RR23, WK19, vAH14]. **Probabilistically** [LLS05].

Probabilities [BJS07, RS15, ST03].

Probability [BP05, BW02, BCM03, HP07, JSX24, MU18, MS06b, PARN22, PW05, Pic13, Wat00, WBME14, vAPA19].

Probability-One

[BW02, Wat00, WBME14]. **Problem**

[ABT00, AINT17, ABCdC23, AY08, AFS01, Ans00, AKT17, BBT06, BTC08, BBCI⁺24, BNL⁺18, BV10, Bie16, BCCL22, BHT16, BT19, BRU97, BV18b, BBV02, BI98, BMP22, CCFP05, CKP00, Cap02, CCLW14, CBJF97, CY00, CM11, CMY15, CLYZ22, CDL14, CL23, CDF⁺94, EB20, FV07, FdOF07, Fle01, GHK17, GLRS15, GHGHL06, GW18, HLTW14, HST24, INT17, IY09, Iid12, IT18, Jan06, JRS10, KSH97, KSS99, LSS19, Las01, LdQ11, Lie20, Lim11, LLST19, LM05, LDLS20, MPB02, McB98, MN96, MP14c, MBW09, O'D21, Pan16, PRRL97, PR07a, Pfo08, Qi16, QZ08, Ray97, RK19, RT05, RT06, Rot09, RN98, SBD⁺11, SCRS00, SZY16, Sim11, SS00, Sta04, iT17, TBZ16, TMHP06, Wac14, WX16, WX17, WLZY07, XZ14a, XC21, YF00, Yil08, YWAS17, ZG03, ZY14, AEGS93]. **problem** [Bon97, DvTY91, Gar93, HP94, Hen95, HH96b, JSC95, JSV91, Li93a, LT92, Man91, McS94, MPW95, NN91b, SM93, Wan95, Zha94b, dKPS09a, dKPS09b]. **Problems** [AAS17, ASNP16, AKS00, ANRV04, AMHL05, AM00, AP21, ATU23, AGJJ00, Att96, ACP11b, AT00, AST10, Aus15, AVS19, AVS21, AZ08, BBN14, BD17, BT00a, BBT12, BP12, BPS15, BT21, BR23b, BTZ97, BTNR02, BDM16, BM18a, BGY⁺23, BNL⁺16, BHKO02, BHK⁺09, BHHK00, Ber97, BPT97, BCWP21, BLRS22, BM18b, Bil02, BW02, BGP09, BKT99b, BGG⁺12, BSTV18, BPSF24, Bom15, BMSS19, BS98, BKMW20, BK21b, BLT17, BCN19, BB23, BDL23, BSR17, BV21, BGM24a, BGM24b, BHR19, BBNT24, BD10, BH15, BK10, BCGH08, CKP12, CP18, CCL09, CCD24, CGT10a, CGT14, CT02, CdIRT08, CHW12,

CT12, CN17, CH97, CX99, CQT03, CX08, CLO14, Che15, CLP16, CJ18, CCFG23, Chr20, CDM20, CY10, Chu16, Chu21a, Chu21b, Chu20, CMV19, CPRZ20, CR21, Cru14, CDZ17, CPS18, CNW10]. **Problems** [CWZ18, DHP16, DIPR20, DIS04, DD98, DG19, DP00, DENR20, DGJ09, DKM18, DHR07, DSZ17, DGL10, DMVV17, DN22, Dol20, DdLM21, DR18, ET19, EQR22, EN14, FS97, FK10, FCF07, FLY11, FNMK24, FI08, FRMP18, FK00, FMW96, FFG99, FB00, FBLV24, FGL24, FG04b, FLT01, GLCxy18, Gar21, GSU21, GP19a, GW21, Ger08, Ger11, Gfr07, GSG12, GLY96, GHHL05, GS07, GLN07, GY20, GMS21, GACD14, GSZ14, GJN06, GKNRP17, HPU19, HHI⁺20, HA21, HS21, HYF05, HW10, HM15, HM16, HKKRZ24, Her09, HS19, HL14, HK06, HKK11, HSK15, HL17, dM08, HLR16, HZ06b, HAG18, HR15, HOR99, IPRT00, ILR01, IK00, IK16, IS02c, IS04, ISU12, JRT97, JLLP16, JL18, JFQS98, JS16, JZZ20, JRS10, JS20, Kal18, Kan14, KP99, KS16a, KKSW19]. **Problems** [KV17, KY21, KYYZ22, KS99, KTT14, KKW05, KKT20, KNP98, KP98, KSX08, KM21b, Kor00, KJ17, KR02, KR03, Lau00, LS22, LM02, LR10, Lev02, LF01, LN09, LFLL09, LST18b, LST18a, LMP⁺18, LBT22, LSY24, LM21a, LT96, LM16, LM99, LX23, LP06b, LBP20, LLS06, LFJ⁺11, Luc02, LPV05, LV19, LSF⁺23, LS98b, LB00, MN09, MPSU19, Mal07, MC05, MS23, MS11b, MP10, MOP20, MG98, MS11c, MS12, MW97, MS06a, MARS10, MGGS09, NARS14, Nem04, NV99, Nes12, NS14, NT16, NS17, NS21, NEYL24, NTZ23, NT19, OOT22, OLR21, PS10a, PZ98, PZ00, PZ03, PT18, POLW20, Pen19, PFA17, PNA10, PQS01, Pot08, Pot12, PW19, Pyt98, Qi99, QP23, QW20, RCGR18, RSS14, RG00, RW21, RFNP14, RQMG12, RSMB19, RM08, RPK03, RR08, RSE18, SS17]. **Problems** [Sag16, SNTI16, STKI17, Sch09, SW11, SU14,

SDGM99, SSSZ10, Sha97, SM18, SBT16, SS97, SS22, SL14, Sol07, SKR16, SH97, SZ98, SW99, SSQ04, TF96, TT24, TN21, TW14, TZS02, Trö05, THZ23, Tse97b, Tuy00, Ulb01, VJM16, Vil05, Vog08, Voi08, WUR⁺23, WKKM06, WJ00, WST10, WP23, WCP17, WD23, Wri00, Wri02, WPY23, XS16, XA18a, XYZ15, XLZH19, Xu22, XWSD24, Xu24, YH01, YFHS16, YPC18, YZZ97, Ye99, Ye00, Ye04, Yos07, YPL21, YCST22, Zha94a, ZCD00, Zha00, ZC09, ZZST00, ZL22b, ZWHZ23, Zha98b, Zha20, ZY07, Zhe20, Zhe23c, Zhe23b, ZT98, ZC10, ZCT10, Zhu02, ZLTD22, dKL11, dSTVB18, vAS14, vdLTY07, AM94, BCT93, BKT99a, BD93, BH95, Bur92, CL92, Dax92, DHLN92, DL91, DFKS11, Dun93, FMS94, GMR91, GIJT96, Gow92, Hei93, Hus94, IK92, IK96, Kan96].

problems [KSW94, KKM93, KN93, Li93b, MMZ95, MS94a, Mel96, MT91, Out94, PR95, PR93, PY93, Ral96, Rot92, Sar95, Sta92, TYF96, TM95, YY95, Zen91, ZC91, ZTP93, ZT96, dRT92, HL20].

Procedure [BBNT24, IPRT00, Lau01, Nes21, VZQD17, Mel96].

Procedures [Che05, GL14a, MW94].

Process [NJS21, SFP11].

Processes [Gha23, GS01, HN07, HG16, LYYD24, RG22].

Processing [CJK98, KB08].

processor [GR94].

Procrustes [DL17].

Product [Ans17, AVS19, BCWW15, LWZ15, SGK21, WPD22, Hus94].

production [HH96b].

production-transportation [HH96b].

Products [Sab11, Tse92].

Profiles [DMM06].

Program [CM21, EG24, FT02, FT07, Gre00, Las02, NF01, PW19, SKC12, WKKM06, XSLZ11, Fre95, War96].

Programming [AAS17, ASNP16, AHO98, AB12, Ani00, Ani02, Ani05b, Ans98, Ans99, ADLL24, AKK14, AD00, AD04, AD09, Aus15, AH05, BC09, BJ22, Bec07, Bec15, BDdSM15, BDK⁺24, BTZ97, BTN97, BTKNZ99, BGM19, BOT06, Ber17, BNT04, BH03, BZ04, BCW08, BEET12, BCD⁺18a, BHP18, BLST19, BPS99, BMW10, BHS15, BDL⁺16, Bur03, BL09, BCD20, BMP22, BHN99, BGNW05, BCT19, CT06, CLPT99, CLMP10a, CLMP10b, CGT11, CB00, Cha02, CS08b, CKS15, CF01, Che01, CWH06, CHN18, Chu06, CHY10, CKS17, CC02, CHP⁺09, CR04, CLPA21, CO12b, DGT20, DHL15, Del19, DMZ12, DY04, Den14, DSZ17, DYC⁺21, DSD12, Dol20, DT98, Dos97, DFS03, DdLM21, DM20, DMM22, ER05, ESKL18, FLN10, FNMK24, Fay96, FGL⁺02, Fle12, FBM15, FS08, FG98, FLT03, Fus14, GS21].

Programming [GM15, GL14b, GM12a, GV15, GCPT18, GL15, GS98, Gon14, GT97b, GKV03, GOST01, Gu00, GAD20, GVJS10, GNL11, Gui20, GMS21, GJR08, Gür10, GL08a, HW10, HTY12, HLWY14, HHY15, HT24, HR00, HS19, HL08b, HKP24, HY96, IdW16, IK16, Jan04, JAL15, JL10, JLLP16, JL18, JPS99, JL16, JKW15, JBK⁺18, JS11, KYYZ22, KPZ19, KM21a, KdK23, Kiw07b, KM24, Kor00, LMT09, Las04, LT01, LCC⁺20, LM02, LLD⁺02, LSW06, LZH14, LST20, LM20a, LST21, LFW98, LNQY10, LY11, LP15c, LS20, LCPS20, LL09, LMO06, LY07, LFJ⁺11, LZ19, LZ23b, Luc02, LW08, LPS05, LSZ98, MNP96, MNP98, MR10, MM08, MPRW09, Man04, MÖ07a, MÖ10, MP14a, Mia96, MS11b, MP10, MG98, Mon97, MT98, MT99, MT03, MN14, MOR15, MW06, NA20, NJLS09, NLQT06, OW06, OSS11, Pan05].

Programming [PC08, Pan16, Pap17, PY19, PT24, PVZ07a, PW07, PAV21, PS98, PR07b, Pyt98, QLSZ18, RB18, RTW97, RKG08, RV06, STKI17, SD00, SZ14, Sha17, SX24, SWW21, ST09, SKL09b, STY15, STY16, TF96, THDL22, TWB⁺03, TTT98, Toh00, Tse97a, Tse03, Tse07, VR05, Voi08, WB05a, WB05b, WJ00, WZYB08, WX17, WDLW23, WP23, WDZZ23, Wat00, Wri98, Wri99, Wri00, Wri01, WT04, Wri05, WSLZ17, WPD22, Xu06, Xu17, Xu18, YZZ97, YW02, YPL21, ZA14, ZZ96, Zha98a, ZH06, ZWL10, ZST10,

ZLCL21, ZCTW12, ZMB⁺20, dE14, dP02, dKPS09a, dKPS09b, dKL10, dKL11, dKP12, dKV16, dMS24, dSTVB18, Ali95, AB95, Ans96, Bar93, BT94a, BD93, BL95, BL93, Bos93, Boy95, Bur92, CH93a, Den00, Eck94, FKMN00, GV94, GLW91, Gon91b, Gon91a, GT92, GHS95, Hei96, HRVW96, Ius91].

programming [JS95, JYZ94, Jey91, KK92, KN93, Lag93, LS93, LP93, LMS92, MMZ95, McS94, Mel96, Mit94, MKT95, Mon98, MT91, MP95, Naz91, Pot96, Pow95, Ren95, SG94, Tod92, TM95, Wri91, ZTD92, ZT93, Zha96, ZR93, Zhu95, dRV92, dRT92].

Programs

[ASS18, AHSS19, Ani05a, Ani05b, AP18, BK12, BHM18a, BHM18b, BPL12, BYZ00, BZ08, BDDM19, Bol14, BJS07, BR19b, BD09, BKS16, BMZ01, BV06, BK10, Cal10, CG08, CKL⁺14, CODL22, CB14, CSW15, CC14, Chu18, CP17, CO12a, CPS18, DLM21, DO06, DFNS05, DR00, DU21, EOL98, EMN22, Ent96, EI06, ESKL18, FJS98, Fil99, FLRS06, FT08, FKS02, FSF12, FP98, Gfr13, Gfr14, GY17, GVA11, Gha17, GRS21, GJLVP14, GNS08, GK96, GR12, Gui16, GKS18, GLY12, GYZ14, GLYZ14, GXZ17, HNO15, HN19, HAN11, HRS06, HLL98, HK09, HS11, dMM10, HMP⁺08, Ios01, IPS11, IS08, JR08, JLD03, JR00, KDB09, KN02, KN04, KN05, KFF09, KS10, KS14, KLLM22, KK05, KM19, KMM19, Krä24, Küc08b, KTSB21, LLS05, Las02, LP17, LLCN06].

Programs

[LS97b, LC24, LP06a, LZ03, LS04, LXL11, LX14, LPR98, MP16, MP19, Mat05, MÖ09, MX06, MZ99, MP07, MLLB08, MDV12, MN13, MOS14, NST18, NS07, NWY17, NRS21, OHF12, OR11, PH23, PS21a, Pat17, Pat98, Pul97, Pul00, RB05, RP23, Rev97, RW07, RP12, SÖ17, SFM14, Sch01, Sch96, ST03, Sch98, SdM00, SA04, SD20b, SAZ22, SW14, SW15, SL15, SKB18, SU10, SK98, SXMW13, SSY24, TAW06, TK02, Toh03, VZQD17, WY15, WBME14, Xu06, XY10,

XHL14, XYZ15, Xu20, YK18, YZ10, YZ16, YT02, YN17, ZK14, ZJS18, ZL02, AW94, BMR94, BQ95, CH93b, Dun93, GK94, Iof94, Li96, MS94b, RS96, Ver96, OOR17].

Progress [McB98]. **Progressive**

[AD09, BCD⁺18a, XZ14b, ZSX19]. **Project**

[BV06, Che05, Lau01]. **Projected**

[BMR00, CWW18, FPT22, Gar21, GP19a, Hei96, Mal15, NLQT06, SU15, SY13, ZC09, Gar93, Gur94, ZR93]. **Projected-Gradient**

[Gar21]. **Projecting** [BBW18]. **Projection**

[AM12, Alv04, BSW23, BF08, BLY14, BBNT24, CS08a, Dai06, Gis21, HZ16, IT18, KL97, Kiw07b, KCS97, LH04, Man99, NRP19, Tse97a, Tse98, WB16, WP24, XWSD24, LT93, Tse91]. **Projection-Based**

[KCS97]. **Projection-like** [AM12].

Projection-Proximal [Alv04, Tse97a].

Projectional [YY23]. **Projections**

[BBCS21, BCGH08, CH02, Dos97, Gar21, GN11, LLAN22, MHL15, MSG20, SB18, CGST93, Sha94]. **Projective**

[JE19, Pan05, Por20, GV94, SG94].

Projectors [BWWX15, Rut17]. **Proof**

[Bar08, KS91]. **Proofs** [DG09, Mas20].

Propagation [MSG20]. **Proper**

[GHNS19, Qiu08]. **Properties**

[ASS18, ACFH24, ABF14, AVS21, BMW16, BGH19, CN17, CS15, CGST96a, CGST96b, CGT10b, CPRZ20, DHL⁺99, Dai02, DL01, FFK98b, GO16, GJT23, KS14, LRWW98, LP17, LP22, LW15, LR22,

LPR98, MU18, OLM24, PP16, PR96, RG24, Sch01, TSP18, TWB⁺03, YFHS16, BT94b,

GN92, Kan96, Pow95]. **Property**

[AGH10, BP15, BR19a, DY99, DK13, DLW99, HP07, HDL21, JKM23, KYYZ22, NYF11, OOR17, OR11, YY23, Zas13].

Proportioning [Dos97]. **Proto** [AB18].

Proto-differentiability [AB18]. **Provably**

[Gri24, LL00, MGR18, SSPY24]. **Provided**

[ANRV04]. **Proving** [GW19]. **Prox**

[ANT16, ACP11b, BBN14, CWP20, LM21b, Luk08, Nem04]. **Prox-Bounded** [CWP20].

Prox-Method [Nem04].
Prox-Penalization [ACP11b].
Prox-Regular [Luk08]. **Prox-Regularity** [ANT16]. **Proximal** [AA20, Alv04, ADV24, ABO22, AD19, AFFG14, ARS07, ACR19, AL20, AT06, AIMM24, BGLW08, BH18, BFO19, BNL⁺16, BNL⁺18, Bia16, BIS05, BCN19, BB23, BDL23, BCLN22, BI98, BD10, Cab05, CMY15, CWP20, CMSZ20, CL14, CP08, CC02, CY14, DG23a, DN20, DT98, FK00, FR15, GY20, GP19b, HWWM24, Har09, HS10, HLY16, IPS03, JKM23, JST12, KT03, KV17, KRR99, Kiw06, Kiw07b, KMM19, KM21b, KMM23, KM24, LSS14, LM12, LST16, LM21b, LLX15, LMH19, LX23, Lu17, LZ19, LWY24, MOT95, MM08, MSU24, MIM20, MS10, MS12, MS14, MSS15, Nes21, NT19, PC08, PLS08, RSMB19, ST14, SAH⁺24, TY12, Teb97, TDKC14, Tse97a, Val20, VGO18, WST10, WLLY16, WB22, WLN23, WLS23, WCP17, XZ14a, XZ14b, Xu17, Xu18, YF00, YST14, YT22, Zas10, ZL20, ZZST20, ZN14b, dEH01]. **proximal** [BT94a, CT93, Gül92, Kiw96, Zhu96].
Proximal-Gradient [AA20, BB23, XZ14a].
Proximal-Like [PC08, Teb97, CT93].
Proximal-Point [Nes21].
Proximal-Projection [Kiw07b].
Proximal-Type [KT03]. **Proximally** [DG19]. **Proximities** [PRT02]. **Proximity** [AB18, FGG04, MST11, PTZ05]. **Psd** [Shi18]. **Pseudo-Normality** [BYZ19].
Pseudospectra [LP08]. **Pseudospectral** [GO12]. **Public** [BPS06]. **Pump** [BEET12, DLR14, DIMS18]. **Pumps** [GMSS17]. **Pure** [BDM16, RSE18, ZK14, Wri95].
Pure-supply [RSE18]. **purpose** [NS91].
Pursuit [SMG14]. **Pushforward** [LMMZ21]. **PVM** [CF01].
QNG [HZZC22]. **QP** [BCWW20, CWH06, QQ00]. **QP-Free** [CWH06, QQ00]. **Quadratic** [Ani00, Ani02, Ans00, AKK14, BT00a, BE06, Bec07, BDdSM15, BTNR02, BCRZ21, BC14, BM17, BDS24, Bol14, BSTV18, Bom15, BLST19, BR08, BDPP14, BHS15, BDL⁺16, BMZ01, BL09, BCW14, BCWW20, BGNW05, CX99, Che15, CM21, CHNT21, CL96b, CDZ17, CO12b, CJRW14, DZ07, Del19, DMS22, Don16, Dos97, DFS03, DK10, DL13, DFR18, FNMK24, Fay96, Fay06, FRMP18, FBO21, FPT22, FLT03, GVA11, GL15, G6m21, Gon14, GT97b, GAD20, Gün14, Hag01, HS21, HLNZ08, HDL21, HR15, JLL09, JL18, JL16, JKW15, KN05, KKT20, KL10, KMM19, Kuč08a, KR03, KGM23, LT01, LTY12, LRP16, LS97b, LSW06, LY11, LS20, LCPS20, Loc15, LMO06, LFJ⁺11, LPR98, LS98b, LSZ04, LSTZ07, LZ10, LB00, MNP98, MP10, uDR15, MT98, NST18, NRS21, OOT22, Pan16, PH23, Pap16].
Quadratic [PRRL97, PY97, PW17, RQMG12, SD20a, SKC12, SBT16, SV07, SLWX23, Sor97, SK98, SZ98, TF96, TY12, Tse03, VZQD17, WX19, WP23, WT04, WSLZ17, XSLZ11, XHL14, XA18b, YY03, YmZS15, YZ03, YZS19, ZH06, ZW18, ZSX19, ZLCL21, ZPXQ21, dSTVB18, Ans96, AFGG11, BD93, BL95, CLMS93, CH93a, CH93b, FM94b, GLW91, Hei96, LS93, Li96, Mar94, MMZ95, MT91, MP95, NN91b, Tha93, ZTD92, ZR93, Zhu95].
Quadratic-Linear [FBO21].
Quadratically [Ani02, AKK14, Bom15, FLT03, JL16, LFJ⁺11, SP97, SLWX23, XHL14, GLW91, PY93]. **Quadrature** [CRY99]. **Quadric** [BMS23]. **Qualification** [AMRS16, AFSS19, BJ22, BHP18, CHL16, Dol20, GM15, GVJS10, IS02b, JLD03, Li97, LJ02, LN03, LN05a, SN07, VR05].
Qualification-Free [SN07]. **Qualifications** [AHSS12, ACFH24, BH19, BKMW20, BHR19, FLN10, GY17, GW19, IS04, Kan14, KS10, LNS00, LNP08, LZH14, LNYZ21, Ye00, ZN04, ZN07b]. **Quantification**

[HTT⁺15]. **Quantitative** [AW93, BS98, LN18, LRX14, ZXZ16]. **Quantization** [FGL24]. **Quantum** [BBW05, BFS16, FS23, LP15a]. **Quartic** [LZ10, QWY04]. **Quasi** [AFSS19, ABO22, ADR22, AH05, AVS19, BYZ19, BFO19, BBN19, BCW08, BHNS16, Ceg15, CRZ18, CP15, CG17, FB00, GL01, HZZC22, HR12, HR14b, HGA15, KS19, KV17, Kau99, LZH14, LMH19, LV08, MSQ98, MER18, MN00, MO07b, PCA19, RN21, SXBN22, SY13, SGK21, SH97, WN16, WMGL17, YNS20, ZW12b, ZNW99, BLN92, EM91, Fle91, Gil97, LN93, TK96, ZNB⁺93]. **Quasi-** [BYZ19]. **Quasi-/Pseudo-Normality** [BYZ19]. **Quasi-Cauchy** [ZNW99]. **Quasi-Convex** [FB00, AH05, SGK21, TK96]. **Quasi-Fejér** [CP15]. **Quasi-monotone** [AVS19]. **Quasi-Natural** [HZZC22]. **Quasi-Newton** [ABO22, BFO19, BBN19, BHNS16, GL01, HGA15, KV17, Kau99, LMH19, LV08, MSQ98, MER18, MN00, PCA19, RN21, SXBN22, SH97, WN16, WMGL17, YNS20, BLN92, EM91, Fle91, Gil97, LN93, ZNB⁺93]. **Quasi-Nonexpansive** [Ceg15, CRZ18, CG17, SY13]. **Quasi-normality** [AFSS19]. **Quasi-Relative** [BCW08]. **Quasi-Slater** [LZH14]. **Quasi-strongly** [ADR22]. **Quasi-smooth** [ZW12b]. **Quasi-Variational** [AVS19, KS19, HR12, HR14b, MO07b]. **Quasiconvex** [BGJ12, DHML01, LP06a]. **quasidefinite** [Van95]. **Quasidifferentials** [Dol20]. **Quasimonotone** [AG14]. **Quasimonotonicity** [CH94]. **Queuing** [BLS21]. **Quickest** [Fle01]. **Quotient** [WX19].

Rachford [BM16a, BD17, BM20a, BH14a, BCN24, BAR21, CM16, DP19, Dav15b, HSX24, HLWY14, LR21b, LM20c, TP20]. **Rademacher** [DQ24]. **Radial** [FB03, Gri18, KM09, WS11]. **Radiation** [Gor22, RADK05]. **Radio** [BBF⁺04]. **Radiosurgery** [FLS03]. **Radius** [GO12, WD05]. **Random** [ALR03, BKL19, Cal10, CCH05, CC14, CN23, CP15, DW24, Har98, JYK24, LZ18, LMQ23, NST18, NC16, QCPLP19, Sch98, SMG14, WB16, WPD22, CJ18]. **Randomization** [BLO⁺23, DIMS18]. **Randomized** [AH16, BBN14, BH20, BT21, CG08, CLL23, DSP10, DBW12, GHHL05, HSX24, JRJ10, LLX15, Lu17, LM20b, MKU21, NRP19, RK20, SFM14, XXS21]. **Randomly** [FPT22]. **Range** [LM21b]. **Rank** [AHH⁺24, BDdSM15, BDDM19, BV18b, BMZ01, BKS96, CGO22, CGT14, CSPW11, CV17a, CNW10, DG09, DU21, DV14, DV16, FGM17, Gar21, GG18b, HLB20, HU19, JBAS10, LYP23, LLT22, LZSV20, LL23, LZ24, LWZ15, LBP20, MS11b, MMBS14, SU15, Shi18, SVD14, TT24, TY11, TQP22, Van14, WW20, WDLW23, XFLP21, YFHS16, BT94b, Bos93, FRW11, KBS93, LdQ11, MSFL17]. **Rank-** [SVD14]. **Rank-1** [YFHS16]. **Rank-Deficient** [CGT14, CNW10]. **Rank-One** [BKS96, DV14, Bos93, KBS93]. **Rank-Sparsity** [CSPW11]. **Rank-Two** [BMZ01, BT94b]. **Raphson** [HN05, YLG22]. **Rapid** [BLMH06, BCW14, Wri05]. **Rare** [TSR22]. **Rate** [AP16, AIMM24, BCS21, BLY14, BLT17, CY14, Dav15b, Dav15a, GY20, GOP17, GOP19, Kuč08a, LY98, LYS17, MER18, MGR18, MOP20, NO09, Nem04, SdM00, ST14, SSD22, TY12, VGO18, VJFC18, WLN23, WP24, Xu22, YNS20, YN17, YPL21, Ius91, Tse91]. **Rates** [AHO98, ASSS23, AC18, ADR19, ADR22, BGN22, CR97, DG23a, DG23b, GW19, Gri19, GP19b, HN07, dM08, HLY16, JE19, KY21, LYSA20, NRP19, PGGH18, Peñ23, Sch96, SDR20, TDZ20, WLKK23, Yin99, dKHL17]. **Ratio** [CCM23, CYZ22, DK22, LMX17]. **Ratio-Bounded** [CCM23]. **Ratio-Cut**

[DK22]. **Rational** [DP22, EG24, EZ10, LMMZ21, MEV23, NTZ23]. **Ratios** [BDL23]. **Ravine** [AF22]. **Rayleigh** [WX19]. **Raymond** [CHPA16]. **Rays** [GdW00]. **Real** [GE14, GKT24, JM18, KFGT21, Las05, MS20, Nie14, SVD12, Vel15]. **Realization** [DKVW17, Gil97]. **Realizations** [GHR14]. **Recession** [GU22]. **Recessive** [BBMW16]. **Reconstruction** [JS00, Nol98]. **Recourse** [GNS08, LC24, LCPS20, RvdVH15, RSvdVH16, Sch96, ST03, SL15, vBRM24, CJ18, RS96]. **Recovering** [TY11]. **Recovery** [CGO22, DL17, FRW11, LZSV20, TQP22]. **Rectangular** [RG24]. **Recursions** [PGGH18]. **Recursive** [GST08, XKK22, YLZ02]. **Redistributed** [HS10]. **Reduced** [AW00, CT06, CCR17, CK99, GL01, GL03, Kau99, RVZ24, RR23, SKM19, XB99, BNS95, Gil97, Kup96, LT93]. **reduced-gradient** [LT93]. **Reduced-Hessian** [GL01, GL03]. **Reduced-Space** [CCR17]. **Reducibility** [DGJ09]. **reducible** [DMZ94]. **Reducing** [AILT14, Bar93, KVZ24, LX23]. **Reduction** [BR08, DL22, DKVW17, FdOF07, Ios01, LJOT17, JH14, JS11, LMT18, MSU24, MP99, MNR⁺22, PRRL97, PFA17, RK19, TAW06, Tüt03, XSLZ11, XZ14b, XKK22, YCST22, YM14, ZX21, BTN94, Fre95, Gon91b, MKT95, Ye92, dRV92]. **Reduction-Based** [PRRL97]. **Reductions** [KW10]. **Redundancy** [BLS21]. **Reference** [HS17]. **Reference-Based** [HS17]. **Refined** [BT20]. **Refinements** [vdLTY06]. **Reflected** [Mal15]. **Reflective** [CL96b]. **Reflexive** [Den97, KRS11, MM11, Sab11]. **Reformulation** [ALT⁺21, AM00, BKS16, DZ14, FFK98b, HMW21, TN21]. **Reformulations** [AZ08, IS02c, JL19, KKT20, LP15c, PTJY10, PH18, WSLZ17, XA18a]. **Regime** [YKI04]. **Regimes** [JS16]. **Region** [AINT17, Ans17, ANP08, ABO22, BSV14, BP15, BV18a, BP97, BV18b, BA13, BKS96, CNY14, CDM20, CGST96b, CSV09, CRRW21, DO19a, DV97, DEAM97, DEAW99, DW24, EA99, EG10, FNMK24, FGL⁺02, For05, GJV16, GLRT99, GST05, GST08, HV01, HR14a, HNKK17, HM02, JW21, JFQS98, JL19, JL20, Kau99, KS99, KPZ19, LMT09, LM02, LLRV19, LY07, MWDS18, Mon23, Ni05, NR20, QQS03, RVZ24, RSS00, hRK14, SHP18, SY19, TA98, TE19, Tse02, Ulb01, WD05, Wal08, WX20a, WLM22, WLKK23, WS11, WT04, YB16, ZA14, ZSL17, Bur92, CL96a, CGST93, EA95, EGG09, Qi95, Sar95, SW95, WZ95]. **Regions** [ABK22, Lu14]. **Registration** [CKS15]. **Regression** [BLG13, CM24, GP04, HPD14, HL17, HL20, OC23, RR15, SFP11, XD20, YZ13, LS93]. **Regret** [GZ17, MMN⁺22]. **Regular** [Ber17, CRZ18, Den00, FS17, Luk08, PRT02, PTZ05, Trö05, YZZ17]. **Regularity** [ANT16, AAI07, AI20, AK21, AIMM24, BCW08, CKLP07, CS08b, DR96, DL13, DPS17, EA99, FFK98b, Fus14, GO12, HL14, Iof11, IS02b, KKT15, LP22, Li97, LNP07, LN14b, MPR10, NT08, SYZ19, WG19, WLKK23, ZFL06, ZN04, ZN08, ZN15, ZZ16, Wan95]. **Regularization** [AL21, BC05, BBT06, BGMT19, BC14, BM17, BM18c, BCD⁺19, BKS16, BH15, CGRV21b, CGT14, CGT19, DV23, FT08, GJT23, HYF05, JLW16, KDB09, Kal18, KS12, KS14, LS97a, LV07, Lie20, LXL11, LMZ21b, MPRW09, Mar17, MZGS08, NP23, NW12, PTJY10, RG00, Sch01, Sch12, TY12, Wan11, WC24, WDST14, YST14, YZS19, IK92]. **Regularizations** [MB14]. **Regularized** [AMS16, ABO22, AO18, AP18, CMYZ22, CD19, CGT10a, CHS24, CW14, CSW15, CCR17, CM24, DLR16, DMN24, GMM17, GN17, GN19, KV17, KSX08, LTAP22, LBT22, LYD24, LLX15, LBP20, LSF⁺23, MX06, Mis23, NT19, OHF12, PR96, Qi99,

TQP22, Wri12, WPY23, ZCH⁺23, Dax92].
Regularizer [CDR22]. **Regularizing** [BDL18]. **Reinforcement** [KLL22b, LZCW23, ZDR24, ZCH⁺23].
Related [AFSS19, AK21, AT00, BM02, FS97, Gar21, OR02, SS22, SH97, WDST14, Dun93].
Relating [Chu03]. **Relation** [ZNW99].
Relations [BWY10, EF02, MS06b, ZT92].
Relationship [HN07, Zha96]. **Relative** [BCW08, CS16, DFO20, FS23, GTdS06, Luk08, RG24, Ric11, SPM18, YY23, Dix91].
Relatively [LFN18]. **Relatives** [dCST15].
Relaxation [BHKM14, BPT97, BT19, BDSS22, Bom15, BMZ01, CC18, CBJF97, CCF⁺20, CM21, CBF23, Che05, CH13, FK00, GW18, HLNZ08, KKW09, KL10, Kiw07b, Las14, LZ24, LFJ⁺11, LLZZ19, LZ10, MLLB08, MST11, NWY17, QT24, SU10, Tse03, Tse07, WZZ22, Wri12, ZLCL21, DFNS05, PR93].
Relaxation-Based [MLLB08].
Relaxations [Ans00, AD15, BHT16, BDPP14, BGM24a, BV06, CP18, CCM23, CS16, CBF23, DW10, GVA11, GLRS15, GR03, HLTW14, HT24, HKKRZ24, JLLP16, JL18, KH05, Kea11, KKW05, KT00, KS18, Las04, Las06a, LM19, Lau01, LNQY10, LDLS20, MB24, MCB09, ND09, NW12, NRS21, PNA10, PW19, STKI17, SL14, WKKM06, WZYB08, ZCTW12, dKPS09a, dKPS09b, dKL11, PR95]. **Relaxed** [Alv04, CS08a, LM20c, MS11b, RW16].
Relaxing [Don16, GW19]. **Relevance** [CGT14]. **Reliable** [OS17]. **ReLU** [DHP24].
Remainder [Car23]. **Remarks** [Li93a].
Remediation [Kel99]. **Removal** [Ete22].
Renormings [LPT07]. **Reoptimization** [BDL⁺16, GG03]. **Representability** [HN09]. **Representable** [NPS10].
Representation [BF08, HW07, Las16, MBG24, Wan24].
Representations [CV17a, GWZ15, KW10, RV06, VS10, Den00].
Representatives [FBH22]. **Representer** [BCD⁺19]. **Rescaling** [dEH01].
Reshuffling [LMQ23]. **Residual** [CWZ12, DO19a, RR15, TK02]. **Resolution** [AFS01, BLO⁺23, FMS94]. **Resolvent** [BBMW16, BBW17, Wan11]. **Resolvents** [BWW12, Sab11]. **Resolving** [Fle14].
Resource [AH19, BBG⁺20, CJK98, Ete20, GKPV01, HS23, LdF08, VJM16]. **Respect** [OR16, QZ08, YP20, ZZ16, ZZN18].
Response [CCM20, CCM23, LS22, CSY23].
Restart [Rd20]. **Restarting** [OLM24].
Restoration [BFMS14, BM20b].
Restricted [HL08a, Kiw96, LPW12, Sch16].
Restriction [ADV24]. **Result** [AG14, Zas00, Fle91]. **Results** [AHO98, ATU23, ACB20, AVS21, BW05, BR19b, CT12, Cel07, DMVV17, Ent96, EL10, FIS10, GLR15, GS07, GO12, HL08a, KN02, KN04, KS10, KLT07, Kum16, Lás17, LS20, MS03, SU15, TP20, Tse03, YZ03, YWAS17, AW94, Luc92, SZ92]. **Retraction** [HAG18, SKM19]. **Retractions** [AM12, BC03]. **Retrieval** [RSMB19].
Reverse [BCT93, Jey03, Lem98].
Reverse-Convex [Jey03]. **Revised** [Pan05, SE99]. **Revisited** [LMV23, LS21, Rot09, SSD22, YT22].
Revisiting [DG23b, Kol05, LL20, LSS22].
Reward [LMX17]. **Reward-Risk** [LMX17].
Reweighted [Bec15, BDMS09, BCWW15, FRW11, ZL12].
Ridge [XD20]. **Riemannian** [ACFH24, BV18b, BV21, FLP19, GSAS21, HMJ⁺23, HU17, HHY18, HGA15, HAG18, LMWY11, LCD⁺21, MMN⁺22, MS16, OOT22, RW12, SI13, SKM19, Sat22, SK22, SAH⁺24, Van14, WLWY15, WWLY21, ZZS23]. **Right** [GST11, Gre00, HCH12, KRT07].
Right-Hand [GST11, HCH12, KRT07].
Right-Hand-Side [Gre00]. **Rigid** [GAP08, TP02]. **Rigidity** [ZSY10].
Rigorous [Jan04]. **Rim** [GHRT98]. **Risk** [BCD20, Cal07, CGC15, CKS17, DR23,

ER05, FWKS15, GC23, GSU21, GZ17, GR12, Gui16, GKS18, HG16, KP22, KS16b, Krä24, LLS05, LZ23a, LLX15, LMX17, MP19, MU24, OR02, Pic13, RS15, RR15, ST03, WX20b, WZZ18, XF24].

Risk-Adjusted [LLS05]. **Risk-Averse** [BCD20, FWKS15, GSU21, Gui16, KS16b, Krä24, LZ23a, MP19, GKS18]. **Risk-Aware** [KP22]. **Risk-Neutral** [MU24]. **Ritz** [KS05b]. **Robinson** [AI20, GM17]. **Robust** [ASNP16, ALSV18, AZ08, AFGO20, BHM18a, BMFY24, BTN97, BTNR02, BdHP21, BLRS22, BG22, BLO05, Cal07, CM17, CSY23, CDL14, CCN⁺18, Chu18, Chu20, DSZ17, DMVV17, DKVW17, DM20, DMM22, EOL98, EL14, GB22, GV15, GJLVP14, GXZ17, HXH22, HMN10, HF14, HS17, Ios01, JL10, KPV18, Kur24, KGM23, LM19, LLD⁺02, LZSV20, LS04, LX14, LMX17, MP14a, MLC22, MU20, MP14c, NJS21, NJLS09, PS21b, RBDM22, RG22, RG24, Sha17, SZL23, She14, VV21, VVM⁺09, WX20b, WX22, XS16, XA18a, ZXZ16, ZAL21, ZAG24, vBRM24, Bur92, CJ18, EA95]. **Rockafellar** [CHLC19]. **Rockafellar-Type** [CHLC19]. **Role** [HKKRZ24, ZM96]. **Root** [AK21, BBH24]. **Rotation** [GH15, SPW15]. **rotundity** [BL94]. **Rounding** [IPRT00]. **Routing** [LL00, RT05]. **Row** [HAN11, ZC91]. **row-action** [ZC91]. **Rows** [AWW09]. **Rule** [BM98a, GJ99, HS24, LL23, Luc02, Tse98, WJ00, YK18, ZN07a]. **Rules** [BPL12, CPRZ20, DKS22, DS12, HLZ08, HJB20, Har98, LN11a, MPA21, QCLP19, Ye04]. **running** [CD92]. **Ryu** [BSW23].

Saddle [BBN14, CLO14, DDD22, HA21, HM15, HM16, HZ06b, MOP20, MS11c, Nem04, PMR19, SLM05, WD23, Xu19, ZWHZ23, ZAG24]. **Saddle-Point** [BBN14, HM15, HM16, HZ06b, MS11c]. **Safe** [EG24]. **Saint** [CHPA16]. **Salesman** [BM02, GW18, dKPS09a, dKPS09b, HP94, JSV91].

salesmen [BCQW95]. **Same** [Pat17, Xu22]. **Sample** [CWZ12, CSS19, DL22, EN14, GY23, GP04, HCH20, KSdM01, Krä24, LL22, LS22, Liu20, LA08, MX06, MU24, PS21a, POLW20, RG24, RVZ24]. **Sample-Based** [DL22, POLW20]. **Sample-Size** [LS22]. **Sampling** [BBN18, BLP23, BLO05, CMYZ22, CERS18, CP17, CV07, GS21, GR12, Gui16, dM08, HU17, HU19, KLW18, Kiw07a, Kiw10, LOZ23, LMW16, LMZ21a, MWDS18, PGGH18, RK20, SHP18]. **Sampling-Based** [GR12, Gui16]. **Satisfy** [Aus10]. **Scalable** [CBP24, CJSY07, SÖ17, XD20, ZA14]. **Scalar** [ABCdC23, HN19]. **Scalarization** [BKR17, Eic09, Kas10, Qiu08]. **Scalarizing** [LPV05]. **Scale** [ABCFR20, AT03, ADLL24, BBN14, BYZ00, BH03, BKT99b, BLO⁺23, BHN99, BHNS16, CB14, CM24, DGN12, DFO20, DNSD13, FJS98, FLP02, FM97, For05, GMS02, GL03, Gou99, GST11, HZZC22, Ios01, JST12, JS00, JM18, LNP98, Lie20, LRR98, Mai15, Nes12, NS14, NLQT06, NW12, Pyt98, Ray97, Ric11, RSS00, SD00, Sor97, TK02, Toh03, WG10, XS99, YCST22, ZDR24, ZLCL21, AM94, BNS95, BKT99a, Dun93, GMR91, GR94, NN91a, Ove92, RD95]. **Scaled** [HL02, Lev02, NT98, RC22, ZCD00, dPRT01]. **Scaling** [ACR19, BBR16, CB00, GLHZ11, IS02a, JRT97, MT98, Pot08, Qi16, TP16, KK92, Lag93, LN93, Mas97, MW96, RV93, Rot92, TM95]. **Scenario** [ACB20, CGC15, GC23, Ram18, ZAL21]. **Scenarios** [MP14b, RBDM22]. **Schedule** [CF99]. **Scheduling** [BLS21, CKL97, CJK98, Rot09, AEGS93]. **Scheme** [BTT96, CBJF97, Dav15b, EQR22, JLZ20, KDB09, LZ10, MU20, PB17, Sch01, SU10, Vil05, Wu96, DFNS05, EA95]. **Schemes** [ACP11a, BTC08, Bec15, CC02, Dav15a, EL14, GAP08, HLL98, LS22, ZM96, GK94]. **Schrijver** [Che05, Lau01]. **Schur** [CC18].

SDLCP [SSK98]. **SDP**

[CP18, JST12, KKW09, Las06a, LM19, LM04, NW12, SSK98, dCST19, TT24].

SDP-Relaxations [Las06a]. **SDPs**

[BPC11]. **Search**

[Abr05, AA06, ANRV04, AF01, ALR03, AD00, AD04, AD06, ACD08, ADL08, AILT14, ALT19, AH16, BCS21, BGP09, BLPP16, BPS99, BK10, Cri22, CV07, DK13, Dan21, DIPR20, DLT03, GV14, GRVZ15, HZ05, HA21, Har98, HHY18, IJOT19, JSX24, KN02, KN04, KSS99, KT04, Kol05, KLT07, LT99, LT00, LT02, LM05, Nes21, NEYL24, OLR21, Pap16, PS20, PW06, RVZ24, RR23, RW18, SU15, SK06, SSK98, Toh00, Tor97, Tse99, WB05a, WB05b, WG10, XFLP21, YPL21, ZH04, dPRT01, dBdH07, And96b, DEG⁺91, DT91, MW94, Tor91]. **Searches** [AD03]. **Searching** [CF99]. **Secant** [HL98, LSY24, WH24, YMT04, DEG⁺91, Hus94, WZ95]. **Second**

[Abr05, AA06, AXY23, ASS18, Aus10, Aus15, BT04, BHM18b, BDS10, BF08, BGM19, BGY⁺23, BCS99, BCD18b, BA13, BCT19, CT06, CT02, CdIRT08, CT12, CM20, CM22, CYZZ19, CW18, CSV09, CRRW21, DSK20, Dun93, EI06, FS12, FSF12, FLT01, Gfr07, Gfr11, Gfr13, GM19, GVA11, GL15, GR10a, GR10b, HYF05, HW10, HS06, HL23b, HLP23, HMN10, Her09, HNKK17, HN04, JL18, KFF09, KM21a, LST21, MFBR24, MLC22, MS03, MS14, MO01, MR12, MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, RR08, See92, SKR16, SXMW13, TW14, Tse07, Wan24, WY03, YZ16, ZY14, SC91]. **Second-Order** [Abr05, AA06, AXY23, Aus15, BT04, BDS10, BF08, BGM19, BGY⁺23, BCD18b, BCT19, CT02, CdIRT08, CYZZ19, CW18, CSV09, CRRW21, DSK20, EI06, FS12, FSF12, Gfr07, Gfr13, GM19, GVA11, GL15, HYF05, HW10, HS06, HL23b, HLP23, HMN10, Her09, HNKK17, HN04, JL18, KFF09, LST21, MLC22, MS03, MS14, MO01, MR12,

MOS14, MOR15, NR20, OOR17, OR11, PC08, PRT02, PQS01, RT06, RW18, SKR16, Tse07, Wan24, WY03, YZ16, ZY14, Dun93].

Second-Order-Cone [BA13, FLT01].**SECQ** [LNP07]. **Seidel** [Xu18]. **Selecting**

[MR10]. **Selection** [BA24, DDW20, Lu09, MS11a, RTBG20, dEH01]. **Selections** [HP24]. **Selective** [DLR17]. **Self**

[CBP24, CM11, FS23, Fay02, Gül97, HL02, KU15, Lu17, MSS15, NT98, PRT02, PTZ05, PFA17, ST10, Wan11]. **Self-Concordance**

[Gül97, CM11]. **Self-Concordant**

[CBP24, FS23, Fay02, KU15, Lu17, MSS15].

Self-Correcting [ST10]. **Self-Dual**

[PFA17, Wan11]. **Self-Regular**

[PRT02, PTZ05]. **Self-Scaled** [HL02, NT98].

Semi

[BHT16, BK10, CCP22, CLPT99, CKLP07, CLMP10a, CLMP10b, CKL⁺14, CODL22, CHY10, CLPA21, FS08, GAP08, GJLVP14, GVJS10, GJR08, Gür10, HW10, HG16, JS97, JS11, Kan14, LP10, LNS00, LZH14, LFW98, LW08, LSdZ18, MP14a, MLLB08, MN13, NKT10, NLQT06, OHF12, Pap17, Pha20, PQS01, RPK03, ST09, VR05, WY15, ZWL10, ZY07, ZW12b, GHS95, JRW94, KN93].

Semi-Algebraic [LP10, Pha20].**Semi-differentiability** [LSdZ18].**Semi-Implicit** [GAP08]. **Semi-Infinite**

[BHT16, BK10, CLPT99, CKLP07, CLMP10a, CLMP10b, FS08, GJLVP14, GVJS10, Gür10, HW10, JS97, JS11, Kan14, LNS00, LFW98, LW08, MP14a, MLLB08, OHF12, Pap17, PQS01, ST09, WY15, ZWL10, CCP22, CKL⁺14, CODL22, CHY10, CLPA21, GJR08, LZH14, MN13, NKT10, NLQT06, RPK03, VR05, ZY07, ZW12b, GHS95, JRW94, KN93]. **Semi-Markov**

[HG16]. Semialgebraic

[BHP18, BLY14, DIL16, EZ10, JAL15, JPT13, JLL23, KS18, KVZ24, Las09, LP17, LP22, Sch05, VS10, MHL15]. **Semicoercive**

[KP98]. Semicontinuity

[DLV10, LW08, GLT97]. **Semicontinuous**

[CH13, NZ01, PZ98, WSLZ17]. **Semiconvex** [HPD14, NP23]. **Semidefinite** [AHO98, Ans00, AW00, Aus15, BDK⁺24, BTN97, BTKNZ99, BYZ00, BNT04, BDSS22, BPS99, Bur03, CS08b, CV17a, CKS15, CQT03, CM21, CSW12, Chu06, CR04, DGT20, DKM18, DYC⁺21, DU21, DT98, DdLM21, DPW15, EOL98, EMN22, FSP15, Fay96, FKS02, Fus14, GV15, GS98, Gu00, GWZ15, GW18, GL08a, HdR02, HLNZ08, HR00, HN09, HKP24, IPS11, JRT97, JAL15, JLLP16, JPS99, JL05, JBAS10, KN02, KN04, KN05, KTT15, KdK23, KL10, Kiw07b, KSH97, KSS99, KW10, Las02, Las14, Lau01, LP15a, LM02, LLD⁺02, LT10b, LNQY10, LP15c, LM05, LLZZ19, LSZ98, LZ10, MHL15, MPRW09, Mat05, MÖ07a, MP10, Mon97, MT99, NWY17, NYZ18, NF01, OG03, PA14, Pap17, PY19, Pat17, PT24, PVZ07a, PW07, PS98, RB18, RTW97, RV06, STKI17, SPW15, Shi17]. **Semidefinitely** [dCST19, Sim11, SL14, SWW21, SKL09b, SSQ04, STY16, iT17, TTT98, Toh00, TZS02, TK02, Toh03, Tse03, WKKM06, WZYB08, WDLW23, WDZZ23, WZZ22, XHL14, Zha98a, ZH06, ZST10, ZVP06, dE14, dPRT01, dKPS09a, dKPS09b, dKL10, dKL11, dKP12, dKV16, dMS24, Ali95, FKMN00, HRVW96, Mon98]. **Semidefinitely** [NPS10]. **Semidiscrete** [BK21a]. **Semilinear** [CDL16, CdIRT08, CHW12, MU24]. **SemiProximal** [STY15]. **Semismooth** [FFK98b, HMW21, HIK03, HH06, KFF09, LdQ11, LST18a, LST20, LLST19, MU14, MXC⁺19, MSU24, Sch08, Sta04, ST09, Ulb01, Ulb03]. **Semismooth*** [GO21]. **Semismoothness** [DSST20]. **Sensing** [AI11, AI12, CWW18, ZYP21]. **Sensitivities** [QGD18]. **Sensitivity** [AB18, AC02, DMZ12, DHR07, DR14, FMP18, GG08, GZ17, Gre00, GYZ14, GLYZ14, HKP18, Lew02, MCL10, MS94b, NA20, SAZ22, SKB18, YT02, ZML21, Iof94]. **Sensor** [CJSY07, KKW09, KW10, Tse07, WZYB08, ZSY10]. **sensors** [AW94]. **Separable** [BPT97, BCU00, CTW19, Chu16, DNSD13, DK10, GV15, HKP18, HTY12, HHY15, Kuč08a, NZ16, PS10a, SBT16, SK98, SAV14, Sva02, dEH01, CH94, GW93, KSW94, YG91]. **Separated** [Pul00]. **Separation** [GKT24, GNRPT16, Kas10, LBH22, MSG20, ZN11]. **Separator** [GHW08]. **Sequence** [ZW12a, Ans91]. **Sequences** [ASSS23, CRZ18, HNP00]. **Sequential** [AMS10, AHSS19, AFSS19, Ani02, BPL12, BBTT12, BCRZ21, BL95, BCW14, BCWW20, CO12b, CJRW14, CWZ18, DSD12, FNMK24, Fle12, FLT03, GS21, GPR02, Har98, HSS20, HR12, IK16, JLD03, JKW15, KLLM22, LT01, LdQ11, LY11, LLS10, OOT22, PS21a, PW98, SKL09b, WP23, WT04, YLQ03, YPL21, AEGS93, Hei96, MP95]. **Serial** [BM94a, Pan94]. **Series** [ASZ08, Góm21]. **Set** [ACN15, ACS14, AAZ15, AI20, ALSV18, BHHK00, BGP09, BRZ20, BDL⁺16, CWH06, CYZZ19, Cri22, CST19, CH16, Dah99, DQ24, DIS04, DLR16, DLW99, DGL10, DFR07, EQR22, EI06, FJS98, FT02, FT07, Gfr11, GLRS15, GLdS05, GTdS06, GL15, GT97a, GLTP98, GJ99, GE14, GR03, GVJS10, HZ06a, HIK03, HR15, IY09, Iof11, IT18, IS08, JPT13, Jey03, JKW15, JRS10, KLT07, KR02, KR03, Las05, LP22, LT10a, LST18b, LNS18, LN11b, LPV05, Luk08, OW06, PZ98, PZ00, PZ03, PW05, RZ01, SK06, SZY16, TY04, Wan24, WK19, YP20, ZC20, Zhe20, BM18c, GLT97, GHRT98, HSS93, JRW94, LS91, LT93]. **set-functions** [LS91]. **Set-Valued** [ACN15, DQ24, GJ99, LP22, LN11b, PZ98, PZ00, PZ03, PW05]. **Sets** [ANT16, AH05, AVS19, AVS21, AZ08, BR19a, BM14, BMR00, BCS99, BM98b, BLY14, BCWW15, CH15, CGT10b, DW15a, DGR17, DP22, DW11, Din98, DR96, EZ10, FI08, FG04a, Fre03, GHHL05, GU22, GJR08,

Gün14, GWZ15, HHI⁺20, HN09, HW07, JAL15, KT00, KS18, KVZ24, Las11, Lás17, Lew02, LN02, LN05b, LNP07, LN14b, Lim11, Lov11, MZH20, MHL15, MUPT24, MM05, NPS10, OR16, Pen17, RG22, RS11, Rut17, Sag16, Sch05, SYZ19, SGK21, Vel15, Vog08, VS10, ZN08, ZN11, ZW12a, Zhe23c, Zhe23b, ACC93, GK99, MS94b, ZT92]. **Several** [LH04, LBP20]. **SGD** [JNN21]. **Shadow** [GHW08]. **Shadows** [DPW15, SS15]. **Shah** [Wan95]. **Shannon** [BH95]. **Shape** [ABCdC23, BHK002, BHK⁺09, Bla21, Bla23, CHP⁺09, DQQY02, GLRW21, Hab98, Lau00, Luc09, LSW20, RW12, SSW16]. **Shape-Preserving** [DQQY02]. **Shaped** [HOR99]. **Shapley** [BT20]. **Share** [GU22]. **Sharing** [AH19, GKPV01]. **Sharp** [CGT20, CL23, DY04, Dol20, FIS10, JL03, LMWY11, LMP⁺18, MZ98, WJ00, WyW04, ZY07, Zua03, MZ00]. **Sharper** [HWWM24]. **Sharpness** [AIMM24, Rd20]. **Sheet** [FGM12]. **Shifted** [GKR20, Mit94]. **Shifting** [YMT04]. **Short** [Bar08, GV94]. **Shortest** [DP00, MUPT24, Wen97, Ber91]. **Shrinkage** [KF18a]. **Shrinkage/Thresholding** [KF18a]. **Shrinking** [GL14a]. **SIAM** [MZ00, QW01, ZT98]. **Side** [Gre00, PS11]. **Sided** [RW16, DFNS05]. **Sides** [GST11, HCH12, KRT07]. **Sieving** [LSY24]. **Sieving-Based** [LSY24]. **Signal** [KB08, GK99]. **Signed** [INT15]. **Signomial** [CS16]. **Simple** [BV18a, BCU00, CBP24, DFS03, HL08a, HL11, HR15, KT14, KLL22a, KLL22b, KR03, KVZ24, LT02, Pyt98, Wan24, YN17, vBRM24, CH93b, Li96]. **Simplex** [ABGJ14, AWW09, AM00, Chu21a, CV07, GRS21, HJB20, IdW16, LRWW98, Loc15, McK98, RSE18, dKLS15]. **Simplicial** [Tse99, DvTY91]. **Simplicity** [DU21]. **Simplified** [GT97b, Roo15, Sch08, Sta04]. **Simulated** [CF99, Fie00, Nau02, Fox95]. **Simulation** [Din98, PGGH18, SFP11, GK95b]. **Simulation-Based** [PGGH18]. **Simultaneous** [DRT17, Gre00, Hol04, JL16]. **Single** [ASZ08, AGH10, AG14, BTC08, BBNT24, CKL97, CJK98, EI06, GRW20, SCRS00, dSTVB18]. **Single-Cone** [EI06]. **Single-Directional** [AGH10]. **Single-Objective** [ASZ08]. **Single-Projection** [BBNT24]. **Single-Sink** [SCRS00]. **Single-Valuedness** [AG14]. **Singly** [CPRZ20]. **Singular** [CCS10, CNQ97, IK00, IS02c, Lov11, SI13]. **Singularities** [CTW19]. **Singularity** [SWW21, iT17, LP93]. **Sink** [SCRS00, XLD99]. **Sinkhorn** [Car22, PV23]. **Sion** [ZZS23]. **Size** [BHG07, FV07, FB19, JL24, Kum16, LS22, MU24, PT24, RSKW19, SM99, AH16, Bar93]. **Sized** [YMT04]. **Sized-Broyden** [YMT04]. **Sizes** [BHT16, BT19, PM15]. **Sizing** [RVZ24, Sta99, YMT04]. **Sketch** [PW17]. **Sketched** [YLG22]. **Sketching** [MKU21]. **Skew** [BAC11]. **Skipping** [KON98]. **Slater** [DLW99, LZH14, MRS16]. **Sliding** [LZ16, LV07, OS23]. **Slim** [DO06]. **Slope** [BHKM14]. **Sloppy** [RTM23]. **Slower** [XXS21]. **Slowly** [Cab05]. **Small** [EL10, JYK24, ND09]. **Smooth** [AAGM22, ASS24, AK21, AST10, AFGO20, BH19, BGR20, BGP09, BM98a, BM98b, BFMS14, CC19, CGT12, CNQ97, CH97, CW23, DN20, Fus14, Gar21, GDG22, GW19, IS02c, JR00, KLW18, KF18b, LPW23, LL20, LM21a, Lu09, LFN18, MFBR24, MS03, MOP20, Nem04, OLR21, POLW20, RS11, RW18, SP12, TN21, TZ10, TDFC18, WG19, Wen97, ZN14b, Zhu02, d'A08, dGJ18, dRT92]. **Smoothed** [AI11, MWDS18, VVM⁺09]. **smoother** [Bel94]. **Smoothing** [BT12, BR23b, BC14, BH14b, CX99, CC99, CY00, CWZ12, CB14, CNY14, CL14, CH15, DGN12, DBW12, FLT01, HYF05, JR10, KP99, KN02, KN04, KSX08, LL09, MPR10, NARS14, Qi99, QZ00, SSQ04, XYZ15, XLS19, ZC09, ZC20, ZPXQ21, dE14, LS93,

MN93, PZ94]. **Smoothing-Type**
 [KN02, KN04]. **Smoothness**
 [CGT19, LTP23, LZ13, LLT22]. **SNOPT**
 [GMS02]. **Sobolev** [Tha93]. **Sofer** [CK99].
Solution [BBT06, BP12, BZ08, Chr20,
 DLR14, FK10, FGG07, GT97a, GLTP98,
 Gre00, HMW21, HKK11, HMP⁺08, HY16,
 IPRT00, JY04, JS16, KS16a, KQ19, KM21a,
 LW11a, Lin08, LNS18, LFJ⁺11, LPV05,
 MZH20, QZ08, RS11, Rob07, Rot09, RPK03,
 SSY24, TM15, Tuy00, ZG03, ZSX19, ZL02,
 BCT93, DFKS11, GMR91, GLT97, Gow92,
 HSS93, MT91, MS94b, MP95]. **Solutions**
 [ADE⁺18, Att96, BTNR02, BPSF24, BS98,
 CG08, CLMP10a, CDL16, CY99, CW23,
 Ded00, EOL98, EMN22, GSG12, GJLVP14,
 GHGHL06, GL10, GJN06, GHNS19, HP24,
 IS10, KP98, KK05, KRT07, LPR00, LN14a,
 Liu20, LJ16, MSFL17, MZ98, Mat05,
 MOS14, NO09, PT18, PT24, RW07, Sag16,
 SS23, SFM14, SdM00, SW15, Vog08, WZZ22,
 WyW04, XS16, XLZH19, ZL12, ZK15,
 Dan93, MZ00, SM93, Tha93, Ver96, Wan95].
Solvability
 [Bie16, CLPT06, GS07, RW16, Zhe20].
Solvability/Unsolvability [CLPT06].
Solvable [PH23]. **Solve**
 [ABGJ14, Krä24, LYSA20, WUR⁺23].
Solver
 [BCWW20, CF01, LMO06, uDR15, Toh03].
Solver-Based [LMO06]. **Solvers**
 [FFG99, Hen15, LM19, MS11a]. **Solves**
 [CH16]. **Solving**
 [AINT17, ACN15, ACS14, AMS16, AGJJ00,
 BBN14, BD17, BTC08, BBTT12, BV18a,
 BT21, BYZ00, BLST19, BH14a, BAD18,
 BV06, BK10, CT06, CHS06, CPRZ20, CP01b,
 CWZ18, DENR20, FMW96, FS17, Fil99,
 GSU21, GO21, GLRT99, GACD14, HM15,
 HNKK17, HL17, HL20, IS02c, JFQS98,
 KV17, KRS11, KMM19, KM21b, Kor00,
 Lev04, LS97b, LST18b, LST18a, LT96, Lie20,
 LFJ⁺11, McB98, MZ99, PS21a, POLW20,
 PFA17, PW19, QQS03, SS17, SBD⁺11,

SNTI16, SSN04, SDGM99, SKC12, SBT16,
 SL15, TA98, TK02, Toh03, Vil05, WST10,
 XYZ15, YL11, ZZST20, ZM96, vdLTY07,
 DMZ94, Fre95, Gar93, PY93, Qi95]. **Some**
 [AKS00, AHFH16, CK99, Chu21b, EW09,
 FIS10, FP98, Fus14, GS07, GO12, JL18,
 KH05, Kea11, LPT07, Loc15, LPR98, NY05,
 PH23, PR07a, Pow95, PW19, SZ98, Toh00,
 TK02, ZYP21, Zha98a, dKL10, CL96b,
 DHLN92, GK95b, Kan96, Mel96, ZC91,
 Zhu96]. **SOS**
 [AP14, ND09, NTP24, WML21a, WML21b].
SOS-Convexity [AP14]. **Source**
 [BTC08, BLMH06]. **Sources** [XLD99].
Space
 [Alv04, ADL08, Bla23, BI98, Bur03, CCR17,
 DLW99, ES22, HXH22, HV05, HK06, HK09,
 KT03, LN05a, Luk08, MPTD21, RZ01,
 RW12, Sch08, TZ10, ZN11, KS91, Kup96].
Spaces
 [AZ19, Bac14, BD17, BP07, BDMS09,
 BCCL22, BKMW20, BK21b, BU22,
 BCGH08, CCFP05, CT03, Den97, DP23,
 DFR07, DS12, FLY11, FI08, FBH22, GP19a,
 GW21, GLRW21, GKT24, GYZ14, GXZ21,
 GNRPT16, HS06, HHP18, HSK15, Hu07,
 JJ15, KKS19, KS19, KRS11, KFGT21,
 KK02, KT08, KNT10, KTSB21, LPT07,
 LLAN22, LLAN24, LN02, LJ02, LN03,
 LN05b, LNP07, LFLL09, LN14b, LN18,
 LMP⁺18, LNYZ21, MM11, MM21, NZ01,
 NT08, RW16, RR23, Rut17, Sab11, Ulb03,
 WyW04, Zas10, ZZS23, ZN04, ZN05, ZN07a,
 ZN07b, ZN08, ZN09, ZN10, ZN14b, Zhu02,
 HK92, Iof94, IK96, NT02, Sha94, Tha93].
Spanning [RO18]. **Sparse**
 [BYZ00, BH03, Bou97, BSR17, CMYZ22,
 CP18, DDW20, DKLM22, DV23, ET19,
 EMN22, Hal24, KKW05, LW11a, LBT22,
 LSY24, LLST19, Lu09, LZ14, MSFL17,
 ND09, QT24, TY11, XZ14a, XD20, YCST22,
 ZL12, Zha20, vdBF11, Fle95, YG91].
Sparsely [AAJN16]. **Sparsest** [ZK15].
Sparsification [Erg19, ZSY10]. **Sparsified**

[AP23]. **Sparsity** [APX17, ACHW21, BE14, BH18, CSPW11, CDR22, HZ16, KKW09, Las06a, SSSZ10, SM18, VZQD17, WKKM06, WML21a, WML21b, XFLP21, FKMN00]. **Sparsity-Inducing** [CDR22]. **SpaseLoc** [CJSY07]. **Special** [DKM18, DR07, LM02, Wu96]. **Specialized** [Cas00]. **Specific** [PTZ05, Sat22]. **Specified** [Fil99, Fre95]. **Spectrahedra** [BRS15, BKL19, GN11, KTT14, KTT15, dCST15]. **Spectrahedral** [Kum16, OC23, SS15]. **Spectral** [ANP08, BMR00, CWW18, CPRZ20, CDZ17, DSST20, DG23b, Erg19, GHR14, HR00, LT20, NRS21, VVM⁺09, WX20b]. **Spectrally** [See97]. **Spectrum** [DK10, WX20b]. **Sphere** [BQX15, BBW18, FHPS22, GH15, Hag01, HHJL23, Las22, SZY16, WX19]. **Spheres** [LNQY10, ZCTW12, Mar94]. **Spherical** [Sor97]. **Spline** [DQQY02]. **Split** [BCDJ21, BAR21, DGR17, HAN11, XC21, BAR21]. **Split-ADMM** [BAR21]. **Split-Douglas** [BAR21]. **Splitting** [ACP11a, ACP11b, BSW23, BFO19, BCH14, BAC11, CR97, DP19, Dav15b, Dav15a, Gis21, GM12b, HLWY14, JE19, LP15b, LR21b, LMV23, MT20, MS11c, MBG24, O'D21, Pan19, RFNP14, RTBG20, Sal17, TP20, Val20, ZY14, Li93a, LT92, Man91]. **Spurious** [EH20, JL23, LYP23]. **SQAP** [JK00]. **SQAP-Polytope** [JK00]. **SQCQP** [AP21]. **SQP** [AKR23, BTZ92, BCN08, BCN10, DJV06, FLT02, FGL⁺02, FLRS06, FV16, GMS02, GR14, GR10a, GR10b, GLR15, GHS95, HV01, HR14a, HH06, IK96, IS10, JR00, Kup96, LZ03, QW00, QW01, SD00, SO21, Wri02, XB99, XYZ15, ZT96, ZT98, ZU11, Zie14]. **SQP-Filter** [FGL⁺02]. **SQP-Methods** [Zie14, IK96]. **SQP-Semismooth** [HH06]. **SQP-Type** [DJV06]. **Square** [AK21, BBH24, MC05]. **Square-Root** [AK21]. **Squared** [SSQ04]. **Squares** [BR23a, BBT06, Bec15, Ber96, Ber97, BDMS09, BCWW15, CGT14, CCFG23, CP17, DP22, DLR16, EZ10, FSP15, FRW11, GLT04, GLN07, GSW97, KV17, KKW05, KS15, Las05, Las06b, LV22, LYP23, LSY24, MEV23, MFBR24, Mas20, PA14, PY19, RV06, RM08, Sch06, Slo22, STY16, VS08, WKKM06, XZ14a, ZCD00, ZCS10, ZC10, vdBf11, Hei93, Hus94, KSW94, YY95]. **Stability** [AHO98, AW94, AAZ15, AK21, AH16, AD15, BCL07, BBH24, BS98, CPS07, CLPT99, CLMP10a, CM17, CJ18, CHN18, CS15, DR00, DHR07, DR14, DGL10, DL13, GM15, GM17, GLT97, GLdS05, GTdS06, GLY12, Har09, HRS06, HMN10, Her09, JY04, JRS10, KK05, KNT10, Küc08b, LV22, LTY12, LPR00, Lev02, LZ13, LXL11, LRX14, Mal07, Mat05, MO07b, MR12, MRS14, MN14, MOS14, MOR15, MN16, MPA21, NT08, NKT10, PVZ07a, PR98, RW07, Roy20, VVM⁺09, ZZX16, ZN15, dP02, AW93, JRW94, RS96]. **Stabilization** [LRR98]. **Stabilized** [GR14]. **Stable** [BGM19, Dah99, FLY11, GLRS15, GR03, GJR08, GER23, IK16, JR10, LFLL09, MS21, SKC12, YZZ17, ZN15, ZZN18]. **Stage** [BHM18a, BHM18b, BJS07, CSS19, CLYZ22, DR00, DMM22, FWKS15, GB22, KGM23, LC24, LXL11, LS20, LCPS20, MÖ07a, MÖ09, MÖ10, OSS11, PS21a, RSvdVH16, SL15, XY10, YK18, ZK14, ZSX19, CM11]. **Stagnation** [Kel99]. **Staircase** [Ent96]. **Standard** [BMP22, KNP98, LSS19]. **Standpoint** [LR21b]. **Start** [YW02, Fre95]. **starting** [BF96]. **Starts** [JKW15]. **State** [BCL07, BDM16, BM16b, BLMH06, CdlIRT08, GW21, Ger08, Ger11, Her09, HK10, HSW14, KU15, Mal07, PZ03, RT06, Sch09, SW11, Trö05]. **State-Constrained** [BCL07]. **States** [HN19]. **Static** [HMW13]. **Stationarity** [APX17, Bet19, HMW21, HMW13, HK09, KLT07, NR20, Wac14]. **Stationary** [AA06, ALSV18, BH20, FT02, FT07, Gün14,

GER23, HPU19, HL23b, HLP23, JBK⁺18, JR10, KK05, LBP20, Mat05, PT18, SW24, vdLTY06, DvTY91, HSS93, Sch92, TDZ20]. **Statistical** [CCF⁺20, CPS18, HZZC22, HS19, JHR23, LV08]. **Statistics** [SM99]. **Steady** [BLMH06]. **Steady-State** [BLMH06]. **Steepest** [CT13, CGT10a, CC02, Fle98, Mur03, Zhu95]. **Steepest-Edge** [Fle98]. **Steiner** [BM02, CBJF97, FdOF07]. **Steklov** [Bla21, SSW16]. **Step** [AFFG14, AH16, BHG07, BRZ20, CD19, CVV99, DIMS18, EGG09, EG10, FB19, GLR14, JSX24, JL24, MT03, PS97, Roo06, Roo15, SZ98, Ans96, Gon91b, Gon91a, GT92, Kiw96, KKM93, TM95, Wri95, dRV92, dRT92]. **Step-size** [AH16]. **Stepping** [CW14, GAP08, TP02]. **Steps** [BB23, CBP24, Gri24, PRS16, GV94]. **Stepsize** [Tse98, dEH01, Mas97]. **Stepsizes** [LM21b]. **Sterilization** [KS00]. **Stiefel** [CMSZ20, GSAS21, LCD⁺21, SX24, XLxY21]. **Stochastic** [AFH⁺13, AFC22, AABL21, AP18, AD19, BGN22, BHM18b, BB21, BPL12, BCRZ21, BGR20, Bia16, BZ08, BCCL22, BHT16, BT19, BCD⁺18a, BBN18, BJS07, BB23, BCD20, BCNN11, BHNS16, CCL09, CCD24, CERS18, Che01, CM11, CWZ12, CSW15, CSS19, CS22, CLYZ22, CDL14, CCT21, CS15, CKS17, CP15, CHP⁺09, DDPR24, DL15, DG19, DD19, Den14, DR00, DR03, DHR07, DR14, DW15b, Din98, DBW12, DR18, DM20, DMM22, DW24, ER05, ES22, EN14, EB20, FWKS15, FCF07, FNMK24, FGL24, GS21, GB22, GH16, GP19a, GW21, GLRW21, GL12, GL14a, GL14b, GRW20, GSG12, GNS08, GHZ99, GDG22, Gri19, GR12, Gui16, GKS18, Gui20, GMS21, HNO15, HN19, HSS17, HKMS20, HP18, HRS06, HS19, dM08, dMM10, HWWY23, HCH20, HZ22, IJOT17, IJOT19]. **Stochastic** [JBS⁺23, JS16, JZZ20, JSX24, JS20, KP22, KPZ19, KM21a, KSdM01, KLL22a, KLL22b, Krä24, Küc08b, LY98, LZ18, LY19, LOZ23, LCC⁺20, LJ20, LS22, LZCW23, LC24, LZ03, LXL11, LRX14, LW15, LS20, LCPS20, LLZ24, Lu14, LW08, Lue08, MP16, MP19, MPP⁺17, MÖ07a, MÖ09, MÖ10, MLC22, MX06, MXC⁺19, MSU24, MP07, MS06b, NL14, NJLS09, OR02, OSS11, PS20, PS21a, Pat16, PAV21, Pfl10, PP12, PP16, RP23, RCGR18, RNV09, RS11, RVZ24, RW07, Rot09, RW17, RR08, SÖ17, SKM19, Sch96, ST03, Sch98, SZ14, SB18, SdM00, SA04, Sha17, SD20b, SHP18, SY18, SL15, SXMW13, THDL22, WB16, WMGL17, WD23, WZZ18, XZ14b, Xu06, XY10, XY15, Xu20, YWF19, YK18, Yin99, YLZ02, YKI04, YNS20, ZDR24, ZC09, ZK14, ZAL21, ZX21, ZMB⁺20, dE14, dAGL24]. **stochastic** [And96b, AW94, BMR94, BQ95, CJ18, DJ93, Den00, JYZ94, RS94, RS96]. **Stochastically** [CSW12]. **Stock** [YLZ02]. **Stokes** [HH06]. **Stop** [Pat16]. **Stopping** [BPL12, Har98]. **Storage** [BK21a, DYC⁺21, Kau99]. **Strategies** [AAGM22, BBN18, CGRV21a, CC19, GHHL05, Hyn23, MCL10, NWW09, NRS21, PMDL10, YW02, LN93]. **Strategy** [BHHK00, HIK03, KR02, Pan16, Sag16]. **Stratifiable** [BDLS07, FMP18]. **Streaming** [LLZ24]. **Strength** [AWW09]. **Strict** [CM10, DDD22, HS24, KN05, KFF09, dCST19, ST09]. **Strictly** [Gre00, HLWY14, HR15, LS97b, SK98]. **Strips** [ET07]. **Strong** [AAS17, AZ09, ACFH24, BE06, Bet19, BL94, CS08b, CHNT21, CRRW21, DY99, DLW99, DP23, DR96, DL13, ET07, FBM13, GH16, HMW13, HK09, JL10, KT03, KS14, KKMP24, KK05, KRZ17, LTP23, LJ02, LN03, LN05b, LNP07, LSxY24, LDLS20, MP97, Mat05, MDV12, NT06, PW16, RTW97, RK19, Rev97, SW14, TWB⁺03, Wac14, WDZZ23]. **Strong-** [MP97]. **Stronger** [MSG20]. **Strongly** [AAGM22, ADV24, AFGO20, BSW23, FS17, GL12, GL14a, GER23, HHI⁺20, IPRT00, JR10, LPW23, LMV23, LB00, PH23, PW16,

RC22, Sch16, WZ24, Xu24, ADR22].

Strongly-Concave [Xu24]. **Structural**

[AK08, CSW15, LM16]. **Structure** [BIM23, DSS09, DF19, DJS13, GSG12, Gor22, GNL11, LT21, MS00, NT19, SW15, SL14, SAV14, CL92, Hen95, HSS93, Hus94, RHW93]. **Structure-Adapted** [NT19].

structure-exploiting [CL92]. **Structured** [BBN14, BCN19, CV17a, Com14, CGST96b, CVV99, CR21, GKPV01, KSW94, LZ19, MS03, NS17, PCA19, SAZ22, SW24, WKKM06, WLM22, XFLP21, YCST22, ZC10, JYZ94]. **Structures** [ABT00, CM16].

Studies [FGM12]. **Study**

[BER04, CCLW14, FWKS15, Pul97, Bon97, KBS93, NN91a]. **Sub** [DG23b].

Subadditive [KM19]. **Subanalytic**

[BDL07]. **Subcubic** [HL11].

Subdeterminants [Del19].

subdifferentiable [MLRR93].

Subdifferential

[BQ95, CD00, CHNT21, CHL16, CHLC19, DHML01, DF19, DL13, EL09, HLZ08, HJ02, LN11a, MR12, PA19, TZ10, WG19].

Subdifferentials [AXY23, CT13, CHY10, KM09, LT20, MO01, MN13, ZN15, BD02].

Subgradient [Bac15, BWWX15, BDL07, BLP23, BBR16, BCGH08, CM24, CHN18, CHNT21, Cru14, DD20, DG19, Gri18, Gri19, JRJ10, JL24, Kiw04, Kiw06, Kiw08, KNX16, LCD⁺21, NB01, NO09, NL14, NS14, RNV09, SY13, WLWY15, YP20, dF09, Ren16].

Subgradient-Based [YP20].

Subgradient-Type [LCD⁺21].

Subgradients

[BDLS07, ND10, QW20, mnSnPm24].

Subgraph [RK19]. **Subgraphs** [CC18].

Subject [BM20a, BCU00, BMW10, CCL09, CL96b, CPRZ20, DK10, Ete22, HH06, HK10, Mal07, Sha97, Sor97, CL96a]. **Subjects**

[BDS10]. **Sublevel** [AH05, AVS21].

Sublinear [ES22, GY20, GIJT96].

Submatrices [DV14]. **Submodular**

[HKMS20]. **Suboptimal** [GSG12, TP16].

Subproblem

[AINT17, AZ09, Ans17, BV18a, CJSY07, CY99, CH16, CW23, For05, GLRT99, HNKK17, JW21, JL19, RSS00, SY19, TA98, WX20a, WLKK23, YB16, MP95].

Subproblems [BA13, BCWW15, IS10, JL20, LST18b, Ni05, SW95]. **Subregularity**

[BYZ19, CHNT21, Gfr11, Gfr13, LM12, WLN23, ZN07b, ZN10, ZN14a, ZZ16, ZN21].

Subset [BA24, BZ04, CKP00, DDW20].

Subsets [BTMN01]. **Subsmooth**

[ZN08, ZN09, ZW12b]. **Subspace**

[ABCFR20, CDR22, EG10, FH14, ML05, RFNP14]. **Subspace-Based** [ML05].

Subspaces [BM16a, BSW23, DW24].

Substitution [HTY12]. **Subsystem**

[Pfe08, YP20]. **Successive** [ACS14, BZ08, BGNW05, KT00, MGGS09, RHL14, TF96].

Sufficiency [BCT19, KMP23, WDZZ23].

Sufficient

[AZ09, BYZ19, CT02, CdIRT08, CM20, CM22, CLPA21, EW09, FS12, HS06, HN09, JL24, Kel99, LP06b, MM11, NYF11, PS10b, Pot14, RT06, WX20a, WY01, Zas05, War92].

Sum

[BR23a, BH14a, BDL23, CKP00, CBF23, CP17, CHL16, DP19, DP22, EZ10, FSP15, HBM21, LY19, Las05, Las06b, LTAP22, LV22, LYP23, MEV23, Mas20, PA14, PY19, QZ00, RV06, Slo22, TSP18, WX19, WC24, WZ24, WZZ22, XKK22, XY97, XY00, And96a].

Sum-of-Ratios [BDL23]. **Sum-of-Squares**

[BR23a, CBF23, DP22, FSP15, LV22, PA14, PY19, RV06, Slo22]. **Summations**

[ND09]. **Sums** [BCH14, KKW05, KS15, LV19, MFBR24, Sch06, VS08, WKKM06].

SUMT [Ans96]. **Super** [DMN24].

Super-Universal [DMN24]. **Superlinear**

[ATP21, CC99, CK00, DJV06, FIS10, GOST01, LSZ98, McS96, MER18, NT16, RN21, Sim11, YF00, EM91, KS91, MW96, ZTD92, ZTP93]. **Superlinearly** [Ani02,

CH15, FQ96, IS02c, LST20, McS94, PS98, PS10b, QQ00, ZL03, ZCT10, CH93b, ZT93].

supply [RSE18]. **Support** [ADE⁺18, BRB19, BH15, FM03, GLHZ11, MÖ10, Men17, ZAL21]. **Supporting** [Pan16]. **Supremum** [CHL16, CHLC19, HLZ08, LN11a, MN13, PA19, PAV21]. **Supremum-Sum** [CHL16]. **Sure** [GW21]. **Surface** [DD98, dMM10, MP14a]. **Surpassing** [MGR18]. **Surrogate** [KL97, RR15]. **Surrogation** [SSD22]. **Survey** [HL23a, Luc09]. **Sweeping** [CP15]. **Switching** [BGM24a, BGM24b, YKI04]. **Symmetric** [BH18, BKS96, CQT03, CHLZ17, CY10, Dan21, Don14, EH20, GS07, GVJS10, HL02, JH14, JS11, KSH97, KSX08, Lim11, LWZ15, LY07, Lu14, LSZ98, Per23, Ran06, RFNP14, SW14, SS22, Van95, Yos07, KBS93, Li93a, Man91]. **Symmetric-Matrix-Valued** [CQT03]. **Symmetries** [BDPX09, DL17]. **Symmetrized** [XXS21]. **Symmetry** [MNR⁺22]. **Symplectic** [GSAS21]. **Synchronization** [Bou16, LXB19, Lin22, LYS17, MB24, ZB18]. **System** [AL21, AF22, Bet19, BPC11, BRU97, CT06, HMW21, HH06, HY16, LN05a, LN05b, LNP07, Peñ00a, vAPA19, KSW94]. **Systematic** [MTB23]. **Systems** [AGH10, AC02, BDdSM15, BGY⁺23, BDL07, BCD18b, CCP22, CPS07, CLMP10a, CCH05, CCP08, Com14, CP01b, DKL21, Ded00, Den97, DEAW99, EF02, Fay02, FG04a, FP97, FGG07, FG04b, GM17, GM19, GJ17, GST11, HSX24, HMN10, lid13, JY04, JLL09, JRJ10, Kan14, KRS11, KNT10, LW11a, LNS00, LN02, LNP08, LN14a, LN14b, LN18, LNYZ21, MN16, MS19, NY02, NKT10, Nga15, PR20, QQS03, She14, Son06, SP24, Toh03, TP02, YY23, YM14, ZL12, ZK15, ZN05, ZW12b, Zua03, ZM06, AW93, DMZ94, GLT97, LL94, YG91].

Tableau [AWW09]. **Tail** [CCH05, JBS⁺23, RVZ24]. **Taking** [TP16].

Tam [BSW23]. **Tame** [FKP10, Iof09]. **Tamed** [ES22]. **Tangencies** [Pha20]. **Tangency** [VS08]. **Tangent** [BCS99, CYZZ19, Pen17, nnSnPm24]. **Tangential** [CGT10b]. **Tangents** [RT19]. **Tapia** [CY99, CL23, YWAS17]. **Target** [LLD⁺02]. **Task** [PTJY10]. **Taylor** [Luc95, XF24]. **Taylor-Approximated** [XF24]. **Team** [GSG12]. **Technique** [BR23b, BKR17, CB14, DSS09, DGN12, DO19b, GG08, HR12, MC05, NARS14, Nes05, WHY⁺19, YCST22, ZH04]. **Techniques** [BBR16, FdOF07, FV16, KS12, LRR98, LSW20, MP14b, RK19, Kiw96]. **Temperature** [CF99, Fie00]. **Temporal** [XA18b]. **Tensor** [Bou97, BV18b, Don14, FS96, FP97, GN20, HHJL23, JLZ20, SC91, SVD14, ULC20, YFHS16]. **Tensor-GMRES** [FP97]. **Tensors** [CHLZ17, NYZ18, WH24]. **Tentacles** [Sch06]. **Term** [Cab05, NYF11, Tse98, WML21a, WML21b]. **Terminal** [BM18a]. **terminates** [O'L95]. **Terminating** [AKS00]. **Termination** [HDL21, WLLY16]. **Terms** [Dol20, LST16, MSG20, SVD14]. **Test** [CM21, SL21]. **Testing** [GKS18, WG19]. **th** [CJ18]. **Their** [BS15, BHR19, CRZ18, CM16, FBLV24, GTdS06, IK14, Kal18, Kan14, MO01, MN13, RW12, dCST15, ZSX19, ACS14, JSC95, MEV23, TM15, XS16]. **Them** [FFG99]. **Theorem** [AHFH16, BHKM14, DQ24, DGLM14, Don12, FS17, GKS18, GL18, Kas10, KKT15, KQ19, KB08, LBH22, MP97, MST11, NT06, ZZS23, ZN11]. **Theorems** [AAZ15, AK21, BCD⁺19, DST23, Dax09, Fay06, FB00, FKP10, GKT24, JLL09, Och19, SN07, Zol03]. **Theoretical** [LS97a, KBS93]. **Theoretically** [JNN21]. **Theories** [DR13]. **Theory** [BGLW08, BP05, BCT19, CD00, CT02, CT12, DV97, DEAM97, DO19b, EA99, GLRS15, HSK15, IS02b, JRS09, KS19,

MA00, RW17, Wat00, YmZS15, ACC93, BS94, GLT97, Kup96, MS00, Ren95]. **Théra** [ABW21]. **Therapy** [Gor22, RADK05]. **Theta** [GPT10, dCST15]. **Third** [GN23]. **Third-Order** [GN23]. **Threading** [GLM98]. **Three** [BHK⁺09, BGR20, NYF11]. **Three-Dimensional** [BHK⁺09]. **Three-Term** [NYF11]. **Thresholding** [CCS10, CP08, KF18a, Zha20]. **Tight** [BHM18b, CCT21, GY20, RTBG20, TP20]. **Tighter** [Lau01]. **Tightness** [LLZZ19, WZZ22]. **Tikhonov** [AL21, BBT06]. **Tilt** [BGM19, CHN18, DL13, GM15, LZ13, MR12, MS21, PR98, ZN15, ZZN18]. **Tilt-Stable** [BGM19, MS21]. **Time** [AP22, ACR19, AH19, BBLZ17, BDK⁺24, BRB19, CCD24, CW14, Chu16, Den14, Ete22, GAP08, Góm21, HG16, HOR99, IT18, JL20, KS05a, MTB23, NOS17, NT16, Pan19, PW17, PS10b, Pul97, SOT09, SL21, TP02, WX19, ZDR24, BTN94, DL91, Ral96]. **Time-Consistent** [Den14]. **Time-Delays** [Pul97]. **Time-Stepping** [CW14, GAP08, TP02]. **Time-Varying** [AH19, BDK⁺24, NOS17, Pan19]. **Times** [CJK98, KS05a, XXS21]. **Timescale** [GRW20, HWWY23]. **TOA** [RM08]. **Todd** [GT97a, GT97b, KT14, TTT98]. **Tolerance** [Pen19]. **Tolerant** [CF01, MIM20, SXBN22]. **Tomography** [BTMN01, JS00]. **Tool** [SBD⁺11]. **Topological** [GKT24]. **Topology** [AK08, BTN97, HHI⁺20, LOZ23, BTB93, BTN94]. **Torricelli** [NARS14]. **Torus** [GH15]. **Total** [BBT06, FLY11, LFLL09, RBDM22]. **Totally** [RvdVH15]. **Trace** [Gar21, MMBS14, PTJY10, WZZ22, CW23]. **Trace-Norm** [Gar21]. **Trace-Sum** [WZZ22]. **Tracking** [LLD⁺02, MMN⁺22, RR15, SSD22, IKR⁺91, PR93]. **Tractable** [BTN02]. **Trade** [BBH24]. **Trade-Off** [BBH24]. **Trading** [RS15, SSSZ10]. **Traffic** [FHKM06]. **Training** [CHP20, GKT23, LLC22]. **Trajectories** [Cha02, GS98, Tüt03, Yos07]. **Trajectory** [NF01]. **Transfer** [GHGHL06, ZT92]. **Transference** [ACHW21]. **transformate** [See92]. **Transformation** [Fuk98, MPSU19, RT05, Wu96, RD95]. **Transformations** [BM07, ULC20]. **Transforms** [RV06]. **Transit** [KS05a]. **Transitive** [MS02]. **Transport** [BBLZ17, BK21a, Car23, HPU19, MRT15, SKM19, TSAKN23]. **Transportation** [BPS06, DO06, HH96b, Zen91, ZC91]. **Transposition** [SN07]. **Transhipment** [Fle01]. **Traveling** [BM02, GW18, HP94, JSV91, dKPS09a, dKPS09b]. **travelling** [BCQW95]. **Treatment** [FLS03, RADK05]. **Tree** [CBJF97, FdOF07, MP07, PP16, RO18]. **Treespace** [SPM18]. **Tresca** [ABCdC23]. **Triangle** [HAN11]. **Triangular** [DMZ94]. **triangulation** [Dan93]. **tridiagonal** [DEG⁺91]. **Trigonometric** [BR23a]. **Triple** [Iid12]. **Triple-Hierarchical** [Iid12]. **Truly** [SS00]. **Truncated** [FLP02, IS10, LRR98, NLQT06, STKI17, VS08, XS99, Dix91, NN91a, ZNB⁺93]. **Truncated-Newton** [XS99, NN91a]. **Truss** [BTN97, JKZ98, BTB93, BTN94]. **Trust** [AINT17, Ans17, ANP08, ABO22, BSV14, BV18a, BP97, BV18b, BA13, BKS96, CNY14, CDM20, CGST96b, CSV09, CRS18, CRRW21, DO19a, DV97, DEAM97, DEAW99, DW24, EA99, EGG09, EG10, FNMK24, FGL⁺02, For05, GJV16, GLRT99, GST05, GST08, HV01, HR14a, HNKK17, HM02, JW21, JFQS98, JL19, JL20, Kau99, KS99, KPZ19, LMT09, LM02, LLRV19, LY07, MWDS18, Mon23, Ni05, NR20, Qi95, QQS03, RVZ24, RSS00, hRK14, SHP18, SY19, TA98, TE19, Tse02, Ulb01, WD05, Wal08, WX20a, WLKK23, WS11, WT04, YB16, ZA14, ZSL17, Bur92, CL96a, CGST93, EA95, Sar95, SW95]. **Trust-Region** [AINT17, ABO22, BSV14, BA13, CDM20,

CSV09, CRRW21, DO19a, DEAW99, DW24, EA99, EG10, FNMK24, FGL⁺02, For05, GJV16, GLRT99, GST08, HV01, HR14a, HNKK17, HM02, JW21, LMT09, LLRV19, LY07, MWDS18, Ni05, RVZ24, RSS00, hRK14, SHP18, SY19, TA98, TE19, Tse02, Ulb01, WD05, Wal08, WLKK23, WT04, ZA14, ZSL17, EGG09, EA95].

Trust-Region-Based [DV97, DEAM97].

Tseng [MS11c]. **TSP** [Che05]. **TSSOS** [WML21a, WML21b]. **Tubularity** [Cha02].

Tucker [ACS14, HSS93, KT18, Pan94, QQS03, VR05]. **Tuning** [BBH24, Ser95].

Turing [dKV16]. **Twice**

[AB18, HS24, MS20]. **Two**

[AHLN16, AHSS12, Ans17, BHM18a, BHM18b, BGV20, BM16a, BE06, BJS07, BMZ01, CM11, CSS19, CLYZ22, CM21, CVV99, DP19, DMZ12, DR00, DMM22, FWKS15, GB22, HAN11, HM15, HWWY23, HDL21, Kum16, KGM23, LPW12, LC24, LH02, LX23, LXL11, LS20, LCPS20, Mar05, MÖ07a, MÖ09, MÖ10, Mia96, MSG20, OSS11, PS21a, PY97, RSvdVH16, SNTI16, SDGM99, SL15, SLWX23, TSP18, XXS21, XY10, YB16, YK18, Yil08, ZDR24, ZK14, ZSX19, dSTVB18, BT94b, DFNS05, Gur94, HSS93]. **Two-Dimensional**

[AHLN16, BGV20, MSG20]. **Two-Level** [DMZ12]. **Two-Parameter** [SNTI16].

Two-Phase [dSTVB18]. **two-piece** [Gur94].

Two-Player [HM15]. **Two-Row** [HAN11].

two-sided [DFNS05]. **Two-Stage** [BHM18a, BHM18b, BJS07, CSS19, CLYZ22, DR00, DMM22, FWKS15, GB22, KGM23, LC24, LXL11, LS20, LCPS20, MÖ07a, MÖ09, MÖ10, OSS11, PS21a, RSvdVH16, SL15, XY10, YK18, ZK14, ZSX19, CM11].

Two-Step [CVV99]. **Two-Time-Scale** [ZDR24]. **Two-Timescale** [HWWY23].

Two-Trust-Region [Ans17, YB16].

Two-Variable [YB16]. **Type**

[AMS16, BT14, BK21b, BW05, BH14a, BKS16, DJV06, DMVV17, DPS17, GXZ21,

HAN11, HM16, HR14b, IS02a, IS04, KT03, KN02, KN04, KN05, KT08, LSS14, LCD⁺21, MSQ98, NLQT06, Pen00b, QGD18, SPT08, SSW16, SS00, STY15, ULC20, WP24, dKHL17, HH06, LFP17, PW07, Bla21, CHLC19, ZOB20]. **Type-I** [ZOB20].

unary [GW93]. **Unbalanced** [SSPY24].

Unbiased [CGO22]. **Unblocking** [GG08].

-Porous [RZ01]. **Unbounded** [GW18,

WUR⁺23, WLM22, ACC93, DvTY91].

Uncapacitated [BGV20, RSE18, RV93].

Uncertain [BTNR02, BTN02, BRU97,

CG08, EOL98, dMM10, RP12, XS16].

Uncertainty [AP18, AZ08, BTN02, BG22,

CR23, CSY23, Chu20, CHP⁺09, GJLVP14,

HTT⁺15, Kur24, NS18, ZSX19].

Unconstrained

[Aus10, BGR20, BM17, BB19, Bou97, CGT10a, CP01a, DHP16, Fuk98, GPR02, GL01, GL03, GST05, HXLT23, JL05, LW11a, LF01, LFW98, LRR98, LS02, NYF11, Pap16, PC03, Ray97, ST10, Sch16, SXBN22, SVD12, SW99, Xu22, ZX99, ZH04, DEG⁺91, Iof94, NS91, Ral96, Sch92, SC91].

Underdetermined [LW11a, ZL12].

Underlying [SL14]. **Underrelaxed** [CH02].

Understanding

[CCF⁺20, Peñ00a, ZHE23a]. **Unification**

[BBW17]. **Unified**

[ASSS23, Aus99, BT12, BCWP21, DO19b, DMVV17, GLR14, GJN06, HS23, JLZ20, LR10, ND10, Pat98, PFA17, RHL14, SJM21, SBFA17, ZN11, BT96, TYF96]. **Uniform**

[DL13, LMV23, MOT04, RvdVH15,

RSvdVH16]. **Uniformly** [Tha93]. **Unifying**

[BY11, HLZ08, MS02, Och19]. **Unilaterally**

[SV07]. **Unimodular** [RvdVH15].

Uniqueness

[Cel07, GS07, HF14, INT17, Sha97, SSK98].

Unit [Las22, LNQY10, Loc15, MC05, WX19,

ZCTW12]. **Unitary** [ULC20]. **Univariate**

[LYP23, LS13]. **Universal** [CGT19, DMN24,

FG04a, Gül97, Gün14, OS23, Vog08, ZSY10].

Unknown [ABK22, VIT22]. **Unknowns** [CHS06]. **Unscaled** [BGM⁺16].

Unsolvability [CLPT06]. **Update** [BER03, KON98, NWW09, WD05, XB99, Xu18, YMT04, Dum93, Fle95, GW93, Gur94, KBS93]. **Updates** [AZ05, BCWW20, WH24, YMT04, BT94b, DEG⁺91, WZ95].

Updating [BDdSM15, MN00, YPC18, ZNW99, Bos93].

Upper [CPRZ20, Jan04, Krä24, NMU18, WP23, dKHL17, vAS14, vAF18, GLT97].

Upper- [WP23]. **Use**

[BM17, BK10, BCNN11, IY09, Hus94]. **Used** [AAJN16, MOT04]. **User** [ANRV04, Fre95].

User-Provided [ANRV04]. **user-specified** [Fre95]. **Uses** [HY96, Luo97]. **Using** [ACN15, Ani05b, ALSV18, AO06, BRÖA24, Bar96, BV18a, BH03, BLG13, BGM⁺16, BPR20, BDPP14, CKS15, CNQ97, CGST96b, CV07, DYC⁺21, GJV16, GM12a, GACD14, HPU19, Kel99, KM21a, KSS99, KS16b, LRO05, LP15a, LCD⁺21, LSW20, MWDS18, MP14b, MSG20, MW06, RADK05, Sch06, Sim11, VS08, WH24, XF24, ZFL06, dEH01, CC18, CT93, CGST93, DEG⁺91, GLRT99, GNL11, KW10, MSFL17, Mit94, MP95, Pap17, SC91, SFP11, vAF18].

Utility [CH09, DR13]. **Uzawa** [HZ06b].

Validated [KH05, Kea11]. **Value**

[ABF14, ACL99, CCS10, CG17, DG20, DMZ12, FBH22, GCPT18, GJV06, GLYZ14, HG16, KS16b, OF03, SI13, YZ10, MS94b].

Value-At-Risk [KS16b, HG16]. **Valued** [ACN15, BP07, CQT03, DQ24, GJ99, LP22, LN11b, MS20, PZ98, PZ00, PZ03, PW05, GTdS06]. **Valuedness** [AG14]. **values**

[MTT94]. **Vanishing**

[AL21, Cab05, SP24, Wan17]. **Vapnik** [LL22]. **Variable**

[AD00, BLPP16, CAFO24, Dav91, Fuk98, KKS03, LS22, LMH19, LPS05, Och19, PLS08, RW21, Sal17, Sol98, YB16, Dix91, FM94a].

Variable-Basis [KKS03]. **Variables**

[AB08, ALT19, CKP12, CL96b, FFK00, JM18, LMZ15, PH23, PNA10, Pyt98, SVD12, dSTVB18]. **Variance** [IJOT17, IJOT19, MSU24, PRRL97, SKM19, XZ14b, XKK22, ZX21]. **Variance-Based** [IJOT19]. **Variant**

[GH16, KT14, LM21b, MT03, YT22].

Variants [BRB19, EL10, GL18, HNKK17, IPS03, MS11c, XS16]. **Variation** [RBDM22].

Variational [AB18, ABCdC23, AM00, ABF14, AZ19, ACP11a, ACP11b, AT00, AGH10, AVS19, BP07, BGY⁺23, Bet19, BL22, BI98, BD10, BGH19, CLMP10a, CLMP10b, Ceg15, CWZ12, CW14, CMY15, CS22, CBF23, CK99, CDM20, CH15, DR07, DR96, DR01, FFK98b, GY17, GM17, GM19, GKNRP17, HP24, HMN10, HKKRZ24, HS11, HZ22, HYY16, ILR01, IJOT17, IJOT19, JFX17, JL03, JS16, JW14, KS19, KRS11, KY21, KMP23, KKMP24, KK05, KLL22a, KLL22b, Lev02, LP08, LN09, LN11b, LMZ21b, Lu14, LSW20, LB00, MZH20, MP97, Mal15, MZ98, MM21, MS12, MSS15, Mor07, MOR15, MN16, MS19, Nem04, NV99, Qi99, RSS14, RG00, Rob07, RW17, SSN04, SW07, SZ98, SW99, TF96, Tse97a, WDZZ23, WyW04, Xu19, Ye00, YL11, Zas13, ZML21, ZL01, ZM96, AW93]. **variational** [Fle91, HR12, HR14b, LT92, MZ00, MO07b, Out94, TK96, Wan95].

Variational-Hemivariational

[LMZ21b, ZML21]. **Varieties**

[CP17, HU19, Nie14, SU15]. **Variety** [VS08].

Various [CGT10b, LWY24, XFLP21].

Varying [AH19, BDK⁺24, CGT19, KON98, NOS17, Pan19, WZ24]. **Vavasis** [MT03].

Vector [ATU23, AUU24, BP07, BIS05, Cru14, EL09, FM03, FB03, FBLV24, GLHZ11, GJN06, GNRPT16, GKNRP17, GHNS19, HYY16, Kas10, LSdZ18, MM05, PP18, SKM19, Sch98, WUR⁺23, WA15, Win08, WDST14, ZN11, vdLTY07, AM94].

Vector-Valued [BP07]. **Vectorization** [EQR22]. **Vectors** [ABW21]. **Verification**

- [Chu21a]. **Verified** [EG24, MC05]. **Versa** [AF22]. **Version** [Kiw10, Pfl10, XXS21, YT22, SZ92]. **Version-Independence** [Pfl10]. **Versions** [KQ19]. **Versus** [Ans00, AIMM24, HLB20]. **Vertical** [MN96]. **Vertices** [ACHW21, dCST15]. **Very** [CH17, Bon97]. **Via** [BDdSM15, GL08a, HLZ08, KRR99, PVZ07a, SU15, AB18, AAJN16, ACR19, AH16, BTN97, BTKNZ99, BBN19, BT20, BCW08, BCM03, BT96, BGH19, CT06, CWW18, CGRV21b, CBP24, CCF⁺20, CHN18, CHNT21, CW18, Chu03, DMS22, Erg19, FRMP18, FRW11, FV99, FGG04, FKMN00, GY17, GM17, Góm21, Gri24, Gür10, GP19b, HHJL23, HS11, Iof94, IS02b, KS12, KdK23, LL22, LMMZ21, LCC⁺20, LRP16, LLD⁺02, LT96, Lin22, LXL11, LL09, Lov11, LZ14, MWDS18, MY10, Nol98, Pan94, POLW20, PW07, PFA17, QQS03, RHW93, RSKW19, SNTI16, ST03, SW07, SSD22, TK02, Toh03, Wan11, WPD22, XFLP21, YY23, Zas13, ZA14, ZX21, ZL02, dP02, dKP12]. **Vice** [AF22]. **View** [GMSS17, Las14, SBFA17]. **Viewpoint** [Pha20]. **Violations** [HKP24]. **Virtuous** [XLS19]. **Viscosity** [Att96, BDS10]. **Viscous** [Bet19]. **voltage** [Bon97]. **Volume** [Ans02, Lim11, RK20, Yil06, ZG03]. **Volumetric** [Ans98]. **Vulnerability** [PMDL10].
- Warm** [YW02, Fre95]. **Warm-Start** [YW02]. **Warmstart** [GG08]. **Warmstarts** [EAV10]. **Wasserstein** [BGV20, MLC22]. **Watermelon** [WX17]. **waters** [CD92]. **Way** [DO06]. **Weak** [Alv04, AHSS12, CH17, CKS17, DY04, DLW99, KM09, KRZ17, LMWY11, LMP⁺18, MZ98, MZ00, RVZ24, WyW04, ZY07]. **weaker** [Di96]. **Weakest** [GM15]. **Weakly** [ASSS23, DD19, DR18, Fus14, IK00, LCD⁺21, LPV05, MZH20, Win08].
- Weierstrass** [AHFH16, KQ19]. **Weight** [MPB02, RK19]. **Weighted** [BLG13, Chu06, GSW97, HLTW14, HL08c, LT96, LM04, Luo97, MÖ10, NL14, Pot12, WX16, Wan24]. **Weights** [PM15]. **Well** [BBH24, CT13, CLPT99, DHP16, FI08, HY06, Li10, MS06a, Rev97, ZML21, Zhe20]. **Well-Conditioning** [CT13]. **Well-Posed** [MS06a, Zhe20]. **Well-Posedness** [BBH24, CLPT99, DHP16, HY06, Rev97, ZML21]. **Where** [CU99]. **Which** [BGJ12, GU22]. **whose** [CHS06]. **Wide** [AZ05, HY96, LP06b, Pot14]. **Width** [BPL12, BA24, DGR17, GHR14, LDS22]. **Wiersma** [BWY10]. **Wireless** [CJSY07]. **within** [BCWW20, LRO05, YMT04]. **Without** [GJV16, HAG18, JKM23, KN05, KFF09, LT10a, LY11, MT20, AD04, EA99, Gri19, IPS03, IS04, JLD03, LTAP22, Lau94, LSxY24, PY19, SS05, Sau20, ST09, WWLY21]. **Wolfe** [BCD⁺18a, BRB19, BRZ20, CBP24, DK13, Fle14, FGM17, Gil97, PRS16, WLM22, XF24]. **Wolkowicz** [HL98]. **Working** [LS13]. **Worst** [BC14, Cap02, CGT20, CW23, DKL21, DGT20, GJV16, THG17]. **Worst-Case** [BC14, Cap02, CGT20, CW23, DGT20, THG17].
- X** [GdW00]. **X-Rays** [GdW00].
- Ye** [GT97a, GT97b, KT14, MT03]. **Yielding** [IPRT00]. **Yosida** [BHHK00, HSW14, LS97a, LR21b, MZGS08, WDST14]. **Yosida-Based** [BHHK00, HSW14]. **Young** [Car23].
- Zarantonello** [BBW17]. **Zenoness** [She14]. **Zero** [BR08, FFK00, TY04, vdLTY07, Tha94]. **Zero-One** [BR08]. **Zeros** [BCH14]. **Zeroth** [CMYZ22, GL14b, JYK24, KP22, MMN⁺22]. **Zeroth-Order** [CMYZ22, GL14b, JYK24, KP22, MMN⁺22]. **Zhang** [Mon98]. **Zolotarev** [PvZ07b]. **ZORO**

[CMYZ22]. **Zuckerberg** [Mas20].

References

Abramson:2006:CMA

[AA06] Mark A. Abramson and Charles Audet. Convergence of mesh adaptive direct search to second-order stationary points. *SIAM Journal on Optimization*, 17(2):606–619, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Adly:2020:FCP

[AA20] Samir Adly and Hedy Attouch. Finite convergence of proximal-gradient inertial algorithms combining dry friction with Hessian-driven damping. *SIAM Journal on Optimization*, 30(3):2134–2162, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Alarie:2021:OSB

[AABL21] Stéphane Alarie, Charles Audet, Pierre-Yves Bouchet, and Sébastien Le Digabel. Optimization of stochastic blackboxes with adaptive precision. *SIAM Journal on Optimization*, 31(4):3127–3156, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Abramson:2009:ODM

[AADD09] Mark A. Abramson, Charles Audet, J. E. Dennis, Jr., and Sébastien Le Digabel. OrthoMADS: a deterministic

MADS instance with orthogonal directions. *SIAM Journal on Optimization*, 20(2):948–966, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Akimoto:2022:GLC

[AAGM22] Youhei Akimoto, Anne Auger, Tobias Glasmachers, and Daiki Morinaga. Global linear convergence of evolution strategies on more than smooth strongly convex functions. *SIAM Journal on Optimization*, 32(2):1402–1429, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1373815>.

Arutyunov:2007:DRM

[AAI07] Aram V. Arutyunov, Evgeniy R. Avakov, and Alexey F. Izmailov. Directional regularity and metric regularity. *SIAM Journal on Optimization*, 18(3):810–833, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Agarwal:2016:LSU

[AAJN16] Alekh Agarwal, Animashree Anandkumar, Prateek Jain, and Praneeth Netrapalli. Learning sparsely used overcomplete dictionaries via alternating minimization. *SIAM Journal on Optimization*, 26(4):2775–2799, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [AAS17] **Aboussoror:2017:EFL** A. Aboussoror, S. Adly, and F. E. Saissi. An extended Fenchel–Lagrange duality approach and optimality conditions for strong bilevel programming problems. *SIAM Journal on Optimization*, 27(2):1230–1255, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AAZ15] A. V. Arutyunov, E. R. Avakov, and S. E. Zhukovskiy. Stability theorems for estimating the distance to a set of coincidence points. *SIAM Journal on Optimization*, 25(2):807–828, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AB95] **Anstreicher:1995:NIN** Kurt M. Anstreicher and Robert A. Bosch. A new infinity-norm path following algorithm for linear programming. *SIAM Journal on Optimization*, 5(2):236–246, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AB08] **Anjos:2008:HFV** Miguel F. Anjos and Samuel Burer. On handling free variables in interior-point methods for conic linear optimization. *SIAM Journal on Optimization*, 18(4):1310–1325, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AB12] **Amelunxen:2012:CFC** Dennis Amelunxen and Peter Bürgisser. A coordinate-free condition number for convex programming. *SIAM Journal on Optimization*, 22(3):1029–1041, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AB18] **Adly:2018:SAV** Samir Adly and Loïc Bourdin. Sensitivity analysis of variational inequalities via twice epi-differentiability and proto-differentiability of the proximity operator. *SIAM Journal on Optimization*, 28(2):1699–1725, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ABCdC23] **Adly:2023:SOV** Samir Adly, Loïc Bourdin, Fabien Caubet, and Aymeric Jacob de Cordemoy. Shape optimization for variational inequalities: The scalar Tresca friction problem. *SIAM Journal on Optimization*, 33(4):2512–2541, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1497560>.
- [ABCFR20] **Al-Baali:2020:CAI** Mehiddin Al-Baali, Andrea Caliciotti, Giovanni Fasano, and Massimo Roma. A class of approximate inverse preconditioners based on Krylov-subspace

methods for large-scale non-convex optimization. *SIAM Journal on Optimization*, 30(3): 1954–1979, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Aravkin:2018:FGP

[ABD⁺18] A. Y. Aravkin, J. V. Burke, D. Drusvyatskiy, M. P. Friedlander, and K. J. MacPhee. Foundations of gauge and perspective duality. *SIAM Journal on Optimization*, 28(3):2406–2434, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Aussel:2021:GAM

[ABDL21] Didier Aussel, Gemayqzel Bouza, Stephan Dempe, and Sébastien Lepaul. Genericity analysis of multi-leader-disjoint-followers game. *SIAM Journal on Optimization*, 31(3):2055–2079, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Aravkin:2014:VPV

[ABF14] Aleksandr Y. Aravkin, James V. Burke, and Michael P. Friedlander. Variational properties of value functions. *SIAM Journal on Optimization*, 23(3): 1689–1717, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Allamigeon:2014:CSA

[ABGJ14] Xavier Allamigeon, Pascal Benchimol, Stéphane Gaubert,

and Michael Joswig. Combinatorial simplex algorithms can solve mean payoff games. *SIAM Journal on Optimization*, 24(4): 2096–2117, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Audet:2022:EUR

[ABK22] Charles Audet, Alain Batailly, and Solène Kojtych. Escaping unknown discontinuous regions in blackbox optimization. *SIAM Journal on Optimization*, 32(3): 1843–1870, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1420915>.

Andreani:2008:ALM

[ABMS08] R. Andreani, E. G. Birgin, J. M. Martínez, and M. L. Schuverdt. On augmented Lagrangian methods with general lower-level constraints. *SIAM Journal on Optimization*, 18(4): 1286–1309, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Aravkin:2022:PQN

[ABO22] Aleksandr Y. Aravkin, Robert Baraldi, and Dominique Orban. A proximal quasi-Newton trust-region method for nonsmooth regularized optimization. *SIAM Journal on Optimization*, 32(2): 900–929, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1409536>.

- [ABP18] **Averkov:2018:ACP** Gennadiy Averkov, Amitabh Basu, and Joseph Paat. Approximation of corner polyhedra with families of intersection cuts. *SIAM Journal on Optimization*, 28(1):904–929, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ABW21] **Alwadani:2021:ATD** Salihah Alwadani, Heinz Bauschke, and Xianfu Wang. Attouch–Théra duality, generalized cycles, and gap vectors. *SIAM Journal on Optimization*, 31(3):1926–1946, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Abr05] **Abramson:2005:SOB** Mark A. Abramson. Second-order behavior of pattern search. *SIAM Journal on Optimization*, 16(2):515–530, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60367>.
- [AC02] **Aze:2002:SAH** D. Azé and J.-N. Corvellec. On the sensitivity analysis of Hoffman constants for systems of linear inequalities. *SIAM Journal on Optimization*, 12(4):913–927, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37585>.
- [Abs05] **Absil:2005:CID** P.-A. Absil. Convergence of the iterates of descent methods for analytic cost functions. *SIAM Journal on Optimization*, 16(2):531–547, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60526>.
- [AC18] **Attouch:2018:CRI** Hedy Attouch and Alexandre Cabot. Convergence rates of inertial forward-backward algorithms. *SIAM Journal on Optimization*, 28(1):849–874, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ABT00] **Achtziger:2000:OPP** W. Achtziger, M. P. Bendsøe, and J. E. Taylor. An optimization problem for predicting the maximal effect of degradation of mechanical structures. *SIAM Journal on Optimization*, 10(4):982–998, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32876>.
- [ACB20] **Assif:2020:SAM** Mishal Assif, Debasish Chatterjee, and Ravi Banavar. Scenario approach for minmax optimization with emphasis on the nonconvex case: Positive results and caveats. *SIAM Journal on Optimization*, 30(2):1119–1143, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [ACC93] **Auslender:1993:CFU**
 A. Auslender, R. Cominetti, and J.-P. Crouzeix. Convex functions with unbounded level sets and applications to duality theory. *SIAM Journal on Optimization*, 3(4):669–687, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ACD08] **Audet:2008:EMA**
 Charles Audet, A. L. Custódio, and J. E. Dennis, Jr. Erratum: Mesh adaptive direct search algorithms for constrained optimization. *SIAM Journal on Optimization*, 18(4):1501–1503, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See [AD06].
- [ACFH24] **Andreani:2024:CQS**
 Roberto Andreani, Kelvin R. Couto, Orizon P. Ferreira, and Gabriel Haeser. Constraint qualifications and strong global convergence properties of an augmented Lagrangian method on Riemannian manifolds. *SIAM Journal on Optimization*, 34(2):1799–1825, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- [ACHW21] **Aliev:2021:DST**
 Iskander Aliev, Marcel Celaya, Martin Henk, and Aled Williams. Distance-sparsity transference for vertices of corner polyhedra. *SIAM Journal on Optimization*, 31(1):200–216, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ACL99] **Aussel:1999:NCO**
 Didier Aussel, Jean-Noël Corvellec, and Marc Lassonde. Non-smooth constrained optimization and multidirectional mean value inequalities. *SIAM Journal on Optimization*, 9(3):690–706, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32339>.
- [ACN15] **Adly:2015:NMS**
 Samir Adly, Radek Cibulka, and Huynh Van Ngai. Newton’s method for solving inclusions using set-valued approximations. *SIAM Journal on Optimization*, 25(1):159–184, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ACP11a] **Attouch:2011:CFB**
 Hedy Attouch, Marc-Olivier Czarnecki, and Juan Peypouquet. Coupling forward-backward with penalty schemes and parallel splitting for constrained variational inequalities. *SIAM Journal on Optimization*, 21(4):1251–1274, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1251_s1.
- [ACP11b] **Attouch:2011:PPS**
 Hedy Attouch, Marc-Olivier Czarnecki, and Juan Peypouquet. Prox-penalization and

- splitting methods for constrained variational problems. *SIAM Journal on Optimization*, 21(1):149–173, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p149_s1. [AD03]
- Attouch:2019:FPM**
- [ACR19] Hedy Attouch, Zaki Chbani, and Hassan Riahi. Fast proximal methods via time scaling of damped inertial dynamics. *SIAM Journal on Optimization*, 29(3):2227–2256, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [AD04]
- Alotaibi:2014:SCC**
- [ACS14] Abdullah Alotaibi, Patrick L. Combettes, and Naseer Shahzad. Solving coupled composite monotone inclusions by successive Fejér approximations of their Kuhn–Tucker set. *SIAM Journal on Optimization*, 24(4):2076–2095, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [AD06]
- Audet:2000:PSA**
- [AD00] Charles Audet and J. E. Dennis, Jr. Pattern search algorithms for mixed variable programming. *SIAM Journal on Optimization*, 11(3):573–594, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35202>. **Audet:2003:AGP**
- Charles Audet and J. E. Dennis, Jr. Analysis of generalized pattern searches. *SIAM Journal on Optimization*, 13(3):889–903, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37874>. **Audet:2004:PSF**
- Charles Audet and J. E. Dennis, Jr. A pattern search filter method for nonlinear programming without derivatives. *SIAM Journal on Optimization*, 14(4):980–1010, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38983>. **Audet:2006:MAD**
- Charles Audet and J. E. Dennis, Jr. Mesh adaptive direct search algorithms for constrained optimization. *SIAM Journal on Optimization*, 17(1):188–217, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [ACD08]. **Audet:2009:PBD**
- Charles Audet and J. E. Dennis, Jr. A progressive barrier for derivative-free nonlinear programming. *SIAM Journal on Optimization*, 20(1):445–472,

- ???? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AD10] **Albersmeyer:2010:LNM** Jan Albersmeyer and Moritz Diehl. The lifted Newton method and its application in optimization. *SIAM Journal on Optimization*, 20(3):1655–1684, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AD15] **Aujol:2015:SRF** J.-F. Aujol and Ch. Dossal. Stability of over-relaxations for the forward-backward algorithm, application to FISTA. *SIAM Journal on Optimization*, 25(4):2408–2433, ????. 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AD19] **Asi:2019:SAP** Hilal Asi and John C. Duchi. Stochastic (approximate) proximal point methods: Convergence, optimality, and adaptivity. *SIAM Journal on Optimization*, 29(3):2257–2290, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ADE⁺18] **Aliev:2018:SIO** I. Aliev, J. A. De Loera, F. Eisenbrand, T. Oertel, and R. Weismantel. The support of integer optimal solutions. *SIAM Journal on Optimization*, 28(3):2152–2157, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AdKH19] **Ahmadi:2019:PN** Amir Ali Ahmadi, Etienne de Klerk, and Georgina Hall. Polynomial norms. *SIAM Journal on Optimization*, 29(1):399–422, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ADL08] **Audet:2008:PSD** Charles Audet, J. E. Dennis, Jr., and Sébastien Le Digabel. Parallel space decomposition of the mesh adaptive direct search algorithm. *SIAM Journal on Optimization*, 19(3):1150–1170, ????. 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ADLL24] **Applegate:2024:IDP** David Applegate, Mateo Díaz, Haihao Lu, and Miles Lubin. Infeasibility detection with primal-dual hybrid gradient for large-scale linear programming. *SIAM Journal on Optimization*, 34(1):459–484, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [ADR19] **Aujol:2019:OCR** Jean-Francois Aujol, Charles Dossal, and Aude Rondepierre. Optimal convergence rates for Nesterov acceleration. *SIAM Journal on Optimization*, 29(4):3131–3153, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Aujol:2022:CRH**
- [ADR22] J.-F. Aujol, Ch. Dossal, and A. Rondepierre. Convergence rates of the heavy ball method for quasi-strongly convex optimization. *SIAM Journal on Optimization*, 32(3):1817–1842, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1403990>.
- Ang:2024:MMN**
- [ADV24] Andersen Ang, Hans De Sterck, and Stephen Vavasis. MG-Prox: a nonsmooth multigrid proximal gradient method with adaptive restriction for strongly convex optimization. *SIAM Journal on Optimization*, 34(3):2788–2820, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1552140>.
- Ascheuer:1993:CPA**
- [AEGS93] N. Ascheuer, L. F. Escudero, M. Grötschel, and M. Stoer. A cutting plane approach to the sequential ordering problem (with applications to job scheduling in manufacturing). *SIAM Journal on Optimization*, 3(1):25–42, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Anderson:2001:DSA**
- [AF01] Edward J. Anderson and Michael C. Ferris. A direct search algorithm for optimization with noisy function evaluations. *SIAM Journal on Optimization*, 11(3):837–857, November/February 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31284>.
- Attouch:2022:RMN**
- [AF22] Hedy Attouch and Jalal Fadili. From the ravine method to the Nesterov method and vice versa: A dynamical system perspective. *SIAM Journal on Optimization*, 32(3):2074–2101, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1474357>.
- Alacaoglu:2022:CSP**
- [AFC22] Ahmet Alacaoglu, Olivier Fercoq, and Volkan Cevher. On the convergence of stochastic primal-dual hybrid gradient. *SIAM Journal on Optimization*, 32(2):1288–1318, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1296252>.
- Astorino:2014:NPB**
- [AFFG14] A. Astorino, A. Frangioni, A. Fuduli, and E. Gorgone. A nonmonotone proximal bundle method with (potentially) continuous step decisions. *SIAM Journal on Optimization*, 23(3):1784–1809, 2014. CO-

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Astorino:2011:PQA

- [AFGG11] A. Astorino, A. Frangioni, M. Gaudio, and E. Gorgone. Piecewise-quadratic approximations in convex numerical optimization. *SIAM Journal on Optimization*, 21(4):1418–1438, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1418_s1.

Aybat:2020:RAG

- [AFGO20] Necdet Serhat Aybat, Alireza Fallah, Mert Gürbüzbalaban, and Asuman Ozdaglar. Robust accelerated gradient methods for smooth strongly convex functions. *SIAM Journal on Optimization*, 30(1):717–751, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Agarwal:2013:SCO

- [AFH+13] Alekh Agarwal, Dean P. Foster, Daniel Hsu, Sham M. Kakade, and Alexander Rakhlin. Stochastic convex optimization with bandit feedback. *SIAM Journal on Optimization*, 23(1):213–240, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Andreani:2001:RGN

- [AFS01] Roberto Andreani, Ana Friedlander, and Sandra A. Santos.

On the resolution of the generalized nonlinear complementarity problem. *SIAM Journal on Optimization*, 12(2):303–321, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37759>.

Artina:2014:LCN

- [AFS14] Marco Artina, Massimo Fornasier, and Francesco Solombrino. Linearly constrained non-smooth and nonconvex minimization. *SIAM Journal on Optimization*, 23(3):1904–1937, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Andreani:2019:SOC

- [AFSS19] Roberto Andreani, Nadia S. Fazio, Maria L. Schuverdt, and Leonardo D. Secchin. A sequential optimality condition related to the quasi-normality constraint qualification and its algorithmic consequences. *SIAM Journal on Optimization*, 29(1):743–766, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Aussel:2014:EKS

- [AG14] D. Aussel and Y. García. On extensions of Kenderov’s single-valuedness result for monotone maps and quasimonotone maps. *SIAM Journal on Optimization*, 24(2):702–713, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Aussel:2010:SDP**
- [AGH10] D. Aussel, Y. Garcia, and N. Hadjisavvas. Single-directional property of multivalued maps and variational systems. *SIAM Journal on Optimization*, 20(3):1274–1285, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Armand:2000:FBI**
- [AGJJ00] Paul Armand, Jean Charles Gilbert, and Sophie Jan-Jégou. A feasible BFGS interior point algorithm for solving convex minimization problems. *SIAM Journal on Optimization*, 11(1):199–222, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34472>.
- Aussel:2005:ASS**
- [AH05] D. Aussel and N. Hadjisavvas. Adjusted sublevel sets, normal operator, and quasi-convex programming. *SIAM Journal on Optimization*, 16(2):358–367, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60695>.
- Aliev:2010:FIK**
- [AH10] Iskander Aliev and Martin Henk. Feasibility of integer knapsacks. *SIAM Journal on Optimization*, 20(6):2978–2993, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Auger:2016:LCC**
- [AH16] Anne Auger and Nikolaus Hansen. Linear convergence of comparison-based step-size adaptive randomized search via stability of Markov chains. *SIAM Journal on Optimization*, 26(3):1589–1624, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Aybat:2019:DAL**
- [AH19] Necdet Serhat Aybat and Erfan Yazdandoost Hamedani. A distributed ADMM-like method for resource sharing over time-varying networks. *SIAM Journal on Optimization*, 29(4):3036–3068, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Amini-Harandi:2016:SGW**
- [AHFH16] A. Amini-Harandi, M. Fakhar, and H. R. Hajisharifi. Some generalizations of the Weierstrass theorem. *SIAM Journal on Optimization*, 26(4):2847–2862, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Aliev:2024:NBI**
- [AHH⁺24] Iskander Aliev, Martin Henk, Mark Hogan, Stefan Kuhlmann, and Timm Oertel. New bounds for the integer Carathéodory rank. *SIAM Journal on Optimization*, 34(1):190–200, Jan-

- uary 2024. CODEN SJOPE8. ISSN 1095-7189.
- Ahmed:2016:CCM**
- [AHLN16] Shabbir Ahmed, Qie He, Shi Li, and George L. Nemhauser. On the computational complexity of minimum-concave-cost flow in a two-dimensional grid. *SIAM Journal on Optimization*, 26(4):2059–2079, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Alizadeh:1998:PDI**
- [AHO98] Farid Alizadeh, Jean-Pierre A. Haeberly, and Michael L. Overton. Primal-dual interior-point methods for semidefinite programming: Convergence rates, stability and numerical results. *SIAM Journal on Optimization*, 8(3):746–768, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30470>.
- Andreani:2012:TNW**
- [AHSS12] Roberto Andreani, Gabriel Haeser, María Laura Schuverdt, and Paulo J. S. Silva. Two new weak constraint qualifications and applications. *SIAM Journal on Optimization*, 22(3):1109–1135, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Andreani:2019:NSO**
- [AHSS19] R. Andreani, G. Haeser, L. D. Secchin, and P. J. S. Silva. New sequential optimality con-
- ditions for mathematical programs with complementarity constraints and algorithmic consequences. *SIAM Journal on Optimization*, 29(4):3201–3230, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Aybat:2011:FOS**
- [AI11] N. S. Aybat and G. Iyengar. A first-order smoothed penalty method for compressed sensing. *SIAM Journal on Optimization*, 21(1):287–313, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p287_s1.
- Aybat:2012:FOA**
- [AI12] N. S. Aybat and G. Iyengar. A first-order augmented Lagrangian method for compressed sensing. *SIAM Journal on Optimization*, 22(2):429–459, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Arutyunov:2020:CCS**
- [AI20] Aram V. Arutyunov and Alexey F. Izmailov. Covering on a convex set in the absence of Robinson’s regularity. *SIAM Journal on Optimization*, 30(1):604–629, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [AILT14] **Audet:2014:RNF** Charles Audet, Andrea Ianni, Sébastien Le Digabel, and Christophe Tribes. Reducing the number of function evaluations in mesh adaptive direct search algorithms. *SIAM Journal on Optimization*, 24(2): 621–642, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AIMM24] **Azizian:2024:RCB** Waïss Azizian, Franck Iutzeler, Jérôme Malick, and Panayotis Mertikopoulos. The rate of convergence of Bregman proximal methods: Local geometry versus regularity versus sharpness. *SIAM Journal on Optimization*, 34(3): 2440–2471, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1580218>.
- [AINT17] **Adachi:2017:STR** Satoru Adachi, Satoru Iwata, Yuji Nakatsukasa, and Akiko Takeda. Solving the trust-region subproblem by a generalized eigenvalue problem. *SIAM Journal on Optimization*, 27(1): 269–291, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AK08] **Achtziger:2008:STO** Wolfgang Achtziger and Michal Kočvara. Structural topology optimization with eigenvalues. *SIAM Journal on Optimization*, 18(4):1129–1164, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AK21] **Arutyunov:2021:SRM** Aram V. Arutyunov and Dmitry Karamzin. Square-root metric regularity and related stability theorems for smooth mappings. *SIAM Journal on Optimization*, 31(2):1380–1409, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AKK14] **Arima:2014:QCQ** Naohiko Arima, Sunyoung Kim, and Masakazu Kojima. A quadratically constrained quadratic optimization model for completely positive cone programming. *SIAM Journal on Optimization*, 23(4):2320–2340, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AKR23] **Antil:2023:AAL** Harbir Antil, Drew P. Kouri, and Denis Ridzal. ALESQP: An augmented Lagrangian equality-constrained SQP method for optimization with general constraints. *SIAM Journal on Optimization*, 33(1):237–266, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1378399>.

- [AKS00] **Al-Khayyal:2000:FTB**
 Faiz A. Al-Khayyal and Hanif D. Sherali. On finitely terminating branch-and-bound algorithms for some global optimization problems. *SIAM Journal on Optimization*, 10(4):1049–1057, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35178>.
- [AKT17] **Atamturk:2017:PCP**
 Alper Atamtürk, Simge Küçükyavuz, and Birce Tezel. Path cover and path Pack inequalities for the capacitated fixed-charge network flow problem. *SIAM Journal on Optimization*, 27(3):1943–1976, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AL14] **Aliev:2014:ICG**
 Iskander Aliev and Adam Letchford. Iterated Chvátal–Gomory cuts and the geometry of numbers. *SIAM Journal on Optimization*, 24(3):1294–1312, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AL20] **Attouch:2020:NLI**
 Hedy Attouch and Szilárd Csaba László. Newton-like inertial dynamics and proximal algorithms governed by maximally monotone operators. *SIAM Journal on Optimization*, 30(4):3252–3283, 2020. CO-
- [AL21] **Alecsa:2021:TRP**
 Cristian Daniel Alecsa and Szilárd Csaba László. Tikhonov regularization of a perturbed heavy ball system with vanishing damping. *SIAM Journal on Optimization*, 31(4):2921–2954, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ALR03] **Alizadeh:1995:IPM**
 Farid Alizadeh. Interior point methods in semidefinite programming with applications to combinatorial optimization. *SIAM Journal on Optimization*, 5(1):13–51, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ALR03] **Appel:2003:ARS**
 M. J. Appel, R. LaBarre, and D. Radulovic. On accelerated random search. *SIAM Journal on Optimization*, 14(3):708–731, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40063>.
- [ALSV18] **Assmann:2018:DRF**
 Denis Aßmann, Frauke Liers, Michael Stingl, and Juan C. Vera. Deciding robust feasibility and infeasibility using a set containment approach: an application to stationary passive gas network operations. *SIAM*

- Journal on Optimization*, 28(3): 2489–2517, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [AM94]
- Audet:2019:MAD**
- [ALT19] Charles Audet, Sébastien Le Digabel, and Christophe Tribes. The mesh adaptive direct search algorithm for granular and discrete variables. *SIAM Journal on Optimization*, 29(2):1164–1189, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [AM00]
- Aardal:2021:LRC**
- [ALT+21] Karen Aardal, Andrea Lodi, Andrea Tramontani, Frederik von Heymann, and Laurence A. Wolsey. Lattice reformulation cuts. *SIAM Journal on Optimization*, 31(4):2539–2557, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [AM12]
- Alvarez:2004:WCR**
- [Alv04] Felipe Alvarez. Weak convergence of a relaxed and inertial hybrid projection-proximal point algorithm for maximal monotone operators in Hilbert space. *SIAM Journal on Optimization*, 14(3):773–782, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42785>. [AMHL05]
- Averick:1994:ELS**
- Brett M. Averick and Jorge J. Moré. Evaluation of large-scale optimization problems on vector and parallel architectures. *SIAM Journal on Optimization*, 4(4): 708–721, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Andreani:2000:RVI**
- Roberto Andreani and José Mario Martínez. Reformulation of variational inequalities on a simplex and compactification of complementarity problems. *SIAM Journal on Optimization*, 10(3):878–895, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35282>.
- Absil:2012:PLR**
- P.-A. Absil and Jérôme Malick. Projection-like retractions on matrix manifolds. *SIAM Journal on Optimization*, 22(1): 135–158, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p135_s1.
- Alvarez-Mena:2005:CAO**
- Jorge Alvarez-Mena and Onésimo Hernández-Lerma. Convergence and approximation of optimization problems. *SIAM Journal on Optimization*, 15(2):

- 527–539, ????. 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41393>. [And96a]
- Andreani:2016:CCC**
- [AMRS16] Roberto Andreani, José Mário Martínez, Alberto Ramos, and Paulo J. S. Silva. A cone-continuity constraint qualification and algorithmic consequences. *SIAM Journal on Optimization*, 26(1):96–110, ????. 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [And96b]
- Andreani:2010:NSO**
- [AMS10] Roberto Andreani, J. M. Martínez, and B. F. Svaiter. A new sequential optimality condition for constrained optimization and algorithmic consequences. *SIAM Journal on Optimization*, 20(6):3533–3554, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3533_s1. [And00]
- Alves:2016:RHT**
- [AMS16] M. Marques Alves, R. D. C. Monteiro, and B. F. Svaiter. Regularized HPE-type methods for solving monotone inclusions with improved pointwise iteration-complexity bounds. *SIAM Journal on Optimization*, 26(4):2730–2743, ????. 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [And96a]
- Andersen:1996:ENB**
- Knud D. Andersen. An efficient Newton barrier method for minimizing a sum of Euclidean norms. *SIAM Journal on Optimization*, 6(1):74–95, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Andradottir:1996:GSM**
- Sigrún Andradóttir. A global search method for discrete stochastic optimization. *SIAM Journal on Optimization*, 6(2):513–530, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Andersen:2000:PDI**
- Erling D. Andersen. On primal and dual infeasibility certificates in a homogeneous model for convex optimization. *SIAM Journal on Optimization*, 11(2):380–388, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35314>.
- Anitescu:2000:DNP**
- [Ani00] Mihai Anitescu. Degenerate nonlinear programming with a quadratic growth condition. *SIAM Journal on Optimization*, 10(4):1116–1135, June/July 2000. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35917>.

Anitescu:2002:SCS

[Ani02]

Mihai Anitescu. A superlinearly convergent sequential quadratically constrained quadratic programming algorithm for degenerate nonlinear programming. *SIAM Journal on Optimization*, 12(4):949–978, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36530>.

Anitescu:2005:GCE

[Ani05a]

Mihai Anitescu. Global convergence of an elastic mode approach for a class of mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 16(1):120–145, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60685>.

Anitescu:2005:UEM

[Ani05b]

Mihai Anitescu. On using the elastic mode in nonlinear programming approaches to mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 15(4):1203–1236, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <http://epubs.siam.org/sam-bin/dbq/article/40122>.

Apkarian:2008:TRS

[ANP08]

P. Apkarian, D. Noll, and O. Prot. A trust region spectral bundle method for non-convex eigenvalue optimization. *SIAM Journal on Optimization*, 19(1):281–306, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Alberto:2004:PSM

[ANRV04]

Pedro Alberto, Fernando Nogueira, Humberto Rocha, and Luís N. Vicente. Pattern search methods for user-provided points: Application to molecular geometry problems. *SIAM Journal on Optimization*, 14(4):1216–1236, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37795>.

Anstreicher:1991:PKA

[Ans91]

Kurt M. Anstreicher. On the performance of Karmarkar’s algorithm over a sequence of iterations. *SIAM Journal on Optimization*, 1(1):22–29, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Anstreicher:1996:LSP

[Ans96]

Kurt M. Anstreicher. On long step path following and SUMT for linear and quadratic programming. *SIAM Journal on Optimization*, 6(1):33–

- 46, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Ans02]
- [Ans98] Kurt M. Anstreicher. Towards a practical volumetric cutting plane method for convex programming. *SIAM Journal on Optimization*, 9(1):190–206, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31801>. [Ans17]
- [Ans99] K. M. Anstreicher. Linear programming in $O([n^3/\ln n]L)$ operations. *SIAM Journal on Optimization*, 9(4):803–812, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32319>. Dedicated to John E. Dennis, Jr., on his 60th birthday. [ANT16]
- [Ans00] K. M. Anstreicher. Eigenvalue bounds versus semidefinite relaxations for the quadratic assignment problem. *SIAM Journal on Optimization*, 11(1):254–265, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35490>. [AO06]
- Anstreicher:2002:ICM**
Kurt M. Anstreicher. Improved complexity for maximum volume inscribed ellipsoids. *SIAM Journal on Optimization*, 13(2):309–320, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39090>.
- Anstreicher:2017:KPC**
Kurt M. Anstreicher. Kronecker product constraints with an application to the two-trust-region subproblem. *SIAM Journal on Optimization*, 27(1):368–378, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Adly:2016:PPR**
S. Adly, F. Nacry, and L. Thibault. Preservation of prox-regularity of sets with applications to constrained optimization. *SIAM Journal on Optimization*, 26(1):448–473, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Audet:2006:FOA**
Charles Audet and Dominique Orban. Finding optimal algorithmic parameters using derivative-free optimization. *SIAM Journal on Optimization*, 17(3):642–664, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [AO18] Sylvain Arreckx and Dominique Orban. A regularized factorization-free method for equality-constrained optimization. *SIAM Journal on Optimization*, 28(2):1613–1639, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP21] Sylvain Arreckx and Dominique Orban. A regularized factorization-free method for equality-constrained optimization. *SIAM Journal on Optimization*, 28(2):1613–1639, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP14] Amir Ali Ahmadi and Pablo A. Parrilo. A complete characterization of the gap between convexity and SOS-convexity. *SIAM Journal on Optimization*, 23(2):811–833, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP22] Amir Ali Ahmadi and Pablo A. Parrilo. A complete characterization of the gap between convexity and SOS-convexity. *SIAM Journal on Optimization*, 23(2):811–833, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP16] Hedy Attouch and Juan Peyrouquet. The rate of convergence of Nesterov’s accelerated forward–backward method is actually faster than $1/k^2$. *SIAM Journal on Optimization*, 26(3):1824–1834, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP23] Hedy Attouch and Juan Peyrouquet. The rate of convergence of Nesterov’s accelerated forward–backward method is actually faster than $1/k^2$. *SIAM Journal on Optimization*, 26(3):1824–1834, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP18] Tsvetan Asamov and Warren B. Powell. Regularized decomposition of high-dimensional multi-stage stochastic programs with Markov uncertainty. *SIAM Journal on Optimization*, 28(1):575–595, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [APR14] Hedy Attouch, Juan Peyrouquet, and Patrick Redont. A dynamical approach to an inertial forward-backward algorithm for convex minimization. *SIAM Journal on Optimization*, 24(1):232–256, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP21] Md Abu Talhamainuddin Ansary and Geetanjali Panda. A globally convergent SQCQP method for multiobjective optimization problems. *SIAM Journal on Optimization*, 31(1):91–113, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AP22] Jason M. Altschuler and Pablo A. Parrilo. Approximating min-mean-cycle for low-diameter graphs in near-optimal time and memory. *SIAM Journal on Optimization*, 32(3):1791–1816, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1439390>.
- [AP23] Fatih S. Aktas and Mustafa Ç. Pinar. PCA sparsified. *SIAM Journal on Optimization*, 33(3):2089–2117, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1492325>.
- [AP24] Hedy Attouch, Juan Peyrouquet, and Patrick Redont. A dynamical approach to an inertial forward-backward algorithm for convex minimization. *SIAM Journal on Optimization*, 24(1):232–256, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ahn:2017:DCL

- [APX17] Miju Ahn, Jong-Shi Pang, and Jack Xin. Difference-of-convex learning: Directional stationarity, optimality, and sparsity. *SIAM Journal on Optimization*, 27(3):1637–1665, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Attouch:2007:NCA

- [ARS07] H. Attouch, P. Redont, and A. Soubeyran. A new class of alternating proximal minimization algorithms with costs-to-move. *SIAM Journal on Optimization*, 18(3):1061–1081, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Agra:2016:DPA

- [ASNP16] Agostinho Agra, Marcio Costa Santos, Dritan Nace, and Michael Poss. A dynamic programming approach for a class of robust optimization problems. *SIAM Journal on Optimization*, 26(3):1799–1823, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Andreani:2018:CPS

- [ASS18] Roberto Andreani, Leonardo D. Secchin, and Paulo J. S. Silva. Convergence properties of a second order augmented Lagrangian method for mathe-

tical programs with complementarity constraints. *SIAM Journal on Optimization*, 28(3):2574–2600, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Andreani:2024:EKO

- [ASS24] Roberto Andreani, María L. Schuverdt, and Leonardo D. Secchin. On enhanced KKT optimality conditions for smooth nonlinear optimization. *SIAM Journal on Optimization*, 34(2):1515–1539, April 2024. CODEN SJOPE8. ISSN 1095-7189.

Atenas:2023:UAD

- [ASSS23] Felipe Atenas, Claudia Sagastizábal, Paulo J. S. Silva, and Mikhail Solodov. A unified analysis of descent sequences in weakly convex optimization, including convergence rates for bundle methods. *SIAM Journal on Optimization*, 33(1):89–115, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1465445>.

Auslender:2010:MBA

- [AST10] Alfred Auslender, Ron Shefi, and Marc Teboulle. A moving balls approximation method for a class of smooth constrained minimization problems. *SIAM Journal on Optimization*, 20(6):3232–3259, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [ASZ08] Charles Audet, Gilles Savard, and Walid Zghal. Multiobjective optimization through a series of single-objective formulations. *SIAM Journal on Optimization*, 19(1):188–210, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ATP21] Masoud Ahookhosh, Andreas Themelis, and Panagiotis Patrinos. A Bregman forward-backward linesearch algorithm for nonconvex composite optimization: Superlinear convergence to nonisolated local minima. *SIAM Journal on Optimization*, 31(1):653–685, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AT00] Alfred Auslender and Marc Teboulle. Lagrangian duality and related multiplier methods for variational inequality problems. *SIAM Journal on Optimization*, 10(4):1097–1115, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35265>.
- [AT03] Le Thi Hoai An and Pham Dinh Tao. Large-scale molecular optimization from distance matrices by a D.C. optimization approach. *SIAM Journal on Optimization*, 14(1):77–114, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34279>.
- [AT06] Alfred Auslender and Marc Teboulle. Interior gradient and proximal methods for convex and conic optimization. *SIAM Journal on Optimization*, 16(3): 697–725, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Att96] Hedy Attouch. Viscosity solutions of minimization problems. *SIAM Journal on Optimization*, 6(3):769–806, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25961>.
- [ATU23] Çagin Ararat, Simay Tekgöl, and Firdevs Ulus. Geometric duality results and approximation algorithms for convex vector optimization problems. *SIAM Journal on Optimization*, 33(1):116–146, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1458788>.

- [Aus99] **Auslender:1999:PBM**
 A. Auslender. Penalty and barrier methods: a unified framework. *SIAM Journal on Optimization*, 10(1):211–230, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32482>.
- [Aus10] **Auslender:2010:CPS**
 Alfred Auslender. Computing points that satisfy second order necessary optimality conditions for unconstrained minimization. *SIAM Journal on Optimization*, 20(4):1868–1884, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Aus15] **Auslender:2015:EPM**
 Alfred Auslender. An exact penalty method for nonconvex problems covering, in particular, nonlinear programming, semidefinite programming, and second-order cone programming. *SIAM Journal on Optimization*, 25(3):1732–1759, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AUU24] **Ararat:2024:CAN**
 Çagin Ararat, Firdevs Ulus, and Muhammad Umer. Convergence analysis of a norm minimization-based convex vector optimization algorithm. *SIAM Journal on Optimization*, 34(3): 2700–2728, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1574580>.
- [AV20] **Artacho:2020:BDC**
 Francisco J. Aragón Artacho and Phan T. Vuong. The boosted difference of convex functions algorithm for nonsmooth functions. *SIAM Journal on Optimization*, 30(1):980–1006, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AVS19] **Aussel:2019:QVI**
 D. Aussel, K. Cao Van, and D. Salas. Quasi-variational inequality problems over product sets with quasi-monotone operators. *SIAM Journal on Optimization*, 29(2):1558–1577, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AVS21] **Aussel:2021:ERG**
 D. Aussel, K. Cao Van, and D. Salas. Existence results for generalized Nash equilibrium problems under continuity-like properties of sublevel sets. *SIAM Journal on Optimization*, 31(4): 2784–2806, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AW93] **Attouch:1993:QSV**
 Hedy Attouch and Roger J.-B. Wets. Quantitative stability of

- variational systems. II. A framework for nonlinear conditioning. *SIAM Journal on Optimization*, 3(2):359–381, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AW94] Zvi Artstein and Roger J.-B. Wets. Stability results for stochastic programs and sensors, allowing for discontinuous objective functions. *SIAM Journal on Optimization*, 4(3):537–550, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AW00] Kurt M. Anstreicher and Margaret H. Wright. A note on the augmented Hessian when the reduced Hessian is semidefinite. *SIAM Journal on Optimization*, 11(1):243–253, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35179>.
- [AWW09] Kent Andersen, Christian Wagner, and Robert Weismantel. On an analysis of the strength of mixed-integer cutting planes from multiple simplex tableau rows. *SIAM Journal on Optimization*, 20(2):967–982, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AXY23] Duong Thi Viet An, Hong-Kun Xu, and Nguyen Dong Yen. Fréchet second-order sub-differentials of Lagrangian functions and optimality conditions. *SIAM Journal on Optimization*, 33(2):766–784, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1512454>.
- [AY08] S. Damla Ahipasaoglu and E. Alper Yildirim. Identification and elimination of interior points for the minimum enclosing ball problem. *SIAM Journal on Optimization*, 19(3):1392–1396, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AZ05] Wenbao Ai and Shuzhong Zhang. An $O(\sqrt[3]{L})$ iteration primal-dual path-following method, based on wide neighborhoods and large updates, for monotone LCP. *SIAM Journal on Optimization*, 16(2):400–417, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60449>.
- [AZ08] Igor Averbakh and Yun-Bin Zhao. Explicit reformulations for robust optimization problems

An:2023:FSO**Artstein:1994:SRS****Anstreicher:2000:NAH****Ai:2005:IPD****Andersen:2009:ASM****Averbakh:2008:ERR**

- with general uncertainty sets. *SIAM Journal on Optimization*, 18(4):1436–1466, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [AZ09] Wenbao Ai and Shuzhong Zhang. Strong duality for the CDT subproblem: a necessary and sufficient condition. *SIAM Journal on Optimization*, 19(4):1735–1756, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Ai:2009:SDC**
- [AZ19] Aram V. Arutyunov and Sergey E. Zhukovskiy. Variational principles in analysis and existence of minimizers for functions on metric spaces. *SIAM Journal on Optimization*, 29(2):994–1016, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Arutyunov:2019:VPA**
- [BA13] Samuel Burer and Kurt M. Anstreicher. Second-order-cone constraints for extended trust-region subproblems. *SIAM Journal on Optimization*, 23(1):432–451, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Burer:2013:SOC**
- [BA24] Walid Ben-Ameur. Subset selection and the cone of factor-width- k matrices. *SIAM Journal on Optimization*, 34(1):817–843, February 2024. CODEN SJOPE8. ISSN 1095-7189. **Briceno-Arias:2011:MSS**
- [BAC11] Luis M. Briceño-Arias and Patrick L. Combettes. A monotone + skew splitting model for composite monotone inclusions in duality. *SIAM Journal on Optimization*, 21(4):1230–1250, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1230_s1. **Briceno-Arias:2011:MSS**
- [Bac14] Miroslav Bacák. Computing medians and means in Hadamard spaces. *SIAM Journal on Optimization*, 24(3):1542–1566, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bacak:2014:CMM**
- [Bac15] Francis Bach. Duality between subgradient and conditional gradient methods. *SIAM Journal on Optimization*, 25(1):115–129, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bach:2015:DBS**
- [BAD18] Luis M. Briceño-Arias and Damek Davis. Forward-backward-half forward algorithm for solving monotone inclusions. *SIAM Journal on Optimization*, 28(4):2839–2871, 2018. CODEN SJOPE8. **Briceno-Arias:2018:FBH**

- ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bar93] Francisco Barahona. Reducing matching to polynomial size linear programming. *SIAM Journal on Optimization*, 3(4):688–695, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bar96] Francisco Barahona. Network design using cut inequalities. *SIAM Journal on Optimization*, 6(3):823–837, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27913>.
- [Bar08] David Bartl. A short algebraic proof of the Farkas Lemma. *SIAM Journal on Optimization*, 19(1):234–239, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BAR21] Luis M. Briceño-Arias and Fernando Roldán. Split-Douglas-Rachford algorithm for composite monotone inclusions and split-ADMM. *SIAM Journal on Optimization*, 31(4):2987–3013, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BB19] Paul T. Boggs and Richard H. Byrd. Adaptive, limited-memory BFGS algorithms for unconstrained optimization. *SIAM Journal on Optimization*, 29(2):1282–1299, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BB21] Anas Barakat and Pascal Bianchi. Convergence and dynamical behavior of the ADAM algorithm for nonconvex stochastic optimization. *SIAM Journal on Optimization*, 31(1):244–274, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BB23] Radu Ioan Bot and Axel Böhm. Alternating proximal-gradient steps for (stochastic) nonconvex-concave minimax problems. *SIAM Journal on Optimization*, 33(3):1884–1913, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1465470>.
- [BBCI⁺24] Roger Behling, Yunier Bello-Cruz, Alfredo N. Iusem, Di Liu, and Luiz-Rafael Santos. A finitely convergent circumcenter method for the convex feasibility problem. *SIAM Journal on Optimization*, 34(3):

- 2535–2556, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1595412>. [BBH24]
- Behling:2021:IEB**
- [BBCS21] Roger Behling, Yunier Bello-Cruz, and Luiz-Rafael Santos. Infeasibility and error bound imply finite convergence of alternating projections. *SIAM Journal on Optimization*, 31(4):2863–2892, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BBLZ17]
- Bodlaender:2004:RLP**
- [BBF⁺04] Hans L. Bodlaender, Hajo Broersma, Fedor V. Fomin, Artem V. Pyatkin, and Gerhard J. Woeginger. Radio labeling with preassigned frequencies. *SIAM Journal on Optimization*, 15(1):1–16, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41018>.
- Beaude:2020:PPM**
- [BBG⁺20] Olivier Beaude, Pascal Benchimol, Stéphane Gaubert, Paulin Jacquot, and Nadia Oudjane. A privacy-preserving method to optimize distributed resource allocation. *SIAM Journal on Optimization*, 30(3):2303–2336, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Berk:2024:SRL**
- Aaron Berk, Simone Brugiapaglia, and Tim Hoheisel. Square root LASSO: Well-posedness, Lipschitz stability, and the tuning trade-off. *SIAM Journal on Optimization*, 34(3):2609–2637, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1561968>.
- Backhoff:2017:CTD**
- [BBLZ17] Julio Backhoff, Mathias Beiglböck, Yiqing Lin, and Anastasiia Zalashko. Causal transport in discrete time and applications. *SIAM Journal on Optimization*, 27(4):2528–2562, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bartz:2016:RAM**
- [BBMW16] Sedi Bartz, Heinz H. Bauschke, Sarah M. Moffat, and Xianfu Wang. The resolvent average of monotone operators: Dominant and recessive properties. *SIAM Journal on Optimization*, 26(1):602–634, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Baes:2014:RMP**
- [BBN14] Michel Baes, Michael Bürgisser, and Arkadi Nemirovski. A randomized mirror-prox method for solving structured large-scale matrix saddle-point problems. *SIAM Journal on Optimization*,

- 23(2):934–962, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBN18] **Bollapragada:2018:ASS** Raghu Bollapragada, Richard Byrd, and Jorge Nocedal. Adaptive sampling strategies for stochastic optimization. *SIAM Journal on Optimization*, 28(4):3312–3343, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBN19] **Berahas:2019:DFO** Albert S. Berahas, Richard H. Byrd, and Jorge Nocedal. Derivative-free optimization of noisy functions via quasi-Newton methods. *SIAM Journal on Optimization*, 29(2):965–993, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBNT24] **Bui:2024:SPP** Hoa T. Bui, Regina S. Burachik, Evgeni A. Nurminski, and Matthew K. Tam. Single-projection procedure for infinite dimensional convex optimization problems. *SIAM Journal on Optimization*, 34(2):1646–1678, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- [BBR16] **Bonettini:2016:STS** S. Bonettini, A. Benfenati, and V. Ruggiero. Scaling techniques for ϵ -subgradient methods. *SIAM Journal on Optimization*, 26(3):1741–1772, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBT06] **Beck:2006:STR** Amir Beck and Aharon Ben-Tal. On the solution of the Tikhonov regularization of the total least squares problem. *SIAM Journal on Optimization*, 17(1):98–118, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBTT12] **Beck:2012:SAP** Amir Beck, Aharon Ben-Tal, and Luba Tretuashvili. A sequential ascending parameter method for solving constrained minimization problems. *SIAM Journal on Optimization*, 22(1):244–260, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BBV02] **Bucur:2002:POC** Dorin Bucur, Giuseppe Buttazzo, and Nicolas Varchon. On the problem of optimal cutting. *SIAM Journal on Optimization*, 13(1):157–167, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38711>.
- [BBW05] **Baritomba:2005:GQA** W. P. Baritomba, D. W. Bulger, and G. R. Wood. Grover’s quantum algorithm applied to global optimization. *SIAM Journal on Optimization*, 15(4):

1170–1184, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60507>.

Bauschke:2007:FFC

[BBW07] Heinz H. Bauschke, Jonathan M. Borwein, and Xianfu Wang. Fitzpatrick functions and continuous linear monotone operators. *SIAM Journal on Optimization*, 18(3):789–809, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bartz:2017:ROU

[BBW17] Sedi Bartz, Heinz H. Bauschke, and Xianfu Wang. The resolvent order: a unification of the orders by Zarantonello, by Loewner, and by Moreau. *SIAM Journal on Optimization*, 27(1):466–477, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2018:PIC

[BBW18] Heinz H. Bauschke, Minh N. Bui, and Xianfu Wang. Projecting onto the intersection of a cone and a sphere. *SIAM Journal on Optimization*, 28(3):2158–2188, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2003:IBR

[BC03] Heinz H. Bauschke and Patrick L. Combettes. Iterating Bregman retractions. *SIAM Journal*

on Optimization, 13(4):1159–1173, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41055>.

Barone:2005:FAA

[BC05] P. Barone and M. Caramia. A fast automatic algorithm for image denoising by a regularization method. *SIAM Journal on Optimization*, 15(2):573–592, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40678>.

Baillon:2009:AEP

[BC09] J. B. Baillon and R. Cominetti. Asymptotic expansion of penalty-gradient flows in linear programming. *SIAM Journal on Optimization*, 20(2):728–739, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bian:2014:WCC

[BC14] Wei Bian and Xiaojun Chen. Worst-case complexity of smoothing quadratic regularization methods for non-Lipschitzian optimization. *SIAM Journal on Optimization*, 23(3):1718–1741, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bittar:2022:SAP

[BCCL22] Thomas Bittar, Pierre Carpentier, Jean-Philippe Chance-

- lier, and Jérôme Lonchamp. The stochastic auxiliary problem principle in Banach spaces: Measurability and convergence. *SIAM Journal on Optimization*, 32(3):1871–1900, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1402467> ■ [BCD20]
- Boland:2018:CPH**
- [BCD⁺18a] Natasha Boland, Jeffrey Christiansen, Brian Dandurand, Andrew Eberhard, Jeff Linderoth, James Luedtke, and Fabricio Oliveira. Combining progressive hedging with a Frank–Wolfe method to compute Lagrangian dual bounds in stochastic mixed-integer programming. *SIAM Journal on Optimization*, 28(2):1312–1336, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Boulmezaoud:2018:GFS**
- [BCD18b] Tahar Z. Boulmezaoud, Philippe Cicutat, and Aris Daniilidis. Gradient flows, second-order gradient systems and convexity. *SIAM Journal on Optimization*, 28(3):2049–2066, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Boyer:2019:RTC**
- [BCD⁺19] Claire Boyer, Antonin Chambolle, Yohann De Castro, Vincent Duval, Frédéric de Gournay, and Pierre Weiss. On representer theorems and convex regularization. *SIAM Journal on Optimization*, 29(2):1260–1281, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Burtscheidt:2020:RAM**
- Johanna Burtscheidt, Matthias Claus, and Stephan Dempe. Risk-averse models in bilevel stochastic linear programming. *SIAM Journal on Optimization*, 30(1):377–406, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Basu:2021:SCP**
- [BCDJ21] Amitabh Basu, Michele Conforti, Marco Di Summa, and Hongyi Jiang. Split cuts in the plane. *SIAM Journal on Optimization*, 31(1):331–347, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Butnariu:2008:BSP**
- [BCGH08] Dan Butnariu, Yair Censor, Pini Gurfil, and Ethan Hadar. On the behavior of subgradient projections methods for convex feasibility problems in Euclidean spaces. *SIAM Journal on Optimization*, 19(2):786–807, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bot:2014:PDS**
- [BCH14] Radu Ioan Bot, Ernő Robert Csetnek, and André Heinrich. A primal-dual splitting algorithm

- for finding zeros of sums of maximal monotone operators. *SIAM Journal on Optimization*, 23(4): 2011–2036, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCL07] Robert Baier, Ilyes Aïssa Chahma, and Frank Lempio. Stability and convergence of Euler’s method for state-constrained differential inclusions. *SIAM Journal on Optimization*, 18(3):1004–1026, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCLN22] Kristian Bredies, Enis Chenchene, Dirk A. Lorenz, and Emanuele Naldi. Degenerate preconditioned proximal point algorithms. *SIAM Journal on Optimization*, 32(3):2376–2401, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1448112>.
- [BCM03] J. Borwein, R. Choksi, and P. Maréchal. Probability distributions of assets inferred from option prices via the principle of maximum entropy. *SIAM Journal on Optimization*, 14(2): 464–478, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCN08] Richard H. Byrd, Frank E. Curtis, and Jorge Nocedal. An inexact SQP method for equality constrained optimization. *SIAM Journal on Optimization*, 19(1): 351–369, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCN10] Richard H. Byrd, Frank E. Curtis, and Jorge Nocedal. Infeasibility detection and SQP methods for nonlinear optimization. *SIAM Journal on Optimization*, 20(5):2281–2299, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCN19] Radu Ioan Bot, Ernő Robert Csetnek, and Dang-Khoa Nguyen. A proximal minimization algorithm for structured nonconvex and nonsmooth problems. *SIAM Journal on Optimization*, 29(2): 1300–1328, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCN24] Kristian Bredies, Enis Chenchene, and Emanuele Naldi. Graph and distributed extensions of the Douglas–Rachford method. *SIAM Journal on Optimization*, 34(2):1569–1594, April 2024. CODEN SJOPE8. ISSN 1095-7189.

- [BCNN11] **Byrd:2011:USH** Richard H. Byrd, Gillian M. Chin, Will Neveitt, and Jorge Nocedal. On the use of stochastic Hessian information in optimization methods for machine learning. *SIAM Journal on Optimization*, 21(3): 977–995, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p977_s1.
- [BCQW95] **Boyd:1995:LTS** Sylvia C. Boyd, William H. Cunningham, Maurice Queyranne, and Yaoguang Wang. Ladders for travelling salesmen. *SIAM Journal on Optimization*, 5(2): 408–420, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCRZ21] **Berahas:2021:SQO** Albert S. Berahas, Frank E. Curtis, Daniel Robinson, and Baoyu Zhou. Sequential quadratic optimization for nonlinear equality constrained stochastic optimization. *SIAM Journal on Optimization*, 31(2): 1352–1379, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCS99] **Bonnans:1999:SOO** J. Frédéric Bonnans, Roberto Cominetti, and Alexander Shapiro. Second order optimality conditions based on parabolic second order tangent sets. *SIAM Journal on Optimization*, 9(2): 466–492, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30676>.
- [BCS21] **Berahas:2021:GCR** A. S. Berahas, L. Cao, and K. Scheinberg. Global convergence rate analysis of a generic line search algorithm with noise. *SIAM Journal on Optimization*, 31(2):1489–1518, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCT93] **Bertsekas:1993:RAS** Dimitri P. Bertsekas, David A. Castañón, and Haralampos Tsaknakis. Reverse auction and the solution of inequality constrained assignment problems. *SIAM Journal on Optimization*, 3(2):268–297, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BCT19] **Byrd:2019:EPM** Richard H. Byrd, Jorio Cocola, and Richard A. Tapia. Extending the Pennisi–McCormick second-order sufficiency theory for nonlinear programming to infinite dimensions. *SIAM Journal on Optimization*, 29(3): 1870–1878, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Best:2000:MSC**
- [BCU00] Michael J. Best, Nilotpal Chakravarti, and Vasant A. Ubhaya. Minimizing separable convex functions subject to simple chain constraints. *SIAM Journal on Optimization*, 10(3):658–672, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31497>.
- Bo:2008:RCQ**
- [BCW08] Radu Ioan Bo, Ernő Robert Csetnek, and Gert Wanka. Regularity conditions via quasi-relative interior in convex programming. *SIAM Journal on Optimization*, 19(1):217–233, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Burke:2014:SQO**
- [BCW14] James V. Burke, Frank E. Curtis, and Hao Wang. A sequential quadratic optimization algorithm with rapid infeasibility detection. *SIAM Journal on Optimization*, 24(2):839–872, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bertsimas:2021:UAM**
- [BCWP21] Dimitris Bertsimas, Ryan Cory-Wright, and Jean Pauphilet. A unified approach to mixed-integer optimization problems with logical constraints. *SIAM Journal on Optimization*, 31(3): 2340–2367, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Burke:2015:IRL**
- [BCWW15] James V. Burke, Frank E. Curtis, Hao Wang, and Jiashan Wang. Iterative reweighted linear least squares for exact penalty subproblems on product sets. *SIAM Journal on Optimization*, 25(1):261–294, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Burke:2020:ISQ**
- [BCWW20] James V. Burke, Frank E. Curtis, Hao Wang, and Jiashan Wang. Inexact sequential quadratic optimization with penalty parameter updates within the QP solver. *SIAM Journal on Optimization*, 30(3): 1822–1849, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bomze:1993:GOA**
- [BD93] Immanuel M. Bomze and Gabriele Danninger. A global optimization algorithm for concave quadratic programming problems. *SIAM Journal on Optimization*, 3(4):826–842, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Benoist:2002:IFS**
- [BD02] Joël Benoist and Aris Daniilidis. Integration of Fenchel subdifferentials of epi-pointed func-

tions. *SIAM Journal on Optimization*, 12(3):575–582, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38127>.

Bundfuss:2009:ALA

- [BD09] Stefan Bundfuss and Mirjam Dür. An adaptive linear approximation algorithm for copositive programs. *SIAM Journal on Optimization*, 20(1):30–53, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Burachik:2010:IPP

- [BD10] Regina Burachik and Joydeep Dutta. Inexact proximal point methods for variational inequality problems. *SIAM Journal on Optimization*, 20(5):2653–2678, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2017:FCD

- [BD17] Heinz H. Bauschke and Minh N. Dao. On the finite convergence of the Douglas–Rachford algorithm for solving (not necessarily convex) feasibility problems in Euclidean spaces. *SIAM Journal on Optimization*, 27(1):507–537, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bodur:2019:LBL

- [BDDM19] Merve Bodur, Alberto Del Pia, Santanu S. Dey, and Marco

Molinaro. Lower bounds on the lattice-free rank for packing and covering integer programs. *SIAM Journal on Optimization*, 29(1):55–76, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bellavia:2015:UCP

- [BDdSM15] Stefania Bellavia, Valentina De Simone, Daniela di Serafino, and Benedetta Morini. Updating constraint preconditioners for KKT systems in quadratic programming via low-rank corrections. *SIAM Journal on Optimization*, 25(3):1787–1808, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bertsimas:2021:PGR

- [BdHP21] Dimitris Bertsimas, Dick den Hertog, and Jean Pauphilet. Probabilistic guarantees in robust optimization. *SIAM Journal on Optimization*, 31(4):2893–2920, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bellon:2024:TVS

- [BDK+24] Antonio Bellon, Mareike Dressler, Vyacheslav Kungurtsev, Jakub Marek, and André Uschmajew. Time-varying semidefinite programming: Path following a Burer–Monteiro factorization. *SIAM Journal on Optimization*, 34(1):1–26, January 2024. CODEN SJOPE8. ISSN 1095-7189.

- [BDL07] Jérôme Bolte, Aris Daniilidis, and Adrian Lewis. The Lojasiewicz inequality for non-smooth subanalytic functions with applications to subgradient dynamical systems. *SIAM Journal on Optimization*, 17(4):1205–1223, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bolte:2007:LIN**
- [BDL⁺16] Christoph Buchheim, Marianna De Santis, Stefano Lucidi, Francesco Rinaldi, and Long Trieu. A feasible active set method with reoptimization for convex quadratic mixed-integer programming. *SIAM Journal on Optimization*, 26(3):1695–1714, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Buchheim:2016:FAS**
- [BDL18] Heinz H. Bauschke, Minh N. Dao, and Scott B. Lindstrom. Regularizing with Bregman–Moreau envelopes. *SIAM Journal on Optimization*, 28(4):3208–3228, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bauschke:2018:RBM**
- [BDL21] Regina S. Burachik, Minh N. Dao, and Scott B. Lindstrom. The generalized Bregman distance. *SIAM Journal on Optimization*, 31(1):404–424, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Burachik:2021:GBD**
- [BDL23] Radu Ioan Bot, Minh N. Dao, and Guoyin Li. Inertial proximal block coordinate method for a class of nonsmooth sum-of-ratios optimization problems. *SIAM Journal on Optimization*, 33(2):361–393, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1472000>. **Bot:2023:IPB**
- [BDLS07] Jérôme Bolte, Aris Daniilidis, Adrian Lewis, and Masahiro Shiota. Clarke subgradients of stratifiable functions. *SIAM Journal on Optimization*, 18(2):556–572, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bolte:2007:CSS**
- [BDM16] F. Benita, S. Dempe, and P. Mehrlitz. Bilevel optimal control problems with pure state constraints and finite-dimensional lower level. *SIAM Journal on Optimization*, 26(1):564–588, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Benita:2016:BOCa**
- [BDMS09] Nicolai Bissantz, Lutz Dümbgen, Axel Munk, and Bernd Stratmann. Convergence analysis of generalized iteratively **Bissantz:2009:CAG**

- reweighted least squares algorithms on convex function spaces. *SIAM Journal on Optimization*, 19(4):1828–1845, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BDS24]
- [BDPP14] C. Buchheim, M. De Santis, L. Palagi, and M. Piacentini. An exact algorithm for nonconvex quadratic integer minimization using ellipsoidal relaxations. *SIAM Journal on Optimization*, 23(3):1867–1889, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BDS24]
- [BDS10] Luc Barbet, Aris Daniilidis, and Pierpaolo Soravia. Generalized Hessians of $C^{1,1}$ -functions and second-order viscosity subsets. *SIAM Journal on Optimization*, 20(6):3040–3058, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BDS24]
- [BDS24] Grigoriy Blekherman, Santanu S. Dey, and Shengding Sun. Aggregations of quadratic inequalities and hidden hyperplane convexity. *SIAM Journal on Optimization*, 34(1):98–126, January 2024. CODEN SJOPE8. ISSN 1095-7189. [BDS24]
- [BDSS22] Grigoriy Blekherman, Santanu S. Dey, Kevin Shu, and Shengding Sun. Hyperbolic relaxation of k -locally positive semidefinite matrices. *SIAM Journal on Optimization*, 32(2):470–490, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1387407>. [BDSS22]
- [BDPX09] Stephen Boyd, Persi Diaconis, Pablo Parrilo, and Lin Xiao. Fastest mixing Markov chain on graphs with symmetries. *SIAM Journal on Optimization*, 20(2):792–819, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BDPX09]
- [BE06] Amir Beck and Yonina C. Eldar. Strong duality in nonconvex quadratic optimization with two quadratic constraints. *SIAM Journal on Optimization*, 17(3):844–860, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BE06]
- [BE14] Amir Beck and Yonina C. Eldar. Sparsity constrained nonlinear optimization: Optimality conditions and algorithms. *SIAM Journal on Optimization*, 23(3):1480–1509, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BE14]

- [Bec07] Amir Beck. Quadratic matrix programming. *SIAM Journal on Optimization*, 17(4):1224–1238, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Beck:2007:QMP**
- [Bec15] Amir Beck. On the convergence of alternating minimization for convex programming with applications to iteratively reweighted least squares and decomposition schemes. *SIAM Journal on Optimization*, 25(1):185–209, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Beck:2015:CAM**
- [BEET12] N. L. Boland, A. C. Eberhard, F. Engineer, and A. Tsoukalas. A new approach to the feasibility pump in mixed integer programming. *SIAM Journal on Optimization*, 22(3):831–861, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Boland:2012:NAF**
- [Bel94] Bradley M. Bell. The iterated Kalman smoother as a Gauss–Newton method. *SIAM Journal on Optimization*, 4(3):626–636, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bell:1994:IKS**
- [Ber91] Dimitri P. Bertsekas. An auction algorithm for shortest paths. *SIAM Journal on Optimization*, 1(4):425–447, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bertsekas:1991:AAS**
- [Ber96] Dimitri P. Bertsekas. Incremental least squares methods and the extended Kalman filter. *SIAM Journal on Optimization*, 6(3):807–822, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26852>. **Bertsekas:1996:ILS**
- [Ber97] Dimitri P. Bertsekas. A new class of incremental gradient methods for least squares problems. *SIAM Journal on Optimization*, 7(4):913–926, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28702>. **Bertsekas:1997:NCI**
- [BER03] Y. Q. Bai, M. El Ghami, and C. Roos. A new efficient large-update primal-dual interior-point method based on a finite barrier. *SIAM Journal on Optimization*, 13(3):766–782, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39813>. **Bai:2003:NEL**

- Bai:2004:CSK**
- [BER04] Y. Q. Bai, M. El Ghami, and C. Roos. A comparative study of kernel functions for primal-dual interior-point algorithms in linear optimization. *SIAM Journal on Optimization*, 15(1): 101–128, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42311>.
- Bertsekas:2017:RPA**
- [Ber17] Dimitri P. Bertsekas. Regular policies in abstract dynamic programming. *SIAM Journal on Optimization*, 27(3):1694–1727, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Betz:2019:SSO**
- [Bet19] Livia M. Betz. Strong stationarity for optimal control of a nonsmooth coupled system: Application to a viscous evolutionary variational inequality coupled with an elliptic PDE. *SIAM Journal on Optimization*, 29(4): 3069–3099, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Billups:1996:CII**
- [BF96] Stephen C. Billups and Michael C. Ferris. Convergence of an infeasible interior-point algorithm from arbitrary positive starting points. *SIAM Journal on Optimization*, 6(2):316–325, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Belloni:2008:SOF**
- [BF08] Alexandre Belloni and Robert M. Freund. On the second-order feasibility cone: Primal-dual representation and efficient projection. *SIAM Journal on Optimization*, 19(3):1073–1092, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Borndorfer:1998:DMB**
- [BFM98] Ralf Borndörfer, Carlos E. Ferreira, and Alexander Martin. Decomposing matrices into blocks. *SIAM Journal on Optimization*, 9(1):236–269, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31868>.
- Bueno:2014:IRM**
- [BFMS14] L. F. Bueno, A. Friedlander, J. M. Martínez, and F. N. C. Sobral. Inexact restoration method for derivative-free optimization with smooth constraints. *SIAM Journal on Optimization*, 23(2): 1189–1213, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Becker:2019:QNF**
- [BFO19] Stephen Becker, Jalal Fadili, and Peter Ochs. On quasi-Newton forward-backward splitting: Proximal calculus and convergence. *SIAM Journal on*

- Optimization*, 29(4):2445–2481, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BFS16] Mario Berta, Omar Fawzi, and Volkher B. Scholz. Quantum bilinear optimization. *SIAM Journal on Optimization*, 26(3):1529–1564, ????. 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BG08] Roberto H. Bielschowsky and Francisco A. M. Gomes. Dynamic control of infeasibility in equality constrained optimization. *SIAM Journal on Optimization*, 19(3):1299–1325, ????. 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BG22] Immanuel Bomze and Markus Gabl. Uncertainty preferences in robust mixed-integer linear optimization with endogenous uncertainty. *SIAM Journal on Optimization*, 32(1):292–318, ????. 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1355422>.
- [BGG⁺12] Paul T. Boggs, David M. Gay, Stewart K. Griffiths, Robert Michael Lewis, Kevin R. Long, Stephen Nash, and Robert H. Nilson. Optimization algorithms for hierarchical problems with application to nanoporous materials. *SIAM Journal on Optimization*, 22(4):1285–1308, ????. 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGH18] James V. Burke, Yuan Gao, and Tim Hoheisel. Convex geometry of the generalized matrix-fractional function. *SIAM Journal on Optimization*, 28(3):2189–2200, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGH19] James V. Burke, Yuan Gao, and Tim Hoheisel. Variational properties of matrix functions via the generalized matrix-fractional function. *SIAM Journal on Optimization*, 29(3):1958–1987, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGJ12] E. N. Barron, R. Goebel, and R. R. Jensen. Functions which are quasiconvex under linear perturbations. *SIAM Journal on Optimization*, 22(3):1089–1108, ????. 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGLW08] Heinz H. Bauschke, Rafal Goebel, Yves Lucet, and Xianfu

- Wang. The proximal average: Basic theory. *SIAM Journal on Optimization*, 19(2):766–785, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGM⁺16] E. G. Birgin, J. L. Gardenghi, J. M. Martínez, S. A. Santos, and Ph. L. Toint. Evaluation complexity for nonlinear constrained optimization using unscaled KKT conditions and high-order models. *SIAM Journal on Optimization*, 26(2):951–967, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGM19] Matús Benko, Helmut Gfrerer, and Boris S. Mordukhovich. Characterizations of tilt-stable minimizers in second-order cone programming. *SIAM Journal on Optimization*, 29(4):3100–3130, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGM24a] Christoph Buchheim, Alexandra Grütering, and Christian Meyer. Parabolic optimal control problems with combinatorial switching constraints, Part I: Convex relaxations. *SIAM Journal on Optimization*, 34(2):1187–1205, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [BGM24b] Christoph Buchheim, Alexandra Grütering, and Christian Meyer. Parabolic optimal control problems with combinatorial switching constraints, Part II: Outer approximation algorithm. *SIAM Journal on Optimization*, 34(2):1295–1315, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [BGMT19] Stefania Bellavia, Gianmarco Gurioli, Benedetta Morini, and Philippe L. Toint. Adaptive regularization algorithms with inexact evaluations for nonconvex optimization. *SIAM Journal on Optimization*, 29(4):2881–2915, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BGN22] Krishnakumar Balasubramanian, Saeed Ghadimi, and Anthony Nguyen. Stochastic multilevel composition optimization algorithms with level-independent convergence rates. *SIAM Journal on Optimization*, 32(2):519–544, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1406222>.
- [BGNW05] Richard H. Byrd, Nicholas I. M. Gould, Jorge Nocedal, and Richard A. Waltz. On the convergence of successive linear-quadratic programming

- algorithms. *SIAM Journal on Optimization*, 16(2):471–489, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42653>. **Bo:2007:MMP**
- [BGP09] C. Bogani, M. G. Gasparo, and A. Papini. Generating set search methods for piecewise smooth problems. *SIAM Journal on Optimization*, 20(1):321–335, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bogani:2009:GSS**
- [BGR20] El Houcine Bergou, Eduard Gorbunov, and Peter Richtárik. Stochastic three points method for unconstrained smooth minimization. *SIAM Journal on Optimization*, 30(4):2726–2749, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bergou:2020:STP**
- [BGV20] Federico Basseti, Stefano Gualandi, and Marco Veneroni. On the computation of Kantorovich–Wasserstein distances between two-dimensional histograms by uncapacitated minimum cost flows. *SIAM Journal on Optimization*, 30(3):2441–2469, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Bassetti:2020:CKW**
- [BGW07] Radu Ioan Bo, Sorin-Mihai Grad, and Gert Wanka. Maximal monotonicity for the precomposition with a linear operator. *SIAM Journal on Optimization*, 17(4):1239–1252, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Benko:2023:SOO**
- [BGY+23] Matús Benko, Helmut Gfrerer, Jane J. Ye, Jin Zhang, and Jinchuan Zhou. Second-order optimality conditions for general nonconvex optimization problems and variational analysis of disjunctive systems. *SIAM Journal on Optimization*, 33(4):2625–2653, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1484742>. **Borwein:1995:FHM**
- [BH95] J. M. Borwein and W. Z. Huang. A fast heuristic method for polynomial moment problems with Boltzmann–Shannon entropy. *SIAM Journal on Optimization*, 5(1):68–99, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Boros:1996:ONP**
- [BH96] E. Boros and F. K. Hwang. Optimality of nested partitions and its application to cluster analysis. *SIAM Jour-*

- nal on Optimization*, 6(4):1153–1162, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27239>. [BH15]
- Betts:2003:LSP**
- [BH03] John T. Betts and William P. Huffman. Large scale parameter estimation using sparse nonlinear programming methods. *SIAM Journal on Optimization*, 14(1):223–244, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39921>. [BH18]
- Bot:2014:DRT**
- [BH14a] Radu Ioan Bot and Christopher Hendrich. A Douglas–Rachford type primal-dual method for solving inclusions with mixtures of composite and parallel-sum type monotone operators. *SIAM Journal on Optimization*, 23(4):2541–2565, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BH19]
- Burke:2014:ECS**
- [BH14b] James V. Burke and Tim Hoheisel. Epi-convergent smoothing with applications to convex composite functions. *SIAM Journal on Optimization*, 23(3):1457–1479, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BH20]
- Burke:2015:MSF**
- James V. Burke and Tim Hoheisel. Matrix support functionals for inverse problems, regularization, and learning. *SIAM Journal on Optimization*, 25(2):1135–1159, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Beck:2018:PMS**
- Amir Beck and Nadav Hallak. Proximal mapping for symmetric penalty and sparsity. *SIAM Journal on Optimization*, 28(1):496–527, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bergmann:2019:IFK**
- Ronny Bergmann and Roland Herzog. Intrinsic formulation of KKT conditions and constraint qualifications on smooth manifolds. *SIAM Journal on Optimization*, 29(4):2423–2444, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Beck:2020:CSP**
- Amir Beck and Nadav Hallak. On the convergence to stationary points of deterministic and randomized feasible descent directions methods. *SIAM Journal on Optimization*, 30(1):56–79, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Blatt:2007:CIG

- [BHG07] Doron Blatt, Alfred O. Hero, and Hillel Gauchman. A convergent incremental gradient method with a constant step size. *SIAM Journal on Optimization*, 18(1):29–51, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bergounioux:2000:CMY

- [BHHK00] M. Bergounioux, M. Haddou, M. Hintermüller, and K. Kunisch. A comparison of a Moreau–Yosida-Based active set strategy and interior point methods for constrained optimal control problems. *SIAM Journal on Optimization*, 11(2):495–521, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34313>.

Beremlijski:2009:SOT

- [BHK⁺09] P. Beremlijski, J. Haslinger, M. Kočvara, R. Kučera, and J. V. Outrata. Shape optimization in three-dimensional contact problems with Coulomb friction. *SIAM Journal on Optimization*, 20(1):416–444, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Basu:2014:STD

- [BHKM14] Amitabh Basu, Robert Hildebrand, Matthias Köppe, and

Marco Molinaro. A $(k + 1)$ -slope theorem for the k -dimensional infinite group relaxation. *SIAM Journal on Optimization*, 23(2):1021–1040, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beremlijski:2002:SOC

- [BHKO02] P. Beremlijski, J. Haslinger, M. Kočvara, and J. Outrata. Shape optimization in contact problems with Coulomb friction. *SIAM Journal on Optimization*, 13(2):561–587, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39506>.

Bansal:2018:DAT

- [BHM18a] Manish Bansal, Kuo-Ling Huang, and Sanjay Mehrotra. Decomposition algorithms for two-stage distributionally robust mixed binary programs. *SIAM Journal on Optimization*, 28(3):2360–2383, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bansal:2018:TSS

- [BHM18b] Manish Bansal, Kuo-Ling Huang, and Sanjay Mehrotra. Tight second stage formulations in two-stage stochastic mixed integer programs. *SIAM Journal on Optimization*, 28(1):788–819, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BHN99] **Byrd:1999:IPA** Richard H. Byrd, Mary E. Hribar, and Jorge Nocedal. An interior point algorithm for large-scale nonlinear programming. *SIAM Journal on Optimization*, 9(4):877–900, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32510>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [BHR19] **Byrd:2016:SQN** R. H. Byrd, S. L. Hansen, Jorge Nocedal, and Y. Singer. A stochastic quasi-Newton method for large-scale optimization. *SIAM Journal on Optimization*, 26(2):1008–1031, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BHP18] **Bolte:2018:QCS** Jérôme Bolte, Antoine Hochart, and Edouard Pauwels. Qualification conditions in semialgebraic programming. *SIAM Journal on Optimization*, 28(2):1867–1891, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BHP23] **Borghi:2023:CCB** Giacomo Borghi, Michael Herty, and Lorenzo Pareschi. Constrained consensus-based optimization. *SIAM Journal on Optimization*, 33(1):211–236, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BHR19] **Bueno:2019:OCC** Luís Felipe Bueno, Gabriel Haeser, and Frank Navarro Rojas. Optimality conditions and constraint qualifications for generalized Nash equilibrium problems and their practical implications. *SIAM Journal on Optimization*, 29(1):31–54, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BHS15] **Buchheim:2015:EBC** Christoph Buchheim, Ruth Hübner, and Anita Schöbel. Ellipsoid bounds for convex quadratic integer programming. *SIAM Journal on Optimization*, 25(2):741–769, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BHT16] **Blado:2016:SIR** Daniel Blado, Weihong Hu, and Alejandro Toriello. Semi-infinite relaxations for the dynamic knapsack problem with stochastic item sizes. *SIAM Journal on Optimization*, 26(3):1625–1648, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BI98] **Burachik:1998:GPP** Regina S. Burachik and Alfredo N. Iusem. A generalized proximal point algorithm for

- the variational inequality problem in a Hilbert space. *SIAM Journal on Optimization*, 8(1): 197–216, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28630>.
- [Bia16] **Bianchi:2016:ECS** Pascal Bianchi. Ergodic convergence of a stochastic proximal point algorithm. *SIAM Journal on Optimization*, 26(4): 2235–2260, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bie16] **Bienstock:2016:NPS** Daniel Bienstock. A note on polynomial solvability of the CDT problem. *SIAM Journal on Optimization*, 26(1):488–498, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bil02] **Billups:2002:HBA** Stephen C. Billups. A homotopy-based algorithm for mixed complementarity problems. *SIAM Journal on Optimization*, 12(3):583–605, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33743>.
- [BIM23] **Bareilles:2023:HSC** Gilles Bareilles, Franck Iutzeler, and Jérôme Malick. Harnessing structure in composite non-smooth minimization. *SIAM Journal on Optimization*, 33(3): 2222–2247, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1505827>.
- [BIS05] **Bonnel:2005:PMV** Henri Bonnel, Alfredo Noel Iusem, and Benar Fux Svaiter. Proximal methods in vector optimization. *SIAM Journal on Optimization*, 15(4): 953–970, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42909>.
- [BJ22] **Barbara:2022:EBC** Abdessamad Barbara and Abderrahim Jourani. Error bound characterizations of the conical constraint qualification in convex programming. *SIAM Journal on Optimization*, 32(3): 2013–2040, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1428674>.
- [BJKJ17] **Bajovic:2017:NLM** Dragana Bajović, Dusan Jakovetić, Natasa Krejić, and Natasa Krklec Jerinkić. Newton-like method with diagonal correction for distributed optimization. *SIAM Journal on Optimization*, 27(2): 1171–1203, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bosch:2007:TSS

- [BJS07] Paul Bosch, Alejandro Jofré, and Rüdiger Schultz. Two-stage stochastic programs with mixed probabilities. *SIAM Journal on Optimization*, 18(3):778–788, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Butikofer:2010:NNM

- [BK10] Stephan Bütikofer and Diethard Klatte. A nonsmooth Newton method with path search and its use in solving $C^{1,1}$ programs and semi-infinite problems. *SIAM Journal on Optimization*, 20(5):2381–2412, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bampou:2012:PAC

- [BK12] Dimitra Bampou and Daniel Kuhn. Polynomial approximations for continuous linear programs. *SIAM Journal on Optimization*, 22(2):628–648, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bansil:2021:NAS

- [BK21a] Mohit Bansil and Jun Kitagawa. A Newton algorithm for semidiscrete optimal transport with storage fees. *SIAM Journal on Optimization*, 31(4):2586–2613, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Borgens:2021:ATM

- [BK21b] Eike Börgens and Christian Kanzow. ADMM-type methods for generalized Nash equilibrium problems in Hilbert spaces. *SIAM Journal on Optimization*, 31(1):377–403, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Breiding:2019:RS

- [BKL19] Paul Breiding, Khazhgali Kozhasov, and Antonio Lerario. Random spectrahedra. *SIAM Journal on Optimization*, 29(4):2608–2624, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Borgens:2020:NCQ

- [BKMW20] Eike Börgens, Christian Kanzow, Patrick Mehlitz, and Gerd Wachsmuth. New constraint qualifications for optimization problems in Banach spaces based on asymptotic KKT conditions. *SIAM Journal on Optimization*, 30(4):2956–2982, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Burachik:2017:NST

- [BKR17] R. S. Burachik, C. Y. Kaya, and M. M. Rizvi. A new scalarization technique and new algorithms to generate Pareto fronts. *SIAM Journal on Optimization*, 27(2):1010–1034, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BKS96] **Byrd:1996:ASR** Richard H. Byrd, Humaid Fayez Khalfan, and Robert B. Schnabel. Analysis of a symmetric rank-one trust region method. *SIAM Journal on Optimization*, 6(4):1025–1039, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25298>.
- [BKS16] **Burdakov:2016:MPC** Oleg P. Burdakov, Christian Kanzow, and Alexandra Schwartz. Mathematical programs with cardinality constraints: Reformulation by complementarity-type conditions and a regularization method. *SIAM Journal on Optimization*, 26(1):397–425, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BKT99a] **Boggs:1999:GCA** Paul T. Boggs, Anthony J. Kearsley, and Jon W. Tolle. A global convergence analysis of an algorithm for large-scale nonlinear optimization problems. *SIAM Journal on Optimization*, 9(4):833–862, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31602>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [BKT99b] **Boggs:1999:PAG** Paul T. Boggs, Anthony J. Kearsley, and Jon W. Tolle. A practical algorithm for general large scale nonlinear optimization problems. *SIAM Journal on Optimization*, 9(3):755–778, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26722>.
- [BL91] **Borwein:1991:CBE** J. M. Borwein and A. S. Lewis. Convergence of best entropy estimates. *SIAM Journal on Optimization*, 1(2):191–205, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BL93] **Borwein:1993:PFPP** J. M. Borwein and A. S. Lewis. Partially-finite programming in L_1 and the existence of maximum entropy estimates. *SIAM Journal on Optimization*, 3(2):248–267, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BL94] **Borwein:1994:SRO** J. M. Borwein and A. S. Lewis. Strong rotundity and optimization. *SIAM Journal on Optimization*, 4(1):146–158, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BL95] **Bonnans:1995:SQP** J. F. Bonnans and G. Lounay. Sequential quadratic programming with penalization of the displacement. *SIAM Journal on Optimization*, 5(4):792–812, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BL09] **Burer:2009:NQP** Samuel Burer and Adam N. Letchford. On nonconvex quadratic programming with box constraints. *SIAM Journal on Optimization*, 20(2):1073–1089, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BL22] **Bullins:2022:HOM** Brian Bullins and Kevin A. Lai. Higher-order methods for convex-concave min-max optimization and monotone variational inequalities. *SIAM Journal on Optimization*, 32(3):2208–2229, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1395764>.
- [Bla21] **Blauth:2021:NCG** Sebastian Blauth. Nonlinear conjugate gradient methods for PDE constrained shape optimization based on Steklov–Poincaré-Type metrics. *SIAM Journal on Optimization*, 31(3):1658–1689, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bla23] **Blauth:2023:SMP** Sebastian Blauth. Space mapping for PDE constrained shape optimization. *SIAM Journal on Optimization*, 33(3):1707–1733, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1515665>.
- [BLG13] **Billups:2013:DFO** Stephen C. Billups, Jeffrey Larson, and Peter Graf. Derivative-free optimization of expensive functions with computational error using weighted regression. *SIAM Journal on Optimization*, 23(1):27–53, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BLMH06] **Boggs:2006:RSI** Paul T. Boggs, Kevin R. Long, Stephen B. Margolis, and Patricia A. Howard. Rapid source inversion for chemical/biological attacks, Part 1: The steady-state case. *SIAM Journal on Optimization*, 17(2):430–458, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BLN92] **Byrd:1992:BBC** Richard H. Byrd, Dong C. Liu, and Jorge Nocedal. On the behavior of Broyden’s class of quasi-Newton methods. *SIAM Journal on Optimization*, 2(4):533–557, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BLO05] **Burke:2005:RGS**
James V. Burke, Adrian S. Lewis, and Michael L. Overton. A robust gradient sampling algorithm for nonsmooth, nonconvex optimization. *SIAM Journal on Optimization*, 15(3): 751–779, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60129>.
- [BLO⁺23] **Bonnans:2023:LSN**
J. Frédéric Bonnans, Kang Liu, Nadia Oudjane, Laurent Pfeiffer, and Cheng Wan. Large-scale nonconvex optimization: Randomization, gap estimation, and numerical resolution. *SIAM Journal on Optimization*, 33(4): 3083–3113, November 2023. CODEN SJOPE8. ISSN 1095-7189.
- [BLP23] **Bolte:2023:SSN**
Jérôme Bolte, Tam Le, and Edouard Pauwels. Subgradient sampling for nonsmooth nonconvex minimization. *SIAM Journal on Optimization*, 33(4): 2542–2569, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1479178>.
- [BLPP16] **Bonettini:2016:VMI**
S. Bonettini, I. Loris, F. Porta, and M. Prato. Variable metric inexact line-search-based methods for nonsmooth optimization. *SIAM Journal on Optimization*, 26(2):891–921, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BLRS22] **Biefel:2022:AAR**
Christian Biefel, Frauke Liers, Jan Rolfes, and Martin Schmidt. Affinely adjustable robust linear complementarity problems. *SIAM Journal on Optimization*, 32(1):152–172, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1359778>.
- [BLS21] **Brosch:2021:OHB**
D. Brosch, M. Laurent, and A. Steenkamp. Optimizing hypergraph-based polynomials modeling job-occupancy in queuing with redundancy scheduling. *SIAM Journal on Optimization*, 31(3):2227–2254, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BLST19] **Bonami:2019:SQP**
Pierre Bonami, Andrea Lodi, Jonas Schweiger, and Andrea Tramontani. Solving quadratic programming by cutting planes. *SIAM Journal on Optimization*, 29(2):1076–1105, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BLT17] **Borwein:2017:CRA**
Jonathan M. Borwein, Guoyin Li, and Matthew K. Tam. Convergence rate analysis for av-

eraged fixed point iterations in common fixed point problems. *SIAM Journal on Optimization*, 27(1):1–33, January 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Borwein:2014:ACR

[BLY14] Jonathan M. Borwein, Guoyin Li, and Liangjin Yao. Analysis of the convergence rate for the cyclic projection algorithm applied to basic semialgebraic convex sets. *SIAM Journal on Optimization*, 24(1):498–527, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bennett:1994:SPM

[BM94a] Kristin P. Bennett and O. L. Mangasarian. Serial and parallel multcategory discrimination. *SIAM Journal on Optimization*, 4(4):722–734, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Burke:1994:EC

[BM94b] James V. Burke and Jorge J. Moré. Exposing constraints. *SIAM Journal on Optimization*, 4(3):573–595, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Borwein:1998:CRE

[BM98a] Jonathan M. Borwein and Warren B. Moors. A chain rule for essentially smooth Lipschitz functions. *SIAM Journal on Optimization*, 8(2):300–308,

May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29783>.

Borwein:1998:NSE

[BM98b] Jonathan M. Borwein and Warren B. Moors. Null sets and essentially smooth Lipschitz functions. *SIAM Journal on Optimization*, 8(2):309–323, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30521>.

Baiou:2002:STS

[BM02] Mourad Baiou and Ali Ridha Mahjoub. The Steiner traveling salesman polytope and related polyhedra. *SIAM Journal on Optimization*, 13(2):498–507, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32228>.

Bose:2007:DCA

[BM07] Christopher J. Bose and Rua Murray. Duality and the computation of approximate invariant densities for nonsingular transformations. *SIAM Journal on Optimization*, 18(2):691–709, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bienstock:2014:CPO

- [BM14] Daniel Bienstock and Alexander Michalka. Cutting-planes for optimization of convex functions over nonconvex sets. *SIAM Journal on Optimization*, 24(2):643–677, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2016:DRA

- [BM16a] Heinz H. Bauschke and Walaa M. Moursi. The Douglas–Rachford algorithm for two (not necessarily intersecting) affine subspaces. *SIAM Journal on Optimization*, 26(2):968–985, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Benita:2016:BOCb

- [BM16b] F. Benita and P. Mehlitz. Bilevel optimal control with final-state-dependent finite-dimensional lower level. *SIAM Journal on Optimization*, 26(1):718–752, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Birgin:2017:UQR

- [BM17] E. G. Birgin and J. M. Martínez. The use of quadratic regularization with a cubic descent condition for unconstrained optimization. *SIAM Journal on Optimization*, 27(2):1049–1074, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Benita:2018:OCP

- [BM18a] Francisco Benita and Patrick Mehlitz. Optimal control problems with terminal complementarity constraints. *SIAM Journal on Optimization*, 28(4):3079–3104, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bienstock:2018:LFP

- [BM18b] Daniel Bienstock and Gonzalo Muñoz. LP formulations for polynomial optimization problems. *SIAM Journal on Optimization*, 28(2):1121–1150, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Birgin:2018:RAS

- [BM18c] E. G. Birgin and J. M. Martínez. On regularization and active-set methods with complexity for constrained optimization. *SIAM Journal on Optimization*, 28(2):1367–1395, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2020:BDR

- [BM20a] Heinz H. Bauschke and Walaa M. Moursi. On the behavior of the Douglas–Rachford algorithm for minimizing a convex function subject to a linear constraint. *SIAM Journal on Optimization*, 30(3):2559–2576, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BM20b] **Bueno:2020:CIR**
 Luís Felipe Bueno and José Mario Martínez. On the complexity of an inexact restoration method for constrained optimization. *SIAM Journal on Optimization*, 30(1):80–101, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BMFY24] **Bayraksan:2024:BMM**
 Güzin Bayraksan, Francesca Maggioni, Daniel Faccini, and Ming Yang. Bounds for multistage mixed-integer distributionally robust optimization. *SIAM Journal on Optimization*, 34(1):682–717, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [BMP22] **Butenko:2022:HSP**
 Sergiy Butenko, Mykyta Makovenko, and Miltiades Pardalos. A hierarchy of standard polynomial programming formulations for the maximum clique problem. *SIAM Journal on Optimization*, 32(3):2102–2128, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1419775>.
- [BMR94] **Berger:1994:EDA**
 Adam J. Berger, John M. Mulvey, and Andrzej Ruszczyński. An extension of the DQA algorithm to convex stochastic programs. *SIAM Journal on Optimization*, 4(4):735–753, November 1994. CODEN SJOPE8.
- [BMR00] **Birgin:2000:NSP**
 Ernesto G. Birgin, José Mario Martínez, and Marcos Raydan. Nonmonotone spectral projected gradient methods on convex sets. *SIAM Journal on Optimization*, 10(4):1196–1211, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33096>.
- [BMS23] **Barmann:2023:BBQ**
 Andreas Bärmann, Alexander Martin, and Oskar Schneider. The bipartite Boolean quadric polytope with multiple-choice constraints. *SIAM Journal on Optimization*, 33(4):2909–2934, October 2023. CODEN SJOPE8. ISSN 1095-7189.
- [BMSS19] **Bomze:2019:HBA**
 Immanuel M. Bomze, Panayotis Mertikopoulos, Werner Schachinger, and Mathias Staudigl. Hessian barrier algorithms for linearly constrained optimization problems. *SIAM Journal on Optimization*, 29(3):2100–2127, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BMW10] **Buchheim:2010:IPS**
 Christoph Buchheim, Dennis Michaels, and Robert Weismantel. Integer programming subject to monomial constraints. ISSN 1052-6234 (print), 1095-7189 (electronic).

- SIAM Journal on Optimization*, 20(6):3297–3311, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [BNP24]
- [BMZ01] Samuel Burer, Renato D. C. Monteiro, and Yin Zhang. Rank-two relaxation heuristics for MAX-CUT and other binary quadratic programs. *SIAM Journal on Optimization*, 12(2):503–521, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38246>. [Burer:2001:RTR]
- [BNL⁺16] G. C. Bento, J. X. Cruz Neto, J. O. Lopes, P. A. Soares, Jr., and A. Soubeyran. Generalized proximal distances for bilevel equilibrium problems. *SIAM Journal on Optimization*, 26(1):810–830, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Bento:2016:GPD]
- [BNL⁺18] G. C. Bento, J. X. Cruz Neto, G. López, A. Soubeyran, and J. C. O. Souza. The proximal point method for locally Lipschitz functions in multiobjective optimization with application to the compromise problem. *SIAM Journal on Optimization*, 28(2):1104–1120, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Bento:2018:PPM]
- [BNT04] Dimitris Bertsimas, Karthik Natarajan, and Chung-Piaw Teo. Probabilistic combinatorial optimization: Moments, semidefinite programming, and asymptotic bounds. *SIAM Journal on Optimization*, 15(1):185–209, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43061>. [Bertsimas:2004:PCO]
- [BNVP24] Robin Brown, David E. Bernal Neira, Davide Venturelli, and Marco Pavone. A copositive framework for analysis of hybrid Ising-classical algorithms. *SIAM Journal on Optimization*, 34(2):1455–1489, April 2024. CODEN SJOPE8. ISSN 1095-7189. [Brown:2024:CFA]
- Avinash Bhardwaj, Vishnu Narayanan, and Abhishek Pathapati. Exact augmented Lagrangian duality for mixed integer convex optimization. *SIAM Journal on Optimization*, 34(2):1622–1645, May 2024. CODEN SJOPE8. ISSN 1095-7189. [Bhardwaj:2024:EAL]
- Lorenz T. Biegler, Jorge Nocedal, and Claudia Schmid. A reduced Hessian method for large-scale constrained optimization. *SIAM Journal on Optimization*, 5(2):314–347, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Biegler:1995:RHM]

- [BO17] **Basu:2017:CLB** Amitabh Basu and Timm Oertel. Centerpoints: a link between optimization and convex geometry. *SIAM Journal on Optimization*, 27(2):866–889, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bos93] **Bosch:1993:MRO** Robert A. Bosch. On Mizuno’s rank-one updating algorithm for linear programming. *SIAM Journal on Optimization*, 3(4):861–867, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bol14] **Boley:2014:LLC** Daniel Boley. Local linear convergence of the alternating direction method of multipliers on quadratic or linear programs. *SIAM Journal on Optimization*, 23(4):2183–2207, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BOT06] **Bertsekas:2006:EFJ** Dimitri P. Bertsekas, Asuman E. Ozdaglar, and Paul Tseng. Enhanced Fritz John conditions for convex programming. *SIAM Journal on Optimization*, 16(3):766–797, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bom15] **Bomze:2015:CRB** Immanuel M. Bomze. Copositive relaxation beats Lagrangian dual bounds in quadratically and linearly constrained quadratic optimization problems. *SIAM Journal on Optimization*, 25(3):1249–1275, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Bou97] **Bouaricha:1997:TML** Ali Bouaricha. Tensor methods for large, sparse unconstrained optimization. *SIAM Journal on Optimization*, 7(3):732–756, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26772>.
- [Bon97] **Bonnans:1997:MSV** J. Frédéric Bonnans. Mathematical study of very high voltage power networks. I. The optimal DC power flow problem. *SIAM Journal on Optimization*, 7(4):979–990, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27802>.
- [Bou16] **Boumal:2016:NPS** Nicolas Boumal. Nonconvex phase synchronization. *SIAM Journal on Optimization*, 26(4):2355–2377, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Boy93] **Boyd:1993:GFC** E. A. Boyd. Generating Fenchel cutting planes for knapsack polyhedra. *SIAM Jour-*

nal on Optimization, 3(4):734–750, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Boyd:1995:CFC

[Boy95]

E. Andrew Boyd. On the convergence of Fenchel cutting planes in mixed-integer programming. *SIAM Journal on Optimization*, 5(2):421–435, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bonnans:1997:TRI

[BP97]

J. Frédéric Bonnans and Cecilia Pola. A trust region interior point algorithm for linearly constrained optimization. *SIAM Journal on Optimization*, 7(3):717–731, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25063>.

Bertsimas:2005:OIP

[BP05]

Dimitris Bertsimas and Ioana Popescu. Optimal inequalities in probability theory: a convex optimization approach. *SIAM Journal on Optimization*, 15(3):780–804, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39990>.

Bednarczuk:2007:VVV

[BP07]

Ewa M. Bednarczuk and Maciej J. Przybyła. The vector-valued variational principle in Banach spaces ordered by cones

with nonempty interiors. *SIAM Journal on Optimization*, 18(3):907–913, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beck:2012:SGL

[BP12]

Amir Beck and Dror Pan. On the solution of the GPS localization and circle fitting problems. *SIAM Journal on Optimization*, 22(1):108–134, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p108_s1.

Basu:2015:OPC

[BP15]

Amitabh Basu and Joseph Paat. Operations that preserve the covering property of the lifting region. *SIAM Journal on Optimization*, 25(4):2313–2333, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bi:2011:NCF

[BPC11]

Shujun Bi, Shaohua Pan, and Jein-Shan Chen. Nonsingularity conditions for the Fischer-Burmeister system of nonlinear SDPs. *SIAM Journal on Optimization*, 21(4):1392–1417, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1392_s1.

- [BPL12] **Bayraksan:2012:FWS**
Güzin Bayraksan and Péguy Pierre-Louis. Fixed-width sequential stopping rules for a class of stochastic programs. *SIAM Journal on Optimization*, 22(4):1518–1548, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BPR20] S. Bonettini, M. Prato, and S. Rebegoldi. Convergence of inexact forward–backward algorithms using the forward–backward envelope. *SIAM Journal on Optimization*, 30(4):3069–3097, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BPS99] **Brixius:1999:NSD**
Nathan Brixius, Florian A. Potra, and Rongqin Sheng. Nonsymmetric search directions for semidefinite programming. *SIAM Journal on Optimization*, 9(4):863–876, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33388>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [BPS06] **Buttazzo:2006:OPP**
Giuseppe Buttazzo, Aldo Pratelli, and Eugene Stepanov. Optimal pricing policies for public transportation networks. *SIAM Journal on Optimization*, 16(3):826–853, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BPS15] **Beck:2015:CBC**
Amir Beck, Edouard Pauwels, and Shoham Sabach. The cyclic block conditional gradient method for convex optimization problems. *SIAM Journal on Optimization*, 25(4):2024–2049, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BPSF24] **Bolte:2024:DNS**
Jérôme Bolte, Edouard Pauwels, and Antonio Silveti-Falls. Differentiating nonsmooth solutions to parametric monotone inclusion problems. *SIAM Journal on Optimization*, 34(1):71–97, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [BPT97] **Bertsekas:1997:RMS**
Dimitri P. Bertsekas, Lazaros C. Polymenakos, and Paul Tseng. An ϵ -relaxation method for separable convex cost network flow problems. *SIAM Journal on Optimization*, 7(3):853–870, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28588>.
- [BQ95] **Birge:1995:SCS**
John R. Birge and Li Qun Qi. Subdifferential convergence in stochastic programs. *SIAM*

- Journal on Optimization*, 5(2): 436–453, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BQX15] Shuanghua Bai, Huo-Duo Qi, and Naihua Xiu. Constrained best Euclidean distance embedding on a sphere: a matrix optimization approach. *SIAM Journal on Optimization*, 25(1): 439–467, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR07] Regina Sandra Burachik and Alex Rubinov. Abstract convexity and augmented Lagrangians. *SIAM Journal on Optimization*, 18(2):413–436, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR08] Christoph Buchheim and Giovanni Rinaldi. Efficient reduction of polynomial zero-one optimization to the quadratic case. *SIAM Journal on Optimization*, 18(4):1398–1413, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR19a] E. Bednarczuk and K. Rutkowski. On Lipschitz-like property for polyhedral moving sets. *SIAM Journal on Optimization*, 29(4): 2504–2516, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR19b] Karima Boufi and Ahmed Roubi. Duality results and dual bundle methods based on the dual method of centers for minimax fractional programs. *SIAM Journal on Optimization*, 29(2): 1578–1602, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR21] Aykut Bulut and Ted K. Ralphs. On the complexity of inverse mixed integer linear optimization. *SIAM Journal on Optimization*, 31(4):3014–3043, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BR23a] Francis Bach and Alessandro Rudi. Exponential convergence of sum-of-squares hierarchies for trigonometric polynomials. *SIAM Journal on Optimization*, 33(3):2137–2159, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1540818>.
- [BR23b] Amir Beck and Israel Rosset. A dynamic smoothing technique for a class of non-smooth optimization problems

Bai:2015:CBE

[BR19b]

Boufi:2019:DRD**Bulut:2021:CIM****Burachik:2007:ACA**

[BR21]

Bach:2023:ECS

[BR23a]

Bednarczuk:2019:LLP**Beck:2023:DST**

[BR23b]

on manifolds. *SIAM Journal on Optimization*, 33(3):1473–1493, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1489447>.

Banert:2020:DDN

[BRA⁺20] Sebastian Banert, Axel Ringh, Jonas Adler, Johan Karlsson, and Ozan Öktem. Data-driven nonsmooth optimization. *SIAM Journal on Optimization*, 30(1):102–131, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bomze:2019:FOM

[BRB19] Immanuel M. Bomze, Francesco Rinaldi, and Samuel Rota Bulò. First-order methods for the impatient: Support identification in finite time with convergent Frank–Wolfe variants. *SIAM Journal on Optimization*, 29(3):2211–2226, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Banert:2024:AFB

[BRÖA24] Sebastian Banert, Jevgenija Rudzusika, Ozan Öktem, and Jonas Adler. Accelerated forward-backward optimization using deep learning. *SIAM Journal on Optimization*, 34(2):1236–1263, April 2024. CODEN SJOPE8. ISSN 1095-7189.

Bhardwaj:2015:DPS

[BRS15] Avinash Bhardwaj, Philipp Rostalski, and Raman Sanyal. De-

terminating polyhedrality of spectrahedra. *SIAM Journal on Optimization*, 25(3):1873–1884, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Blanchini:1997:NDP

[BRU97] Franco Blanchini, Franca Rinaldi, and Walter Ukovich. A network design problem for a distribution system with uncertain demands. *SIAM Journal on Optimization*, 7(2):560–578, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26626>.

Bomze:2020:ASC

[BRZ20] Immanuel M. Bomze, Francesco Rinaldi, and Damiano Zeffiro. Active set complexity of the away-step Frank–Wolfe algorithm. *SIAM Journal on Optimization*, 30(3):2470–2500, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Brown:1994:CTN

[BS94] Peter N. Brown and Youcef Saad. Convergence theory of nonlinear Newton–Krylov algorithms. *SIAM Journal on Optimization*, 4(2):297–330, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BS98] **Bonnans:1998:NQS** J. Frédéric Bonnans and Alexander Shapiro. Nondegeneracy and quantitative stability of parameterized optimization problems with multiple solutions. *SIAM Journal on Optimization*, 8(4): 940–946, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31651>.
- [BS15] **Bajbar:2015:CPT** Tomás Bajbar and Oliver Stein. Coercive polynomials and their Newton polytopes. *SIAM Journal on Optimization*, 25(3): 1542–1570, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BS19] **Basu:2019:CCG** Amitabh Basu and Sriram Sankaranarayanan. Can cut-generating functions be good and efficient? *SIAM Journal on Optimization*, 29(2):1190–1210, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BSR17] **Boyd:2017:ADC** Nicholas Boyd, Geoffrey Schiebinger, and Benjamin Recht. The alternating descent conditional gradient method for sparse inverse problems. *SIAM Journal on Optimization*, 27(2):616–639, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BSTV18] **Bolte:2018:FOM** Jérôme Bolte, Shoham Sabach, Marc Teboulle, and Yakov Vaisbourd. First order methods beyond convexity and Lipschitz gradient continuity with applications to quadratic inverse problems. *SIAM Journal on Optimization*, 28(3):2131–2151, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BSV14] **Bandeira:2014:CTR** A. S. Bandeira, K. Scheinberg, and L. N. Vicente. Convergence of trust-region methods based on probabilistic models. *SIAM Journal on Optimization*, 24(3): 1238–1264, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BSW23] **Bauschke:2023:SAR** Heinz H. Bauschke, Shambhavi Singh, and Xianfu Wang. The splitting algorithms by Ryu, by Malitsky-Tam, and by Campoy applied to normal cones of linear subspaces converge strongly to the projection onto the intersection. *SIAM Journal on Optimization*, 33(2): 739–765, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1483165>.
- [BT94a] **Bertsekas:1994:PPM** Dimitri P. Bertsekas and Paul Tseng. Partial proximal minimization algorithms for convex

programming. *SIAM Journal on Optimization*, 4(3):551–572, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Boggs:1994:CPC

- [BT94b] Paul T. Boggs and Jon W. Tolle. Convergence properties of a class of rank-two updates. *SIAM Journal on Optimization*, 4(2):262–287, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Burke:1996:UAH

- [BT96] James V. Burke and Paul Tseng. A unified analysis of Hoffman’s bound via Fenchel duality. *SIAM Journal on Optimization*, 6(2):265–282, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beck:2000:GOC

- [BT00a] Amir Beck and Marc Teboulle. Global optimality conditions for quadratic optimization problems with binary constraints. *SIAM Journal on Optimization*, 11(1):179–188, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33693>.

Bertsekas:2000:GCG

- [BT00b] Dimitri P. Bertsekas and John N. Tsitsiklis. Gradient convergence in gradient methods with errors. *SIAM Journal on Optimization*, 10(3):627–642, Febru-

ary/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33106>.

Baccari:2004:CNS

[BT04] Abdeljelil Baccari and Abdelhamid Trad. On the classical necessary second-order optimality conditions in the presence of equality and inequality constraints. *SIAM Journal on Optimization*, 15(2):394–408, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42122>.

Beck:2012:SFO

[BT12] Amir Beck and Marc Teboulle. Smoothing and first order methods: a unified framework. *SIAM Journal on Optimization*, 22(2):557–580, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beck:2014:CBC

- [BT14] Amir Beck and Luba Tetruashvili. On the convergence of block coordinate descent type methods. *SIAM Journal on Optimization*, 23(4):2037–2060, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Blado:2019:RAD

[BT19] Daniel Blado and Alejandro Toriello. Relaxation analysis for the dynamic knapsack problem

with stochastic item sizes. *SIAM Journal on Optimization*, 29(1):1–30, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bi:2020:DGE

[BT20] Yingjie Bi and Ao Tang. Duality gap estimation via a refined Shapley–Folkman lemma. *SIAM Journal on Optimization*, 30(2):1094–1118, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beck:2021:DRC

[BT21] Amir Beck and Marc Teboulle. Dual randomized coordinate descent method for solving a class of nonconvex problems. *SIAM Journal on Optimization*, 31(3):1877–1896, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ben-Tal:1993:NMO

[BTB93] Aharon Ben-Tal and Martin P. Bendsøe. A new method for optimal truss topology design. *SIAM Journal on Optimization*, 3(2):322–358, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Beck:2008:IMS

[BTC08] Amir Beck, Marc Teboulle, and Zahar Chikishev. Iterative minimization schemes for solving the single source localization problem. *SIAM Journal on Optimization*, 19(3):1397–1416, 2008. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Ben-Tal:1999:FMD

[BTKNZ99] A. Ben-Tal, M. Kočvara, A. Nemirovski, and J. Zowe. Free material design via semidefinite programming: The multi-load case with contact conditions. *SIAM Journal on Optimization*, 9(4):813–832, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32799>. Dedicated to John E. Dennis, Jr., on his 60th birthday.

Ben-Tal:2001:OSM

[BTMN01] Aharon Ben-Tal, Tamar Margalit, and Arkadi Nemirovski. The ordered subsets mirror descent optimization method with applications to tomography. *SIAM Journal on Optimization*, 12(1):79–108, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35456>.

Ben-Tal:1994:PRP

[BTN94] Aharon Ben-Tal and Arkadii Nemirovskii. Potential reduction polynomial time method for truss topology design. *SIAM Journal on Optimization*, 4(3):596–612, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [BTN97] **Ben-Tal:1997:RTT**
 A. Ben-Tal and A. Nemirovski. Robust truss topology design via semidefinite programming. *SIAM Journal on Optimization*, 7(4):991–1016, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29195>.
- [BTN02] **Ben-Tal:2002:TAU**
 Aharon Ben-Tal and Arkadi Nemirovski. On tractable approximations of uncertain linear matrix inequalities affected by interval uncertainty. *SIAM Journal on Optimization*, 12(3):811–833, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37475>.
- [BTNR02] **Ben-Tal:2002:RSU**
 A. Ben-Tal, A. Nemirovski, and C. Roos. Robust solutions of uncertain quadratic and conic-quadratic problems. *SIAM Journal on Optimization*, 13(2):535–560, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39235>.
- [BTT96] **Ben-Tal:1996:CDS**
 Aharon Ben-Tal and Marc Teboulle. A conjugate duality scheme generating a new class of differentiable duals. *SIAM Journal on Optimization*, 6(3):617–625, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25429>.
- [BTZ92] **Byrd:1992:SAL**
 R. H. Byrd, R. A. Tapia, and Yin Zhang. An SQP augmented Lagrangian BFGS algorithm for constrained optimization. *SIAM Journal on Optimization*, 2(2):210–241, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BTZ97] **Ben-Tal:1997:PBM**
 Aharon Ben-Tal and Michael Zibulevsky. Penalty/barrier multiplier methods for convex programming problems. *SIAM Journal on Optimization*, 7(2):347–366, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25921>.
- [BU22] **Brokate:2022:NDC**
 Martin Brokate and Michael Ulbrich. Newton differentiability of convex functions in normed spaces and of a class of operators. *SIAM Journal on Optimization*, 32(2):1265–1287, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1449531>.

- Burke:1992:RTR**
- [Bur92] James V. Burke. A robust trust region method for constrained nonlinear programming problems. *SIAM Journal on Optimization*, 2(2):325–347, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Burer:2003:SPS**
- [Bur03] Samuel Burer. Semidefinite programming in the space of partial positive semidefinite matrices. *SIAM Journal on Optimization*, 14(1):139–172, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40851>.
- Burer:2006:SLP**
- [BV06] Samuel Burer and Dieter Vandembussche. Solving lift-and-project relaxations of binary integer programs. *SIAM Journal on Optimization*, 16(3):726–750, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Bienstock:2010:PPG**
- [BV10] Daniel Bienstock and Abhinav Verma. The $N - k$ problem in power grids: New models, formulations, and numerical experiments. *SIAM Journal on Optimization*, 20(5):2352–2380, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Beck:2018:GST**
- [BV18a] Amir Beck and Yakov Vaisbourd. Globally solving the trust region subproblem using simple first-order methods. *SIAM Journal on Optimization*, 28(3):1951–1967, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Breiding:2018:RTR**
- [BV18b] Paul Breiding and Nick Vanieuwenhoven. A Riemannian trust region method for the canonical tensor rank approximation problem. *SIAM Journal on Optimization*, 28(3):2435–2465, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Breiding:2021:CNR**
- [BV21] Paul Breiding and Nick Vanieuwenhoven. The condition number of Riemannian approximation problems. *SIAM Journal on Optimization*, 31(1):1049–1077, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Billups:2002:POH**
- [BW02] Stephen C. Billups and Layne T. Watson. A probability-one homotopy algorithm for nonsmooth equations and mixed complementarity problems. *SIAM Journal on Optimization*, 12(3):606–626, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL [http:](http://)

[//epubs.siam.org/sam-bin/dbq/article/37758](http://epubs.siam.org/sam-bin/dbq/article/37758).

Bot:2005:FTR

- [BW05] Radu Ioan Bot and Gert Wanka. Farkas-type results with conjugate functions. *SIAM Journal on Optimization*, 15(2):540–554, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60233>.

Borwein:2007:ADM

- [BW07] Jonathan Borwein and Herre Wiersma. Asplund decomposition of monotone operators. *SIAM Journal on Optimization*, 18(3):946–960, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2012:FPA

- [BWW12] Heinz H. Bauschke, Xianfu Wang, and Calvin J. S. Wylie. Fixed points of averages of resolvents: Geometry and algorithms. *SIAM Journal on Optimization*, 22(1):24–40, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p24_s1.

Bauschke:2015:SP

- [BWWX15] Heinz H. Bauschke, Caifang Wang, Xianfu Wang, and Jia Xu. On subgradient projectors. *SIAM Journal on Optimization*, 25(2):1064–1082, 2015.

CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bauschke:2010:BWD

- [BWY10] Heinz H. Bauschke, Xianfu Wang, and Liangjin Yao. On Borwein–Wiersma decompositions of monotone linear relations. *SIAM Journal on Optimization*, 20(5):2636–2652, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Bertsekas:2011:UPA

- [BY11] Dimitri P. Bertsekas and Huizhen Yu. A unifying polyhedral approximation framework for convex optimization. *SIAM Journal on Optimization*, 21(1):333–360, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p333_s1.

Benson:2000:SLS

- [BYZ00] Steven J. Benson, Yinyu Ye, and Xiong Zhang. Solving large-scale sparse semidefinite programs for combinatorial optimization. *SIAM Journal on Optimization*, 10(2):443–461, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32800>.

- [BYZ19] **Bai:2019:DQS** Kuang Bai, Jane J. Ye, and Jin Zhang. Directional quasi-pseudo-normality as sufficient conditions for metric subregularity. *SIAM Journal on Optimization*, 29(4):2625–2649, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [BZ04] **Bienstock:2004:SAL** Daniel Bienstock and Mark Zuckerberg. Subset algebra lift operators for 0-1 integer programming. *SIAM Journal on Optimization*, 15(1):63–95, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42034>.
- [BZ08] **Birge:2008:SLA** John R. Birge and Gongyun Zhao. Successive linear approximation solution of infinite-horizon dynamic stochastic programs. *SIAM Journal on Optimization*, 18(4):1165–1186, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Cab05] **Cabot:2005:PPA** Alexandre Cabot. Proximal point algorithm controlled by a slowly vanishing term: Applications to hierarchical minimization. *SIAM Journal on Optimization*, 15(2):555–572, 2005. CODEN SJOPE8.
- [CAFO24] **Castera:2024:CNL** Camille Castera, Hedy Attouch, Jalal Fadili, and Peter Ochs. Continuous Newton-like methods featuring inertia and variable mass. *SIAM Journal on Optimization*, 34(1):251–277, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [Cal07] **Calafiore:2007:ARM** Giuseppe C. Calafiore. Ambiguous risk measures and optimal robust portfolios. *SIAM Journal on Optimization*, 18(3):853–877, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Cal10] **Calafiore:2010:RCP** Giuseppe Carlo Calafiore. Random convex programs. *SIAM Journal on Optimization*, 20(6):3427–3464, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3427_s1.
- [Cap02] **Caprara:2002:ABW** Alberto Caprara. Additive bounding, worst-case analysis, and the breakpoint median problem. *SIAM Journal on Optimization*, 13(2):508–519, September/October 2002. CODEN SJOPE8. ISSN 1052-6234

(print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/38484>.

Carrier:2022:LCM

[Car22] Guillaume Carrier. On the linear convergence of the multi-marginal Sinkhorn algorithm. *SIAM Journal on Optimization*, 32(2):786–794, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1410634>.

Carrier:2023:FYI

[Car23] Guillaume Carrier. Fenchel–Young inequality with a remainder and applications to convex duality and optimal transport. *SIAM Journal on Optimization*, 33(3):1463–1472, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M150839X>.

Castro:2000:SIP

[Cas00] Jordi Castro. A specialized interior-point algorithm for multicommodity network flows. *SIAM Journal on Optimization*, 10(3):852–877, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34187>.

Castillo:2000:CBA

[CB00] Ileana Castillo and Earl R. Barnes. Chaotic behavior of the

affine scaling algorithm for linear programming. *SIAM Journal on Optimization*, 11(3):781–795, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31407>.

Chen:2014:FOS

[CB14] Jieqiu Chen and Samuel Burer. A first-order smoothing technique for a class of large-scale linear programs. *SIAM Journal on Optimization*, 24(2):598–620, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chernyavsky:2023:CRI

[CBFG23] Alexander Chernyavsky, Jason J. Bramburger, Giovanni Fantuzzi, and David Goluskin. Convex relaxations of integral variational problems: Pointwise dual relaxation and sum-of-squares optimization. *SIAM Journal on Optimization*, 33(2):481–512, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1455127>.

Chapeau-Blondeau:1997:DAR

[CBJF97] François Chapeau-Blondeau, Fabrice Janez, and Jean-Louis Ferrier. A dynamic adaptive relaxation scheme applied to the Euclidean Steiner minimal tree problem. *SIAM Journal on Optimization*, 7(4):1037–1053, November 1997. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27506>.
- [CBP24] Alejandro Carderera, Mathieu Besançon, and Sebastian Pokutta. Scalable Frank–Wolfe on generalized self-concordant functions via simple steps. *SIAM Journal on Optimization*, 34(3):2231–2258, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1616789>.
- [CC02] R. Cominetti and M. Courdurier. Coupling general penalty schemes for convex programming with the steepest descent and the proximal point algorithm. *SIAM Journal on Optimization*, 13(3):745–765, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CC14] **Carderera:2024:SFW** Dennis Cheung and Felipe Cucker. On the average condition of random linear programs. *SIAM Journal on Optimization*, 23(2):799–810, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39724>.
- [CC18] **Candogan:2018:FPS** Utkan Onur Candogan and Venkat Chandrasekaran. Finding planted subgraphs with few eigenvalues using the Schur–Horn relaxation. *SIAM Journal on Optimization*, 28(1):735–759, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CC19] **Calatroni:2019:BSA** Luca Calatroni and Antonin Chambolle. Backtracking strategies for accelerated descent methods with smooth composite objectives. *SIAM Journal on Optimization*, 29(3):1772–1798, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CCD24] **Carpentier:2024:TCM** Pierre Carpentier, Jean-Philippe Chancelier, and Michel De Lara. Time consistency for multistage stochastic optimization problems under constraints in expectation. *SIAM Journal on Optimization*, 34(2):
- [CC99] **Chen:1999:GLS** Bintong Chen and Xiaojun Chen. A global and local super-linear continuation-smoothing method for P_0 and R_0 NCP or monotone NCP. *SIAM Journal on Optimization*, 9(3):624–645, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32110>.

- 1909–1936, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M151830X>. [CCL09]
- Chen:2020:NMC**
- [CCF+20] Yuxin Chen, Yuejie Chi, Jianqing Fan, Cong Ma, and Yuling Yan. Noisy matrix completion: Understanding statistical guarantees for convex relaxation via nonconvex optimization. *SIAM Journal on Optimization*, 30(4):3098–3121, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cantone:2005:EAA**
- [CCFP05] D. Cantone, G. Cincotti, A. Ferro, and A. Pulvirenti. An efficient approximate algorithm for the 1-median problem in metric spaces. *SIAM Journal on Optimization*, 16(2):434–451, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42474>.
- Cheung:2005:TDM**
- [CCH05] Dennis Cheung, Felipe Cucker, and Raphael Hauser. Tail decay and moment estimates of a condition number for random linear conic systems. *SIAM Journal on Optimization*, 15(4):1237–1261, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43470>.
- Carpentier:2009:ASO**
- Pierre Carpentier, Jean-Philippe Chancelier, and Michel De Lara. Approximations of stochastic optimization problems subject to measurability constraints. *SIAM Journal on Optimization*, 19(4):1719–1734, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Caprara:2014:SCC**
- [CCLW14] Alberto Caprara, Margarida Carvalho, Andrea Lodi, and Gerhard J. Woeginger. A study on the computational complexity of the bilevel knapsack problem. *SIAM Journal on Optimization*, 24(2):823–838, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Caruso:2020:IAB**
- [CCM20] Francesco Caruso, Maria Carmela Ceparano, and Jacqueline Morgan. An inverse-adjusted best response algorithm for Nash equilibria. *SIAM Journal on Optimization*, 30(2):1638–1663, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Caruso:2023:ARB**
- [CCM23] Francesco Caruso, Maria Carmela Ceparano, and Jacqueline Morgan. Affine relaxations of the best response algorithm: Global convergence in ratio-bounded games. *SIAM Journal on Optimization*, 33(3):

- 1914–1942, ????. 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M140612X>. [CCR17]
- Chen:2017:RSA**
- Tianyi Chen, Frank E. Curtis, and Daniel P. Robinson. A reduced-space algorithm for minimizing ℓ_1 -regularized convex functions. *SIAM Journal on Optimization*, 27(3):1583–1610, ????. 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cheng:2018:DRO**
- [CCN⁺18] Jianqiang Cheng, Richard Li-Yang Chen, Habib N. Najm, Ali Pinar, Cosmin Safta, and Jean-Paul Watson. Distributionally robust optimization with principal component analysis. *SIAM Journal on Optimization*, 28(2):1817–1841, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cai:2010:SVT**
- [CCS10] Jian-Feng Cai, Emmanuel J. Candès, and Zuowei Shen. A singular value thresholding algorithm for matrix completion. *SIAM Journal on Optimization*, 20(4):1956–1982, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cheung:2008:CNM**
- [CCP08] Dennis Cheung, Felipe Cucker, and Javier Peña. A condition number for multifold conic systems. *SIAM Journal on Optimization*, 19(1):261–280, ????. 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cheung:2021:PSA**
- [CCT21] Yun Kuen Cheung, Richard J. Cole, and Yixin Tao. Parallel stochastic asynchronous coordinate descent: Tight bounds on the possible parallelism. *SIAM Journal on Optimization*, 31(1):448–460, ????. 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Camacho:2022:CHC**
- [CCP22] J. Camacho, M. J. Cánovas, and J. Parra. From calmness to Hoffman constants for linear semi-infinite inequality systems. *SIAM Journal on Optimization*, 32(4):2859–2878, ????. 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1418228>. [CD92]
- Chalifour:1992:ODL**
- [CD92] Alain Chalifour and Michel C. Delfour. Optimal distribution of larvicide in running waters. *SIAM Journal on Optimization*, 2(2):264–303, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [CD00] **Campa:2000:SCN** Ines Campa and Marco Degiovanni. Subdifferential calculus and nonsmooth critical point theory. *SIAM Journal on Optimization*, 10(4):1020–1048, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35316>.
- [CDL14] **Cheng:2014:DRS** Jianqiang Cheng, Erick Delage, and Abdel Lisser. Distributionally robust stochastic knapsack problem. *SIAM Journal on Optimization*, 24(3):1485–1506, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CD19] **Carmon:2019:GDF** Yair Carmon and John Duchi. Gradient descent finds the cubic-regularized nonconvex Newton step. *SIAM Journal on Optimization*, 29(3):2146–2178, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CDL16] **Carja:2016:GSS** O. Cârja, T. Donchev, and A. I. Lazû. Generalized solutions of semilinear evolution inclusions. *SIAM Journal on Optimization*, 26(2):1365–1378, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CDF⁺94] **Cramer:1994:PFM** Evin J. Cramer, J. E. Dennis, Jr., Paul D. Frank, Robert Michael Lewis, and Gregory R. Shubin. Problem formulation for multidisciplinary optimization. *SIAM Journal on Optimization*, 4(4):754–776, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CdIRT08] **Casas:2008:SSO** Eduardo Casas, Juan Carlos de los Reyes, and Fredi Tröltzsch. Sufficient second-order optimality conditions for semilinear control problems with pointwise state constraints. *SIAM Journal on Optimization*, 19(2):616–643, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CDHS18] **Carmon:2018:AMN** Yair Carmon, John C. Duchi, Oliver Hinder, and Aaron Sidford. Accelerated methods for NonConvex optimization. *SIAM Journal on Optimization*, 28(2):1751–1772, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CDM20] **Christof:2020:NTR** Constantin Christof, Juan Carlos De los Reyes, and Christian Meyer. A nonsmooth trust-region method for locally Lipschitz functions with application to optimization problems constrained by variational inequalities. *SIAM Journal on Optimization*, 30(3):2163–2196,

???? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Curtis:2022:SAM

[CDR22] Frank E. Curtis, Yutong Dai, and Daniel P. Robinson. A subspace acceleration method for minimization involving a group sparsity-inducing regularizer. *SIAM Journal on Optimization*, 32(2):545–572, ????. 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1411111>.

Cui:2017:QGC

[CDZ17] Ying Cui, Chao Ding, and Xinyuan Zhao. Quadratic growth conditions for convex matrix optimization problems associated with spectral functions. *SIAM Journal on Optimization*, 27(4):2332–2355, ????. 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cegielski:2015:AQN

[Ceg15] Andrzej Cegielski. Application of quasi-nonexpansive operators to an iterative method for variational inequality. *SIAM Journal on Optimization*, 25(4):2165–2181, ????. 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cellina:2007:UCR

[Cel07] A. Cellina. Uniqueness and comparison results for functionals depending on ∇u and on u .

SIAM Journal on Optimization, 18(3):711–716, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chambolle:2018:SPD

[CERS18] Antonin Chambolle, Matthias J. Ehrhardt, Peter Richtárik, and Carola-Bibiane Schönlieb. Stochastic primal-dual hybrid gradient algorithm with arbitrary sampling and imaging applications. *SIAM Journal on Optimization*, 28(4):2783–2808, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cohn:1999:SAS

[CF99] Harry Cohn and Mark Fielding. Simulated annealing: Searching for an optimal temperature schedule. *SIAM Journal on Optimization*, 9(3):779–802, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32968>.

Chen:2001:FFT

[CF01] Qun Chen and Michael C. Ferris. FATCOP: a fault tolerant Condor-PVM mixed integer programming solver. *SIAM Journal on Optimization*, 11(4):1019–1036, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35391>.

- [CG08] **Campi:2008:EFR** M. C. Campi and S. Garatti. The exact feasibility of randomized solutions of uncertain convex programs. *SIAM Journal on Optimization*, 19(3):1211–1230, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CG17] **Combettes:2017:QNI** Patrick L. Combettes and Lilian E. Glaudin. Quasi-nonexpansive iterations on the affine hull of orbits: From Mann’s mean value algorithm to inertial methods. *SIAM Journal on Optimization*, 27(4):2356–2380, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CGC15] **Care:2015:SMM** A. Carè, S. Garatti, and M. C. Campi. Scenario min-max optimization and the risk of empirical costs. *SIAM Journal on Optimization*, 25(4):2061–2080, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CGO22] **Carlsson:2022:UAL** Marcus Carlsson, Daniele Gerosa, and Carl Olsson. An unbiased approach to low rank recovery. *SIAM Journal on Optimization*, 32(4):2969–2996, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1294800>.
- [CGRV21a] **Calandra:2021:HOM** Henri Calandra, Serge Gratton, Elisa Riccietti, and Xavier Vasseur. On high-order multilevel optimization strategies. *SIAM Journal on Optimization*, 31(1):307–330, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CGRV21b] **Calatroni:2021:AIR** Luca Calatroni, Guillaume Garrigos, Lorenzo Rosasco, and Silvia Villa. Accelerated iterative regularization via dual diagonal descent. *SIAM Journal on Optimization*, 31(1):754–784, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CGST93] **Conn:1993:GCC** A. R. Conn, Nick Gould, A. Sartenaer, and Ph. L. Toint. Global convergence of a class of trust region algorithms for optimization using inexact projections on convex constraints. *SIAM Journal on Optimization*, 3(1):164–221, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CGST96a] **Conn:1996:CPA** A. R. Conn, N. Gould, A. Sartenaer, and Ph. L. Toint. Convergence properties of an augmented Lagrangian algorithm for optimization with a combination of general equality and linear constraints. *SIAM*

- Journal on Optimization*, 6(3): 674–703, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25146>. [CGT11]
- Conn:1996:CPM**
- [CGST96b] A. R. Conn, Nick Gould, A. Sartenaer, and Ph. L. Toint. Convergence properties of minimization algorithms for convex constraints using a structured trust region. *SIAM Journal on Optimization*, 6(4):1059–1086, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/23648>. [CGT12]
- Cartis:2010:CSD**
- [CGT10a] C. Cartis, N. I. M. Gould, and Ph. L. Toint. On the complexity of steepest descent, Newton’s and regularized Newton’s methods for nonconvex unconstrained optimization problems. *SIAM Journal on Optimization*, 20(6): 2833–2852, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Correa:2010:VLL**
- [CGT10b] Rafael Correa, Pedro Gajardo, and Lionel Thibault. Various Lipschitz-like properties for functions and sets I: Directional derivative and tangential characterizations. *SIAM Journal on Optimization*, 20(4):1766–1785, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cartis:2011:ECC**
- Coralia Cartis, Nicholas I. M. Gould, and Philippe L. Toint. On the evaluation complexity of composite function minimization with applications to non-convex nonlinear programming. *SIAM Journal on Optimization*, 21(4):1721–1739, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1721_s1.
- Cartis:2012:OCF**
- Coralia Cartis, Nicholas I. M. Gould, and Philippe L. Toint. On the oracle complexity of first-order and derivative-free algorithms for smooth non-convex minimization. *SIAM Journal on Optimization*, 22(1):66–86, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p66_s1.
- Cartis:2014:ECC**
- [CGT14] Coralía Cartis, Nicholas I. M. Gould, and Philippe L. Toint. On the evaluation complexity of cubic regularization methods for potentially rank-deficient nonlinear least-squares problems and its relevance to constrained nonlinear optimization. *SIAM Journal on Optimization*, 23(3):

1553–1574, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cartis:2019:URM

- [CGT19] Coralia Cartis, Nick I. Gould, and Philippe L. Toint. Universal regularization methods: Varying the power, the smoothness and the accuracy. *SIAM Journal on Optimization*, 29(1):595–615, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CH93b]

Cartis:2020:SWC

- [CGT20] Coralia Cartis, Nicholas I. M. Gould, and Philippe L. Toint. Sharp worst-case evaluation complexity bounds for arbitrary-order nonconvex optimization with inexpensive constraints. *SIAM Journal on Optimization*, 30(1):513–541, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CH94]

Correa:2014:EMD

- [CGTZ14] R. Correa, P. Gajardo, L. Thibault, and D. Zagrodny. Existence of minimizers on drops. *SIAM Journal on Optimization*, 23(2):1154–1166, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CH97]

Chen:1993:NCM

- [CH93a] Bintong Chen and Patrick T. Harker. A noninterior continuation method for quadratic and linear programming. *SIAM Journal on Optimization*, 3(3):

503–515, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Coleman:1993:GSC

Thomas F. Coleman and Laurie A. Hulbert. A globally and superlinearly convergent algorithm for convex quadratic programs with simple bounds. *SIAM Journal on Optimization*, 3(2):298–321, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Crouzeix:1994:QSO

J.-P. Crouzeix and A. Hassouni. Quasimonotonicity of separable operators and monotonicity indices. *SIAM Journal on Optimization*, 4(3):649–658, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:1997:SAN

Bintong Chen and Patrick T. Harker. Smooth approximations to nonlinear complementarity problems. *SIAM Journal on Optimization*, 7(2):403–420, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28061>.

Censor:2002:BIA

Yair Censor and Gabor T. Herman. Block-iterative algorithms with underrelaxed Bregman projections. *SIAM Journal on Optimization*, 13(1):283–

- 297, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38943>.
- [CH09] Maria B. Chiarolla and Ulrich G. Haussmann. Multivariable utility functions. *SIAM Journal on Optimization*, 19(4):1511–1533, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CH13] Rafael Correa and Abderrahim Hantoute. Lower semicontinuous convex relaxation in optimization. *SIAM Journal on Optimization*, 23(1):54–73, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CH15] C. B. Chua and L. T. K. Hien. A superlinearly convergent smoothing Newton continuation algorithm for variational inequalities over definable sets. *SIAM Journal on Optimization*, 25(2):1034–1063, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CH16] Frank E. Curtis and Zheng Han. Globally convergent primal-dual active-set methods with inexact subproblem solves. *SIAM Journal on Optimization*, 26(4):2261–2283, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CH17] Maria B. Chiarolla and Ulrich G. Haussmann. Computation of graphical derivative for a class of normal cone mappings under a very weak condition. *SIAM Journal on Optimization*, 27(1):190–204, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Cha02] T. Champion. Tubularity and asymptotic convergence of penalty trajectories in convex programming. *SIAM Journal on Optimization*, 13(1):212–227, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38477>.
- [Che01] Victoria C. P. Chen. Measuring the goodness of orthogonal array discretizations for stochastic programming and stochastic dynamic programming. *SIAM Journal on Optimization*, 12(2):322–344, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33240>.

- Cheung:2005:LSL**
- [Che05] Kevin K. H. Cheung. On Lovász–Schrijver lift-and-project procedures on the Dantzig–Fulkerson–Johnson relaxation of the TSP. *SIAM Journal on Optimization*, 16(2): 380–399, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60584>.
- Chen:2015:OCM**
- [Che15] Wei Chen. Optimality conditions for the minimization of quadratic 0–1 problems. *SIAM Journal on Optimization*, 25(3): 1717–1731, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Correa:2016:TSS**
- [CHL16] R. Correa, A. Hantoute, and M. A. López. Towards supremum-sum subdifferential calculus free of qualification conditions. *SIAM Journal on Optimization*, 26(4):2219–2234, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Correa:2019:MRT**
- [CHLC19] Rafael Correa, Abderrahim Hantoute, and Marco A. López-Cerdá. Moreau–Rockafellar-Type formulas for the subdifferential of the supremum function. *SIAM Journal on Optimization*, 29(2):1106–1130, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Chen:2012:MBI**
- [CHLZ12] Bilian Chen, Simai He, Zhenying Li, and Shuzhong Zhang. Maximum block improvement and polynomial optimization. *SIAM Journal on Optimization*, 22(1):87–107, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p87_s1.
- Chen:2017:NCN**
- [CHLZ17] Bilian Chen, Simai He, Zhening Li, and Shuzhong Zhang. On new classes of nonnegative symmetric tensors. *SIAM Journal on Optimization*, 27(1):292–318, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Chieu:2018:CTS**
- [CHN18] Nguyen Huy Chieu, Le Van Hien, and Tran T. A. Nghia. Characterization of tilt stability via subgradient graphical derivative with applications to nonlinear programming. *SIAM Journal on Optimization*, 28(3): 2246–2273, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Chieu:2021:QGS**
- [CHNT21] Nguyen Huy Chieu, Le Van Hien, Tran T. A. Nghia, and Ha Anh Tuan. Quadratic growth and strong metric subregularity

of the subdifferential via subgradient graphical derivative. *SIAM Journal on Optimization*, 31(1): 545–568, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Conti:2009:SOU

[CHP⁺09] Sergio Conti, Harald Held, Martin Pach, Martin Rumpf, and Rüdiger Schultz. Shape optimization under uncertainty — a stochastic programming perspective. *SIAM Journal on Optimization*, 19(4):1610–1632, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cui:2020:MNO

[CHP20] Ying Cui, Ziyu He, and Jong-Shi Pang. MultiComposite non-convex optimization for training deep neural networks. *SIAM Journal on Optimization*, 30(2): 1693–1723, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Correa:2016:KSR

[CHPA16] Rafael Correa, Abderrahim Hantoute, and Pedro Pérez-Aros. On the Klee–Saint Raymond’s characterization of convexity. *SIAM Journal on Optimization*, 26(2):1312–1321, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Christof:2020:GBS

[Chr20] Constantin Christof. Gradient-based solution algorithms for a

class of bilevel optimization and optimal control problems with a nonsmooth lower level. *SIAM Journal on Optimization*, 30(1): 290–318, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Camino:2006:SMI

[CHS06] Juan F. Camino, J. William Helton, and Robert E. Skelton. Solving matrix inequalities whose unknowns are matrices. *SIAM Journal on Optimization*, 17(1):1–36, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cayci:2024:CER

[CHS24] Semih Cayci, Niao He, and R. Srikant. Convergence of entropy-regularized natural policy gradient with linear function approximation. *SIAM Journal on Optimization*, 34(3): 2729–2755, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1540156>.

Chua:2003:RHC

[Chu03] Chek Beng Chua. Relating homogeneous cones and positive definite cones via T -algebras. *SIAM Journal on Optimization*, 14(2):500–506, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Chu06] **Chua:2006:NNW**
Chek Beng Chua. A new notion of weighted centers for semidefinite programming. *SIAM Journal on Optimization*, 16(4): 1092–1109, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu09] **Chua:2009:AAP**
Chek Beng Chua. A T -algebraic approach to primal-dual interior-point algorithms. *SIAM Journal on Optimization*, 20(1):503–523, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu16] **Chubanov:2016:PTD**
Sergei Chubanov. A polynomial-time descent method for separable convex optimization problems with linear constraints. *SIAM Journal on Optimization*, 26(1):856–889, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu18] **Chuong:2018:LMI**
Thai Doan Chuong. Linear matrix inequality conditions and duality for a class of robust multiobjective convex polynomial programs. *SIAM Journal on Optimization*, 28(3):2466–2488, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu20] **Chuong:2020:ROD**
Thai Doan Chuong. Robust optimality and duality in multiobjective optimization problems under data uncertainty. *SIAM Journal on Optimization*, 30(2): 1501–1526, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu21a] **Chubanov:2021:GSM**
Sergei Chubanov. A generalized simplex method for integer problems given by verification oracles. *SIAM Journal on Optimization*, 31(1):686–701, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Chu21b] **Chubanov:2021:MAC**
Sergei Chubanov. Method of alternating contractions and its applications to some convex optimization problems. *SIAM Journal on Optimization*, 31(3): 1947–1970, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CHW12] **Casas:2012:OCE**
Eduardo Casas, Roland Herzog, and Gerd Wachsmuth. Optimality conditions and error analysis of semilinear elliptic control problems with L^1 cost functional. *SIAM Journal on Optimization*, 22(3):795–820, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CHY10] **Chuong:2010:SMF**
Thai Doan Chuong, Nguyen Quang Huy, and Jen-Chih Yao. Subdifferentials of marginal functions in semi-infinite programming.

- SIAM Journal on Optimization*, 20(3):1462–1477, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CJ18] Zhiping Chen and Jie Jiang. Stability analysis of optimization problems with k th order stochastic and distributionally robust dominance constraints induced by full random recourse. *SIAM Journal on Optimization*, 28(2):1396–1419, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CJK98] T. C. Edwin Cheng, Adam Janiak, and Mikhail Y. Kovalyov. Bicriterion single machine scheduling with resource dependent processing times. *SIAM Journal on Optimization*, 8(2):617–630, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28819>.
- [CJR14] Frank E. Curtis, Travis C. Johnson, Daniel P. Robinson, and Andreas Wächter. An inexact sequential quadratic optimization algorithm for nonlinear optimization. *SIAM Journal on Optimization*, 24(3):1041–1074, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CJSY07] Michael W. Carter, Holly H. Jin, Michael A. Saunders, and Yinyu Ye. SpaseLoc: An adaptive subproblem algorithm for scalable wireless sensor network localization. *SIAM Journal on Optimization*, 17(4):1102–1128, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CK99] T. D. Choi and C. T. Kelley. Estimates for the Nash–Sofer preconditioner for the reduced Hessian for some elliptic variational inequalities. *SIAM Journal on Optimization*, 9(2):327–341, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32336>.
- [CK00] T. D. Choi and C. T. Kelley. Superlinear convergence and implicit filtering. *SIAM Journal on Optimization*, 10(4):1149–1162, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35409>.
- [CKL97] T. C. Edwin Cheng, Mikhail Y. Kovalyov, and Bertrand M.-T. Lin. Single machine scheduling to minimize batch delivery and job earliness penalties.

SIAM Journal on Optimization, 7(2):547–559, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26954>.

Canovas:2014:CML

- [CKL+14] M. J. Cánovas, A. Y. Kruger, M. A. López, J. Parra, and M. A. Théra. Calmness modulus of linear semi-infinite programs. *SIAM Journal on Optimization*, 24(1):29–48, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Canovas:2007:MRC

- [CKLP07] M. J. Cánovas, D. Klatte, M. A. López, and J. Parra. Metric regularity in convex semi-infinite optimization under canonical perturbations. *SIAM Journal on Optimization*, 18(3):717–732, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Caprara:2000:MSS

- [CKP00] Alberto Caprara, Hans Kellerer, and Ulrich Pferschy. The multiple subset sum problem. *SIAM Journal on Optimization*, 11(2):308–319, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34848>.

Cafuta:2012:CPO

- [CKP12] Kristijan Cafuta, Igor Klep, and Janez Povh. Constrained poly-

nomial optimization problems with noncommuting variables. *SIAM Journal on Optimization*, 22(2):363–383, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chaudhury:2015:GRM

- [CKS15] K. N. Chaudhury, Y. Khoo, and A. Singer. Global registration of multiple point clouds using semidefinite programming. *SIAM Journal on Optimization*, 25(1):468–501, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Claus:2017:WCR

- [CKS17] M. Claus, V. Krätschmer, and R. Schultz. Weak continuity of risk functionals with applications to stochastic programming. *SIAM Journal on Optimization*, 27(1):91–109, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Conn:1992:SEA

- [CL92] Andrew R. Conn and Yuying Li. A structure-exploiting algorithm for nonlinear minimax problems. *SIAM Journal on Optimization*, 2(2):242–263, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Coleman:1996:ITR

- [CL96a] Thomas F. Coleman and Yuying Li. An interior trust region approach for nonlinear minimization subject to bounds. *SIAM Journal on Optimization*,

6(2):418–445, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Coleman:1996:RNM

- [CL96b] Thomas F. Coleman and Yuying Li. A reflective Newton method for minimizing a quadratic function subject to bounds on some of the variables. *SIAM Journal on Optimization*, 6(4):1040–1058, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24045>.

Chua:2014:BBS

- [CL14] Chek Beng Chua and Zhen Li. A barrier-based smoothing proximal point algorithm for NCPs over closed convex cones. *SIAM Journal on Optimization*, 23(2):745–769, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Consolini:2023:SFB

- [CL23] Luca Consolini and Marco Locatelli. Sharp and fast bounds for the Celis–Dennis–Tapia problem. *SIAM Journal on Optimization*, 33(2):868–898, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M144548X>.

Chen:2023:GCR

- [CLL23] Ziang Chen, Yingzhou Li, and Jianfeng Lu. On the global

convergence of randomized coordinate gradient descent for nonconvex optimization. *SIAM Journal on Optimization*, 33(2):713–738, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1460375>.

Canovas:2010:VASa

- [CLMP10a] M. J. Cánovas, M. A. López, B. S. Mordukhovich, and J. Parra. Variational analysis in semi-infinite and infinite programming, I: Stability of linear inequality systems of feasible solutions. *SIAM Journal on Optimization*, 20(3):1504–1526, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Canovas:2010:VASb

- [CLMP10b] M. J. Cánovas, M. A. López, B. S. Mordukhovich, and J. Parra. Variational analysis in semi-infinite and infinite programming, II: Necessary optimality conditions. *SIAM Journal on Optimization*, 20(6):2788–2806, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Carpenter:1993:HOP

- [CLMS93] Tamra J. Carpenter, Irvin J. Lustig, John M. Mulvey, and David F. Shanno. Higher-order predictor-corrector interior point methods with application to quadratic objectives. *SIAM Journal on Optimization*,

3(4):696–725, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2014:OPD

[CLO14] Yunmei Chen, Guanghui Lan, and Yuyuan Ouyang. Optimal primal-dual methods for a class of saddle point problems. *SIAM Journal on Optimization*, 24(4):1779–1814, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2016:PMC

[CLP16] Xiaojun Chen, Zhaosong Lu, and Ting Kei Pong. Penalty methods for a class of non-Lipschitz optimization problems. *SIAM Journal on Optimization*, 26(3):1465–1492, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Correa:2021:NSO

[CLPA21] Rafael Correa, M. A. López, and Pedro Pérez-Aros. Necessary and sufficient optimality conditions in DC semi-infinite programming. *SIAM Journal on Optimization*, 31(1):837–865, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Canovas:1999:SWP

[CLPT99] M. J. Cánovas, M. A. López, J. Parra, and M. I. Todorov. Stability and well-posedness in linear semi-infinite programming. *SIAM Journal on Op-*

timization, 10(1):82–98, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31986>.

Canovas:2006:DSU

[CLPT06] M. J. Cánovas, M. A. López, J. Parra, and F. J. Toledo. Distance to solvability/unsolvability in linear optimization. *SIAM Journal on Optimization*, 16(3):629–649, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2022:SAM

[CLYZ22] Lin Chen, Yongchao Liu, Xinmin Yang, and Jin Zhang. Stochastic approximation methods for the two-stage stochastic linear complementarity problem. *SIAM Journal on Optimization*, 32(3):2129–2155, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1375796>.

Casini:2010:GSM

[CM10] E. Casini and E. Miglierina. The geometry of strict maximality. *SIAM Journal on Optimization*, 20(6):3146–3160, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2011:SCD

[CM11] Michael Chen and Sanjay Mehrotra. Self-concordance

- and decomposition-based interior point methods for the two-stage stochastic convex optimization problem. *SIAM Journal on Optimization*, 21(4):1667–1687, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1667_s1. [CM21]
- Censor:2016:NDR**
- [CM16] Yair Censor and Rafiq Mansour. New Douglas–Rachford algorithmic structures and their convergence analyses. *SIAM Journal on Optimization*, 26(1):474–487, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CM22]
- Chan:2017:SCR**
- [CM17] Timothy C. Y. Chan and Philip Allen Mar. Stability and continuity in robust optimization. *SIAM Journal on Optimization*, 27(2):817–841, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CM24]
- Casas:2020:CCS**
- [CM20] Eduardo Casas and Mariano Mateos. Critical cones for sufficient second order conditions in PDE constrained optimization. *SIAM Journal on Optimization*, 30(1):585–603, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See corrigendum [CM22].
- Cheng:2021:OGT**
- Sheng Cheng and Nuno C. Martins. An optimality gap test for a semidefinite relaxation of a quadratic program with two quadratic constraints. *SIAM Journal on Optimization*, 31(1):866–886, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Casas:2022:CCC**
- Eduardo Casas and Mariano Mateos. Corrigendum: Critical cones for sufficient second order conditions in PDE constrained optimization. *SIAM Journal on Optimization*, 32(1):319–320, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1466839>. See [CM20].
- Chen:2024:SRM**
- [CM24] Wenyu Chen and Rahul Mazumder. Subgradient regularized multivariate convex regression at scale. *SIAM Journal on Optimization*, 34(3):2350–2377, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1413134>.
- Chen:2020:PGM**
- [CMSZ20] Shixiang Chen, Shiqian Ma, Anthony Man-Cho So, and Tong Zhang. Proximal gradient method for nonsmooth optimization over the Stiefel man-

- ifold. *SIAM Journal on Optimization*, 30(1):210–239, ????. 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CMV19] Christian Clason, Stanislav Mazurenko, and Tuomo Valkonen. Acceleration and global convergence of a first-order primal-dual method for nonconvex problems. *SIAM Journal on Optimization*, 29(1):933–963, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CMY15] Caihua Chen, Shiqian Ma, and Junfeng Yang. A general inertial proximal point algorithm for mixed variational inequality problem. *SIAM Journal on Optimization*, 25(4):2120–2142, ????. 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CMYZ22] HanQin Cai, Daniel McKenzie, Wotao Yin, and Zhenliang Zhang. Zeroth-order regularized optimization (ZORO): Approximately sparse gradients and adaptive sampling. *SIAM Journal on Optimization*, 32(2):687–714, ????. 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1392966>.
- [CN17] Jordi Castro and Stefano Nasini. On geometrical properties of preconditioners in IPMs for classes of block-angular problems. *SIAM Journal on Optimization*, 27(3):1666–1693, ????. 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CN23] Flavia Chorobura and Ion Necoara. Random coordinate descent methods for nonseparable composite optimization. *SIAM Journal on Optimization*, 33(3):2160–2190, ????. 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M148700X>.
- [CNQ97] Xiaojun Chen, Zuhair Nashed, and Liqun Qi. Convergence of Newton’s method for singular

- smooth and nonsmooth equations using adaptive outer inverses. *SIAM Journal on Optimization*, 7(2):445–462, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24628>.
- [CNW10] Frank E. Curtis, Jorge Nocedal, and Andreas Wächter. A matrix-free algorithm for equality constrained optimization problems with rank-deficient Jacobians. *SIAM Journal on Optimization*, 20(3):1224–1249, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CNY14] Xiaojun Chen, Lingfeng Niu, and Yaxiang Yuan. Optimality conditions and a smoothing trust region Newton method for NonLipschitz optimization. *SIAM Journal on Optimization*, 23(3):1528–1552, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CO12a] Z. Coulibaly and D. Orban. An ℓ_1 elastic interior-point method for mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 22(1):187–211, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CO12b] Frank E. Curtis and Michael L. Overton. A sequential quadratic programming algorithm for non-convex, nonsmooth constrained optimization. *SIAM Journal on Optimization*, 22(2):474–500, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CODL22] Martina Cerulli, Antoine Oustry, Claudia D’Ambrosio, and Leo Liberti. Convergent algorithms for a class of convex semi-infinite programs. *SIAM Journal on Optimization*, 32(4):2493–2526, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1431047>.
- [Com14] Patrick L. Combettes. Systems of structured monotone inclusions: Duality, algorithms, and applications. *SIAM Journal on Optimization*, 23(4):2420–2447, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CP01a] I. D. Coope and C. J. Price. On the convergence of grid-based methods for unconstrained optimization. *SIAM Journal on Optimization*, 11(4):859–869, March/May 2001. CODEN SJOPE8. ISSN 1052-6234

Curtis:2012:SQP**Curtis:2010:MFA****Cerulli:2022:CAC****Chen:2014:OCS****Combettes:2014:SSM****Coulibaly:2012:EIP****Coope:2001:CGB**

(print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/35498>.

Cucker:2001:PDA

- [CP01b] Felipe Cucker and Javier Peña. A primal-dual algorithm for solving polyhedral conic systems with a finite-precision machine. *SIAM Journal on Optimization*, 12(2):522–554, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38679>.

Combettes:2008:PTA

- [CP08] Patrick L. Combettes and Jean-Christophe Pesquet. Proximal thresholding algorithm for minimization over orthonormal bases. *SIAM Journal on Optimization*, 18(4):1351–1376, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Combettes:2015:SQF

- [CP15] Patrick L. Combettes and Jean-Christophe Pesquet. Stochastic quasi-Fejér block-coordinate fixed point iterations with random sweeping. *SIAM Journal on Optimization*, 25(2):1221–1248, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cifuentes:2017:SAV

- [CP17] Diego Cifuentes and Pablo A. Parrilo. Sampling algebraic varieties for sum of squares

programs. *SIAM Journal on Optimization*, 27(4):2381–2404, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Campos:2018:MAS

- [CP18] Juan S. Campos and Panos Parpas. A multigrid approach to SDP relaxations of sparse polynomial optimization problems. *SIAM Journal on Optimization*, 28(1):1–29, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Crisci:2020:SPB

- [CPRZ20] Serena Crisci, Federica Porta, Valeria Ruggiero, and Luca Zanni. Spectral properties of Barzilai–Borwein rules in solving singly linearly constrained optimization problems subject to lower and upper bounds. *SIAM Journal on Optimization*, 30(2):1300–1326, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Camlibel:2007:LSC

- [CPS07] M. Kanat Camlibel, Jong-Shi Pang, and Jinglai Shen. Lyapunov stability of complementarity and extended systems. *SIAM Journal on Optimization*, 17(4):1056–1101, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cui:2018:CDM

- [CPS18] Ying Cui, Jong-Shi Pang, and Bodhisattva Sen. Compos-

- ite difference-max programs for modern statistical estimation problems. *SIAM Journal on Optimization*, 28(4):3344–3374, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CR21]
- [CQT03] Xin Chen, Houduo Qi, and Paul Tseng. Analysis of nonsmooth symmetric-matrix-valued functions with applications to semidefinite complementarity problems. *SIAM Journal on Optimization*, 13(4):960–985, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38058>. [CR23]
- [CR97] George H.-G. Chen and R. T. Rockafellar. Convergence rates in Forward–Backward splitting. *SIAM Journal on Optimization*, 7(2):421–444, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29017>. [Cri22]
- [CR04] Rafael Correa and Hector Ramirez C. A global algorithm for nonlinear semidefinite programming. *SIAM Journal on Optimization*, 15(1):303–318, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41729>. [Cristofari:2021:DFM]
- Andrea Cristofari and Francesco Rinaldi. A derivative-free method for structured optimization problems. *SIAM Journal on Optimization*, 31(2):1079–1107, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Cristofari:2023:PBP]
- Peng Chen and Johannes O. Royset. Performance bounds for PDE-constrained optimization under uncertainty. *SIAM Journal on Optimization*, 33(3):1828–1854, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1457916>. [Cristofari:2022:ASI]
- Andrea Cristofari. Active-set identification with complexity guarantees of an almost cyclic 2-coordinate descent method with Armijo line search. *SIAM Journal on Optimization*, 32(2):739–764, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1328014>. [Curtis:2021:TRN]
- [CRRW21] Frank E. Curtis, Daniel P. Robinson, Clément W. Royer, and Stephen J. Wright. Trust-region Newton-CG with strong

- second-order complexity guarantees for nonconvex optimization. *SIAM Journal on Optimization*, 31(1):518–544, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CRZ18]
- Curtis:2018:CAT**
- [CRS18] Frank E. Curtis, Daniel P. Robinson, and Mohammadreza Samadi. Complexity analysis of a trust funnel algorithm for equality constrained optimization. *SIAM Journal on Optimization*, 28(2):1533–1563, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CS08a]
- Cruz:2014:SMV**
- [Cru14] J. Y. Bello Cruz. A subgradient method for vector optimization problems. *SIAM Journal on Optimization*, 23(4):2169–2182, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CS08b]
- Cheng:1999:NOQ**
- [CRY99] H. Cheng, V. Rokhlin, and N. Yarvin. Nonlinear optimization, quadrature, and interpolation. *SIAM Journal on Optimization*, 9(4):901–923, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34979>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- Cegielski:2018:RSQ**
- Andrzej Cegielski, Simeon Reich, and Rafał Zalas. Regular sequences of quasi-nonexpansive operators and their applications. *SIAM Journal on Optimization*, 28(2):1508–1532, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Cegielski:2008:RAP**
- Andrzej Cegielski and Agnieszka Suchocka. Relaxed alternating projection methods. *SIAM Journal on Optimization*, 19(3):1093–1106, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Chan:2008:CNS**
- Zi Xian Chan and Defeng Sun. Constraint nondegeneracy, strong regularity, and nonsingularity in semidefinite programming. *SIAM Journal on Optimization*, 19(1):370–396, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Claus:2015:LPS**
- [CS15] M. Claus and R. Schultz. Lipschitzian properties and stability of a class of first-order stochastic dominance constraints. *SIAM Journal on Optimization*, 25(1):396–415, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [CS16] **Chandrasekaran:2016:RER**
Venkat Chandrasekaran and Parikshit Shah. Relative entropy relaxations for signomial optimization. *SIAM Journal on Optimization*, 26(2):1147–1173, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CS22] **Chen:2022:DSV**
Xiaojun Chen and Jinglai Shen. Dynamic stochastic variational inequalities and convergence of discrete approximation. *SIAM Journal on Optimization*, 32(4):2909–2937, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M145536X>.
- [CSPW11] **Chandrasekaran:2011:RSI**
Venkat Chandrasekaran, Sujoy Sanghavi, Pablo A. Parrilo, and Alan S. Willsky. Rank-sparsity incoherence for matrix decomposition. *SIAM Journal on Optimization*, 21(2):572–596, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p572_s1.
- [CSS19] **Chen:2019:CAS**
Xiaojun Chen, Alexander Shapiro, and Hailin Sun. Convergence analysis of sample average approximation of two-stage stochastic generalized equations. *SIAM Journal on Optimization*, 29(1):135–161, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CST19] **Cui:2019:CBA**
Ying Cui, Defeng Sun, and Kim-Chuan Toh. Computing the best approximation over the intersection of a polyhedral set and the doubly nonnegative cone. *SIAM Journal on Optimization*, 29(4):2785–2813, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CSV09] **Conn:2009:GCG**
Andrew R. Conn, Katya Scheinberg, and Luís N. Vicente. Global convergence of general derivative-free trust-region algorithms to first- and second-order critical points. *SIAM Journal on Optimization*, 20(1):387–415, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CSW12] **Cheung:2012:LMI**
Sin-Shuen Cheung, Anthony Man-Cho So, and Kuncheng Wang. Linear matrix inequalities with stochastically dependent perturbations and applications to chance-constrained semidefinite optimization. *SIAM Journal on Optimization*, 22(4):1394–1430, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Chen:2015:RMP**
- [CSW15] Xiaojun Chen, Hailin Sun, and Roger J.-B. Wets. Regularized mathematical programs with stochastic equilibrium constraints: Estimating structural demand models. *SIAM Journal on Optimization*, 25(1):53–75, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Chen:2023:ROC**
- [CSY23] Hongfan (Kevin) Chen, Xu Andy Sun, and Haoxiang Yang. Robust optimization with continuous decision-dependent uncertainty with applications to demand response management. *SIAM Journal on Optimization*, 33(3):2406–2434, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1502082>.
- Chen:1993:CAP**
- [CT93] Gong Chen and Marc Teboulle. Convergence analysis of a proximal-like minimization algorithm using Bregman functions. *SIAM Journal on Optimization*, 3(3):538–543, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Casas:2002:SON**
- [CT02] Eduardo Casas and Fredi Tröltzsch. Second-order necessary and sufficient optimality conditions for optimization problems and applications to control theory. *SIAM Journal on Optimization*, 13(2):406–431, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36769>.
- Combari:2003:ECC**
- [CT03] Christophe Combari and Lionel Thibault. Epiconvergence of convexly composite functions in Banach spaces. *SIAM Journal on Optimization*, 13(4):986–1003, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35980>.
- Cai:2006:SSO**
- [CT06] Zhi Cai and Kim-Chuan Toh. Solving second order cone programming via a reduced augmented system approach. *SIAM Journal on Optimization*, 17(3):711–737, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Casas:2012:SOA**
- [CT12] Eduardo Casas and Fredi Tröltzsch. Second order analysis for optimal control problems: Improving results expected from abstract theory. *SIAM Journal on Optimization*, 22(1):261–279, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [CT13] **Cabot:2013:ISL** A. Cabot and L. Thibault. Inclusion of subdifferentials, linear well-conditioning, and steepest descent equation. *SIAM Journal on Optimization*, 23(1):552–575, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CTW19] **Chen:2019:CPS** Xiaojun Chen, Ph. L. Toint, and H. Wang. Complexity of partially separable convexly constrained optimization with non-Lipschitzian singularities. *SIAM Journal on Optimization*, 29(1):874–903, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CV07] **Custodio:2007:USS** A. L. Custódio and L. N. Vicente. Using sampling and simplex derivatives in pattern search methods. *SIAM Journal on Optimization*, 18(2):537–555, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CV17a] **Chao:2017:SRG** Hsiao-Han Chao and Lieven Vandenbergh. Semidefinite representations of gauge functions for structured low-rank matrix decomposition. *SIAM Journal on Optimization*, 27(3):1362–1389, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CV17b] **Clason:2017:PDE** Christian Clason and Tuomo Valkonen. Primal-dual extragradient methods for nonlinear non-smooth PDE-constrained optimization. *SIAM Journal on Optimization*, 27(3):1314–1339, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [CV24] **Cristancho:2024:HHP** Sergio Cristancho and Mauricio Velasco. Harmonic hierarchies for polynomial optimization. *SIAM Journal on Optimization*, 34(1):590–615, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [CVV99] **Conn:1999:TSA** Andrew R. Conn, Luís N. Vicente, and Chandu Visweswariah. Two-step algorithms for nonlinear optimization with structured applications. *SIAM Journal on Optimization*, 9(4):924–947, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33439>.
- [CU99] **Cox:1999:WBH** Steven J. Cox and Paul X. Uhlig. Where best to hold a drum fast. *SIAM Journal on Optimization*, 9(4):948–964, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32608>. Dedicated to John E. Dennis, Jr., on his 60th birthday.

Dedicated to John E. Dennis, Jr., on his 60th birthday.

Chen:2014:CRT

- [CW14] Xiaojun Chen and Zhengyu Wang. Convergence of regularized time-stepping methods for differential variational inequalities. *SIAM Journal on Optimization*, 23(3):1647–1671, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Christof:2018:NGS

- [CW18] Constantin Christof and Gerd Wachsmuth. No-gap second-order conditions via a directional curvature functional. *SIAM Journal on Optimization*, 28(3):2097–2130, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Curtis:2023:WCC

- [CW23] Frank E. Curtis and Qi Wang. Worst-case complexity of TRACE with inexact subproblem solutions for nonconvex smooth optimization. *SIAM Journal on Optimization*, 33(3):2191–2221, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1492428>.

Chen:2006:FAS

- [CWH06] Lifeng Chen, Yongli Wang, and Guoping He. A feasible active set QP-free method for nonlinear programming. *SIAM Journal on Optimization*, 17(2):

401–429, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2020:PAP

- [CWP20] J. Chen, X. Wang, and C. Planiden. A proximal average for prox-bounded functions. *SIAM Journal on Optimization*, 30(2):1366–1390, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Cai:2018:SCS

- [CWW18] Jian-Feng Cai, Tianming Wang, and Ke Wei. Spectral compressed sensing via projected gradient descent. *SIAM Journal on Optimization*, 28(3):2625–2653, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2011:MCN

Xiaojun Chen, Robert S. Womersley, and Jane J. Ye. Minimizing the condition number of a Gram matrix. *SIAM Journal on Optimization*, 21(1):127–148, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p127_s1.

Chen:2012:SVI

- [CWZ12] Xiaojun Chen, Roger J.-B. Wets, and Yanfang Zhang. Stochastic variational inequalities: Residual minimization

- smoothing sample average approximations. *SIAM Journal on Optimization*, 22(2):649–673, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [CY99]
- [CWZ18] Frank E. Curtis, Andreas Wächter, and Victor M. Zavala. A sequential algorithm for solving nonlinear optimization problems with chance constraints. *SIAM Journal on Optimization*, 28(1):930–958, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Curtis:2018:SAS]
- [CX99] Bintong Chen and Naihua Xiu. A global linear and local quadratic noninterior continuation method for nonlinear complementarity problems based on Chen–Mangasarian smoothing functions. *SIAM Journal on Optimization*, 9(3):605–623, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31619>. [Chen:1999:GLL]
- [CX08] Xiaojun Chen and Shuhuang Xiang. Perturbation bounds of P -matrix linear complementarity problems. *SIAM Journal on Optimization*, 18(4):1250–1265, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Chen:2008:PBM]
- [CY99] Xiongda Chen and Ya-Xiang Yuan. On local solutions of the Celis–Dennis–Tapia subproblem. *SIAM Journal on Optimization*, 10(2):359–383, December/February 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33501>. [Chen:1999:LSC]
- [CY00] Xiaojun Chen and Yinyu Ye. On smoothing methods for the P_0 matrix linear complementarity problem. *SIAM Journal on Optimization*, 11(2):341–363, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33508>. [Chen:2000:SMM]
- [CY10] Chek Beng Chua and Peng Yi. A continuation method for nonlinear complementarity problems over symmetric cones. *SIAM Journal on Optimization*, 20(5):2560–2583, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Chua:2010:CMN]
- [CY14] Etienne Corman and Xiaoming Yuan. A generalized proximal point algorithm and its convergence rate. *SIAM Journal on Optimization*, 24(4):1614–1638, 2014. CODEN SJOPE8. [Corman:2014:GPP]

ISSN 1052-6234 (print), 1095-7189 (electronic).

Chang:2022:GRP

[CZZ22] Xiao-Kai Chang, Junfeng Yang, and Hongchao Zhang. Golden ratio primal–dual algorithm with linesearch. *SIAM Journal on Optimization*, 32(3):1584–1613, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1420319>.

Chen:2019:EFS

[CZZ19] Jein-Shan Chen, Jane J. Ye, Jin Zhang, and Jinchuan Zhou. Exact formula for the second-order tangent set of the second-order cone complementarity set. *SIAM Journal on Optimization*, 29(4):2986–3011, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Chen:2019:DMF

[CZZ19] Xujin Chen, Wenan Zang, and Qiulan Zhao. Densities, matchings, and fractional edge-colorings. *SIAM Journal on Optimization*, 29(1):240–261, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

dAspremont:2008:SOA

[d’A08] Alexandre d’Aspremont. Smooth optimization with approximate gradient. *SIAM Journal on Optimization*, 19(3):1171–1183, 2008. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

dAspremont:2024:OAS

[dAGL24] Alexandre d’Aspremont, Cristóbal Guzmán, and Clément Lezane. Optimal algorithms for stochastic complementary composite minimization. *SIAM Journal on Optimization*, 34(1):163–189, January 2024. CODEN SJOPE8. ISSN 1095-7189.

Dahl:1999:SSP

[Dah99] Geir Dahl. Stable set polytopes for a class of circulant graphs. *SIAM Journal on Optimization*, 9(2):493–503, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32197>.

Dai:2002:CPB

[Dai02] Yu-Hong Dai. Convergence properties of the BFGS algorithm. *SIAM Journal on Optimization*, 13(3):693–701, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38345>.

Dai:2006:FAP

[Dai06] Yu-Hong Dai. Fast algorithms for projection on an ellipsoid. *SIAM Journal on Optimization*, 16(4):986–1006, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [DAJJ12] **Duchi:2012:EMD**
John C. Duchi, Alekh Agarwal, Mikael Johansson, and Michael I. Jordan. Ergodic mirror descent. *SIAM Journal on Optimization*, 22(4):1549–1578, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dan93] **Dang:1993:TCD**
Chuang Yin Dang. The D_2^* -triangulation for continuous deformation algorithms to compute solutions of nonlinear equations. *SIAM Journal on Optimization*, 3(4):784–799, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dan21] **Danielson:2021:FDS**
Claus Danielson. Fundamental domains for symmetric optimization: Construction and search. *SIAM Journal on Optimization*, 31(3):1827–1849, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dav91] **Davidon:1991:VMM**
William C. Davidon. Variable metric method for minimization. *SIAM Journal on Optimization*, 1(1):1–17, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dav15a] **Davis:2015:CRAb**
Damek Davis. Convergence rate analysis of primal-dual splitting schemes. *SIAM Journal on Optimization*, 25(3):1912–1943, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dav15b] **Davis:2015:CRAa**
Damek Davis. Convergence rate analysis of the forward-Douglas–Rachford splitting scheme. *SIAM Journal on Optimization*, 25(3):1760–1786, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dax92] **Dax:1992:RLN**
Achiya Dax. On regularized least norm problems. *SIAM Journal on Optimization*, 2(4):602–618, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dax09] **Dax:2009:NCM**
Achiya Dax. A new class of minimum norm duality theorems. *SIAM Journal on Optimization*, 19(4):1947–1969, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [dBdH07] **denBoef:2007:ELS**
Edgar den Boef and Dick den Hertog. Efficient line search methods for convex functions. *SIAM Journal on Optimization*, 18(1):338–363, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Duchi:2012:RSS**
- [DBW12] John C. Duchi, Peter L. Bartlett, and Martin J. Wainwright. Randomized smoothing for stochastic optimization. *SIAM Journal on Optimization*, 22(2):674–701, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Silva:2015:VSA**
- [dCST15] Marcel K. de Carli Silva and Levent Tunçel. Vertices of spectrahedra arising from the ellipsope, the theta body, and their relatives. *SIAM Journal on Optimization*, 25(1):295–316, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Silva:2019:SCS**
- [dCST19] Marcel K. de Carli Silva and Levent Tunçel. Strict complementarity in semidefinite optimization with ellipsopes including the MaxCut SDP. *SIAM Journal on Optimization*, 29(4):2650–2676, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Das:1998:NBI**
- [DD98] Indraneel Das and J. E. Dennis. Normal-boundary intersection: a new method for generating the Pareto surface in nonlinear multicriteria optimization problems. *SIAM Journal on Optimization*, 8(3):631–657, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30751>.
- Davis:2019:SMB**
- [DD19] Damek Davis and Dmitriy Drusvyatskiy. Stochastic model-based minimization of weakly convex functions. *SIAM Journal on Optimization*, 29(1):207–239, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Daniilidis:2020:PSD**
- [DD20] Aris Daniilidis and Dmitriy Drusvyatskiy. Pathological subgradient dynamics. *SIAM Journal on Optimization*, 30(2):1327–1338, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Davis:2022:ESS**
- [DDD22] Damek Davis, Mateo Díaz, and Dmitriy Drusvyatskiy. Escaping strict saddle points of the Moreau envelope in non-smooth optimization. *SIAM Journal on Optimization*, 32(3):1958–1983, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1430868>.
- Dostert:2021:ESP**
- [DdLM21] Maria Dostert, David de Laat, and Philippe Moustrou. Exact semidefinite programming bounds for packing problems. *SIAM Journal on Optimization*, 31(2):1433–1458, 2021.

CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dambrine:2024:SDE

- [DDPR24] M. Dambrine, Ch. Dossal, B. Puig, and A. Rondepierre. Stochastic differential equations for modeling first order optimization methods. *SIAM Journal on Optimization*, 34(2):1402–1426, April 2024. CODEN SJOPE8. ISSN 1095-7189.

DelPia:2020:SSS

- [DDW20] Alberto Del Pia, Santanu S. Dey, and Robert Weismantel. Subset selection in sparse matrices. *SIAM Journal on Optimization*, 30(2):1173–1190, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

dAspremont:2014:SSA

- [dE14] Alexandre d’Aspremont and Noureddine El Karoui. A stochastic smoothing algorithm for semidefinite programming. *SIAM Journal on Optimization*, 24(3):1138–1177, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dennis:1997:GCT

- [DEAM97] J. E. Dennis, Jr., Mahmoud El-Alem, and Maria C. Maciel. A global convergence theory for general trust-region-based algorithms for equality constrained optimization. *SIAM Journal on Optimization*, 7(1):

177–207, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/23888>.

Dennis:1999:TRA

- [DEAW99] J. E. Dennis, Jr., Mahmoud El-Alem, and Karen Williamson. A trust-region approach to nonlinear systems of equalities and inequalities. *SIAM Journal on Optimization*, 9(2):291–315, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27620>.

Dedieu:2000:ASA

- [Ded00] Jean-Pierre Dedieu. Approximate solutions of analytic inequality systems. *SIAM Journal on Optimization*, 11(2):411–425, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35606>.

Dennis:1991:CSU

- [DEG⁺91] J. E. Dennis, Jr., N. Echebest, M. T. Guardarucci, J. M. Martínez, H. D. Scolnik, and C. Vacchino. A curvilinear search using tridiagonal secant updates for unconstrained optimization. *SIAM Journal on Optimization*, 1(3):333–357, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [dEH01] **daSilvaeSilva:2001:RSS**
 Paulo José da Silva e Silva, Jonathan Eckstein, and Carlos Humes Jr. Rescaling and stepsize selection in proximal methods using separable generalized distances. *SIAM Journal on Optimization*, 12(1):238–261, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36578>.
- [Del19] **DelPia:2019:SCI**
 Alberto Del Pia. Subdeterminants and concave integer quadratic programming. *SIAM Journal on Optimization*, 29(4):3154–3173, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Den97] **Deng:1997:CEB**
 Sien Deng. Computable error bounds for convex inequality systems in reflexive Banach spaces. *SIAM Journal on Optimization*, 7(1):274–279, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28483>.
- [Den00] **Dentcheva:2000:RCR**
 Darinka Dentcheva. Regular Castaing representations of multifunctions with applications to stochastic programming. *SIAM Journal on Optimization*, 10(3):732–749, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34145>.
- [Den14] **Densing:2014:SPT**
 M. Densing. Stochastic programming of time-consistent extensions of AVaR. *SIAM Journal on Optimization*, 24(3):993–1010, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DENR20] **DeSantis:2020:SMM**
 Marianna De Santis, Gabriele Eichfelder, Julia Niebling, and Stefan Rocktäschel. Solving multiobjective mixed integer convex optimization problems. *SIAM Journal on Optimization*, 30(4):3122–3145, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [dF09] **dAntonio:2009:CAD**
 Giacomo d’Antonio and Antonio Frangioni. Convergence analysis of deflected conditional approximate subgradient methods. *SIAM Journal on Optimization*, 20(1):357–386, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DF19] **Daniilidis:2019:LSF**
 Aris Daniilidis and Gonzalo Flores. Linear structure of functions with maximal Clarke subdifferential. *SIAM Journal on Optimization*, 29(1):511–521, 2019. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Dreves:2011:SKC

- [DFKS11] Axel Dreves, Francisco Facchinei, Christian Kanzow, and Simone Sagratella. On the solution of the KKT conditions of generalized Nash equilibrium problems. *SIAM Journal on Optimization*, 21(3):1082–1108, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p1082_s1.

DeMiguel:2005:TSR

- [DFNS05] Victor DeMiguel, Michael P. Friedlander, Francisco J. Nogales, and Stefan Scholtes. A two-sided relaxation scheme for mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 16(2):587–609, January 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Diakonikolas:2020:FPC

- [DFO20] Jelena Diakonikolas, Maryam Fazel, and Lorenzo Orecchia. Fair packing and covering on a relative scale. *SIAM Journal on Optimization*, 30(4):3284–3314, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Donchev:2007:DAF

- [DFR07] Tzanko Donchev, Elza Farkhi, and Simeon Reich. Discrete approximations and fixed set iter-

ations in Banach spaces. *SIAM Journal on Optimization*, 18(3):895–906, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Drusvyatskiy:2018:OFO

- [DFR18] Dmitriy Drusvyatskiy, Maryam Fazel, and Scott Roy. An optimal first order method based on optimal quadratic averaging. *SIAM Journal on Optimization*, 28(1):251–271, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dostal:2003:ALA

- [DFS03] Z. Dostál, A. Friedlander, and S. A. Santos. Augmented Lagrangians with adaptive precision control for quadratic programming with simple bounds and equality constraints. *SIAM Journal on Optimization*, 13(4):1120–1140, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36257>.

Dash:2009:MIR

- [DG09] Sanjeeb Dash and Oktay Günlük. On mixing inequalities: Rank, closure, and cutting-plane proofs. *SIAM Journal on Optimization*, 20(2):1090–1109, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Davis:2019:PGS

- [DG19] Damek Davis and Benjamin Grimmer. Proximally guided

- stochastic subgradient method for nonsmooth, nonconvex problems. *SIAM Journal on Optimization*, 29(3):1908–1930, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DG20] Michel De Lara and Olivier Gossner. Payoffs-beliefs duality and the value of information. *SIAM Journal on Optimization*, 30(1):464–489, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DG23a] Mateo Díaz and Benjamin Grimmer. Optimal convergence rates for the proximal bundle method. *SIAM Journal on Optimization*, 33(2):424–454, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1428601>.
- [DG23b] Lijun Ding and Benjamin Grimmer. Revisiting spectral bundle methods: Primal-dual (sub)linear convergence rates. *SIAM Journal on Optimization*, 33(2):1305–1332, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1402340>.
- [DGJ09] Stephan Dempe, Harald Günzel, and Hubertus Th. Jongen. On reducibility in bilevel problems. *SIAM Journal on Optimization*, 20(2):718–727, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [dGJ18] Alexandre d’Aspremont, Cristóbal Guzmán, and Martin Jaggi. Optimal affine-invariant smooth minimization algorithms. *SIAM Journal on Optimization*, 28(3):2384–2405, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DGL10] N. Dinh, M. A. Goberna, and M. A. López. On the stability of the feasible set in optimization problems. *SIAM Journal on Optimization*, 20(5):2254–2280, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DGLM14] N. Dinh, M. A. Goberna, M. A. López, and T. H. Mo. From the Farkas lemma to the Hahn–Banach theorem. *SIAM Journal on Optimization*, 24(2):678–701, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DGN12] Olivier Devolder, François Glineur, and Yurii Nesterov. Double smoothing technique for large-scale linearly constrained convex optimization. *SIAM Journal on Optimization*, 22(2):

- 702–727, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [DHL15]
- Dash:2017:PCM**
- [DGR17] Sanjeeb Dash, Oktay Günlük, and Diego A. Morán R. On the polyhedrality of closures of multibranch split sets and other polyhedra with bounded max-facet-width. *SIAM Journal on Optimization*, 27(3):1340–1361, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- DeKlerk:2020:WCC**
- [DGT20] Etienne De Klerk, François Glineur, and Adrien B. Taylor. Worst-case convergence analysis of inexact gradient and Newton methods through semidefinite programming performance estimation. *SIAM Journal on Optimization*, 30(3):2053–2082, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dai:1999:CPN**
- [DHL⁺99] Yuhong Dai, Jiye Han, Guanghui Liu, Defeng Sun, Hongxia Yin, and Ya-Xiang Yuan. Convergence properties of nonlinear conjugate gradient methods. *SIAM Journal on Optimization*, 10(2):345–358, December/February 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26844>.
- DeLoera:2015:AAL**
- Jesús A. De Loera, Raymond Hemmecke, and Jon Lee. On augmentation algorithms for linear and integer-linear programming: From Edmonds–Karp to Bland and beyond. *SIAM Journal on Optimization*, 25(4):2494–2511, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Decarreau:1992:DME**
- [DHLN92] Andrée Decarreau, Danielle Hilhorst, Claude Lemaréchal, and Jorge Navaza. Dual methods in entropy maximization. Application to some problems in crystallography. *SIAM Journal on Optimization*, 2(2):173–197, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Daniilidis:2001:ASQ**
- [DHML01] Aris Daniilidis, Nicolas Hadjisavvas, and Juan-Enrique Martínez-Legaz. An appropriate subdifferential for quasiconvex functions. *SIAM Journal on Optimization*, 12(2):407–420, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37139>.
- Dang:2016:WPU**
- [DHP16] Văn Doạt Dang, Huy Vui Hà, and Tien Son Păhm. Well-posedness in unconstrained polynomial optimization prob-

- lems. *SIAM Journal on Optimization*, 26(3):1411–1428, ????. 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [DIL16]
- [DHP24] Guozhi Dong, Michael Hintermüller, and Kostas Papafitsoros. A descent algorithm for the optimal control of ReLU neural network informed PDEs based on approximate directional derivatives. *SIAM Journal on Optimization*, 34(3):2314–2349, ????. 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1534420>.
- [DHR07] Darinka Dentcheva, René Henrion, and Andrzej Ruszczyński. Stability and sensitivity of optimization problems with first order stochastic dominance constraints. *SIAM Journal on Optimization*, 18(1):322–337, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Di96] Simon Di. Classical optimality conditions under weaker assumptions. *SIAM Journal on Optimization*, 6(1):178–197, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DIMS18] Santanu S. Dey, Andres Iroume, Marco Molinaro, and Domenico Salvagnin. Improving the randomization step in feasibility pump. *SIAM Journal on Optimization*, 28(1):355–378, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DIPR20] Zsolt Darvay, Tibor Illés, Janez Povh, and Petra Renáta Rigó. Feasible corrector-predictor interior-point algorithm for $P_*(\kappa)$ -linear complementarity problems based on a new search direction. *SIAM Journal on Optimization*, 30(3):2628–2658, ????. 2020. CO-
- D Brusvyatskiy:2016:GMB**
- D. Drusvyatskiy, A. D. Ioffe, and A. S. Lewis. Generic minimizing behavior in semialgebraic optimization. *SIAM Journal on Optimization*, 26(1):513–534, ????. 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dey:2018:IRS**
- Dinwoodie:1998:SSI**
- I. H. Dinwoodie. Stochastic simulation on integer constraint sets. *SIAM Journal on Optimization*, 9(1):53–61, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31384>.
- Darvay:2020:FCP**
- Dong:2024:DAO**
- Dentcheva:2007:SSO**
- Di:1996:COC**

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Daryina:2004:CAS

[DIS04]

A. N. Daryina, A. F. Izmailov, and M. V. Solodov. A class of active-set Newton methods for mixed complementarity problems. *SIAM Journal on Optimization*, 15(2):409–429, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43590>.

Dixon:1991:IAD

[Dix91]

L. C. W. Dixon. On the impact of automatic differentiation on the relative performance of parallel truncated Newton and variable metric algorithms. *SIAM Journal on Optimization*, 1(4):475–486, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Delyon:1993:ASA

[DJ93]

Bernard Delyon and Anatoli Juditsky. Accelerated stochastic approximation. *SIAM Journal on Optimization*, 3(4):868–881, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Diakonikolas:2021:GMB

[DJ21]

Jelena Diakonikolas and Michael I. Jordan. Generalized momentum-based methods: a Hamiltonian perspective. *SIAM Journal on Optimization*, 31(1):915–944, 2021. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Dorsch:2013:SCG

[DJS13]

D. Dorsch, H. Th. Jongen, and V. Shikhman. On structure and computation of generalized Nash equilibria. *SIAM Journal on Optimization*, 23(1):452–474, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Diehl:2006:LSC

[DJV06]

Moritz Diehl, Florian Jarre, and Christoph H. Vogelbusch. Loss of superlinear convergence for an SQP-type method with conic constraints. *SIAM Journal on Optimization*, 16(4):1201–1210, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dostal:2010:OAM

[DK10]

Zdeněk Dostál and Radek Kučera. An optimal algorithm for minimization of quadratic functions with bounded spectrum subject to separable convex inequality and linear equality constraints. *SIAM Journal on Optimization*, 20(6):2913–2938, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dai:2013:NCG

[DK13]

Yu-Hong Dai and Cai-Xia Kou. A nonlinear conjugate gradient algorithm with an optimal property and an improved Wolfe line search. *SIAM Journal*

on *Optimization*, 23(1):296–320, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DelPia:2018:MPA

[DK18] Alberto Del Pia and Aida Khajavirad. The multilinear polytope for acyclic hypergraphs. *SIAM Journal on Optimization*, 28(2):1049–1076, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DeRosa:2022:RCP

[DK22] Antonio De Rosa and Aida Khajavirad. The ratio-cut polytope and K -means clustering. *SIAM Journal on Optimization*, 32(1):173–203, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1348601>.

deKlerk:2017:ICR

[dKHL17] Etienne de Klerk, Roxana Hess, and Monique Laurent. Improved convergence rates for Lasserre-type hierarchies of upper bounds for box-constrained polynomial optimization. *SIAM Journal on Optimization*, 27(1):347–367, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

deKlerk:2010:EBS

[dKL10] Etienne de Klerk and Monique Laurent. Error bounds for some semidefinite programming

approaches to polynomial minimization on the hypercube. *SIAM Journal on Optimization*, 20(6):3104–3120, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

deKlerk:2011:LHS

[dKL11] Etienne de Klerk and Monique Laurent. On the Lasserre hierarchy of semidefinite programming relaxations of convex polynomial optimization problems. *SIAM Journal on Optimization*, 21(3):824–832, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p824_s1.

Dandurand:2021:BAI

[DKL21] Brian C. Dandurand, Kibaek Kim, and Sven Leyffer. A bilevel approach for identifying the worst contingencies for nonconvex alternating current power systems. *SIAM Journal on Optimization*, 31(1):702–726, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dey:2022:CPG

[DKLM22] Santanu S. Dey, Aleksandr Kazachkov, Andrea Lodi, and Gonzalo Munoz. Cutting plane generation through sparse principal component analysis. *SIAM Journal on Optimization*, 32(2):1319–1343, 2022. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1399956>.
- deKlerk:2015:EAP**
- [dKLS15] Etienne de Klerk, Monique Laurent, and Zhao Sun. An error analysis for polynomial optimization over the simplex based on the multivariate hypergeometric distribution. *SIAM Journal on Optimization*, 25(3):1498–1514, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dempe:2018:OCS**
- [DKM18] Stephan Dempe, Floriane Mefo Kue, and Patrick Mehlitz. Optimality conditions for special semidefinite bilevel optimization problems. *SIAM Journal on Optimization*, 28(2):1564–1587, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- deKlerk:2012:ILB**
- [dKP12] E. de Klerk and D. V. Pasechnik. Improved lower bounds for the 2-page crossing numbers of $K_{m,n}$ and K_n via semidefinite programming. *SIAM Journal on Optimization*, 22(2):581–595, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- deKlerk:2009:ESP**
- [dKPS09a] Etienne de Klerk, Dmitrii V. Pasechnik, and Renata Sotirov. Erratum: On semidefinite programming relaxations of the
- Traveling Salesman Problem. *SIAM Journal on Optimization*, 20(2):1132, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See [dKPS09b].
- deKlerk:2009:SPR**
- [dKPS09b] Etienne de Klerk, Dmitrii V. Pasechnik, and Renata Sotirov. On semidefinite programming relaxations of the Traveling Salesman Problem. *SIAM Journal on Optimization*, 19(4):1559–1573, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [dKPS09a].
- DeLoera:2022:PRC**
- [DKS22] Jesús A. De Loera, Sean Kafer, and Laura Sanità. Pivot rules for circuit-augmentation algorithms in linear optimization. *SIAM Journal on Optimization*, 32(3):2156–2179, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1419994>.
- deKlerk:2016:TMC**
- [dKV16] Etienne de Klerk and Frank Vallentin. On the Turing model complexity of interior point methods for semidefinite programming. *SIAM Journal on Optimization*, 26(3):1944–1961, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Drusvyatskiy:2017:NED

- [DKVW17] D. Drusvyatskiy, N. Krislock, Y.-L. Voronin, and H. Wolkowicz. Noisy Euclidean distance realization: Robust facial reduction and the Pareto frontier. *SIAM Journal on Optimization*, 27(4):2301–2331, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ding:1991:PTP

- [DL91] Jiu Ding and Tien-Yien Li. A polynomial-time predictor-corrector algorithm for a class of linear complementarity problems. *SIAM Journal on Optimization*, 1(1):83–92, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DiPillo:2001:ALF

- [DL01] Gianni Di Pillo and Stefano Lucidi. An augmented Lagrangian function with improved exactness properties. *SIAM Journal on Optimization*, 12(2):376–406, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32189>.

Drusvyatskiy:2013:TSU

- [DL13] D. Drusvyatskiy and A. S. Lewis. Tilt stability, uniform quadratic growth, and strong metric regularity of the sub-differential. *SIAM Journal on Optimization*, 23(1):256–267,

2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dang:2015:SBM

- [DL15] Cong D. Dang and Guanghui Lan. Stochastic block mirror descent methods for nonsmooth and stochastic optimization. *SIAM Journal on Optimization*, 25(2):856–881, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dym:2017:ERS

- [DL17] Nadav Dym and Yaron Lipman. Exact recovery with symmetries for Procrustes matching. *SIAM Journal on Optimization*, 27(3):1513–1530, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dentcheva:2022:BRs

- [DL22] Darinka Dentcheva and Yang Lin. Bias reduction in sample-based optimization. *SIAM Journal on Optimization*, 32(1):130–151, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1326428>.

Dan:2021:EAF

- [DLM21] Teodora Dan, Andrea Lodi, and Patrice Marcotte. An exact algorithmic framework for a class of mixed-integer programs with equilibrium constraints. *SIAM Journal on Optimization*, 31(1):

275–306, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DeSantis:2014:NCF

[DLR14] M. De Santis, S. Lucidi, and F. Rinaldi. A new class of functions for measuring solution integrality in the feasibility pump approach. *SIAM Journal on Optimization*, 23(3):1575–1606, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DeSantis:2016:FAS

[DLR16] Marianna De Santis, Stefano Lucidi, and Francesco Rinaldi. A fast active set block coordinate descent algorithm for ℓ_1 -regularized least squares. *SIAM Journal on Optimization*, 26(1):781–809, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Du:2017:SLM

[DLR17] Yu Du, Xiaodong Lin, and Andrzej Ruszczyński. A selective linearization method for multiblock convex optimization. *SIAM Journal on Optimization*, 27(2):1102–1117, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dolan:2003:LCP

[DLT03] Elizabeth D. Dolan, Robert Michael Lewis, and Virginia Torczon. On the local convergence of pattern search. *SIAM Journal on Optimization*, 14(2):567–583, Jan-

uary 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dinh:2010:FIA

[DLV10] N. Dinh, M. A. López, and M. Volle. Functional inequalities in the absence of convexity and lower semicontinuity with applications to optimization. *SIAM Journal on Optimization*, 20(5):2540–2559, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Deutsch:1999:BAI

[DLW99] Frank Deutsch, Wu Li, and Joseph D. Ward. Best approximation from the intersection of a closed convex set and a polyhedron in Hilbert space, weak Slater conditions, and the strong conical hull intersection property. *SIAM Journal on Optimization*, 10(1):252–268, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33727>.

Homem-de-Mello:2008:RCS

[dM08] Tito Homem de Mello. On rates of convergence for stochastic optimization problems under nonindependent and identically distributed sampling. *SIAM Journal on Optimization*, 19(2):524–551, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Duque:2020:DRS

- [DM20] Daniel Duque and David P. Morton. Distributionally robust stochastic dual dynamic programming. *SIAM Journal on Optimization*, 30(4):2841–2865, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DeLeone:1994:CCG

- [DMK⁺94] R. De Leone, R. R. Meyer, S. Kontogiorgis, A. Zakarian, and G. Zakeri. Coordination in coarse-grained decomposition. *SIAM Journal on Optimization*, 4(4):777–793, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dolan:2006:OMP

- [DMM06] Elizabeth D. Dolan, Jorge J. Moré, and Todd S. Munson. Optimality measures for performance profiles. *SIAM Journal on Optimization*, 16(3):891–909, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Homem-de-Mello:2010:CSM

- [dMM10] Tito Homem de Mello and Sanjay Mehrotra. A cutting-surface method for uncertain linear programs with polyhedral stochastic dominance constraints. *SIAM Journal on Optimization*, 20(3):1250–1273, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Duque:2022:DRT

- [DMM22] Daniel Duque, Sanjay Mehrotra, and David P. Morton. Distributionally robust two-stage stochastic programming. *SIAM Journal on Optimization*, 32(3):1499–1522, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1370227>.

Doikov:2024:SUR

- [DMN24] Nikita Doikov, Konstantin Mishchenko, and Yurii Nesterov. Super-universal regularized Newton method. *SIAM Journal on Optimization*, 34(1):27–56, January 2024. CODEN SJOPE8. ISSN 1095-7189.

Dey:2022:OCH

- [DMS22] Santanu S. Dey, Gonzalo Muñoz, and Felipe Serrano. On obtaining the convex hull of quadratic inequalities via aggregations. *SIAM Journal on Optimization*, 32(2):659–686, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1428583>.

deMeijer:2024:ISP

- [dMS24] Frank de Meijer and Renata Sotirov. On integrality in semidefinite programming for discrete optimization. *SIAM Journal on Optimization*, 34(1):1071–1096, March 2024. CODEN SJOPE8. ISSN 1095-7189.

Dinh:2017:UAR

- [DMVV17] N. Dinh, T. H. Mo, G. Vallet, and M. Volle. A unified approach to robust Farkas-type results with applications to robust optimization problems. *SIAM Journal on Optimization*, 27(2): 1075–1101, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dennis:1994:TDM

- [DMZ94] J. E. Dennis, Jr., José Mario Martínez, and Xiaodong Zhang. Triangular decomposition methods for solving reducible nonlinear systems of equations. *SIAM Journal on Optimization*, 4(2): 358–382, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dempe:2012:SAT

- [DMZ12] S. Dempe, B. S. Mordukhovich, and A. B. Zemkoho. Sensitivity analysis for two-level value functions with applications to bilevel programming. *SIAM Journal on Optimization*, 22(4):1309–1343, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Doikov:2020:CPM

- [DN20] Nikita Doikov and Yurii Nesterov. Contracting proximal methods for smooth convex optimization. *SIAM Journal on Optimization*, 30(4):3146–3169, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Doikov:2022:HOO

[DN22] Nikita Doikov and Yurii Nesterov. High-order optimization methods for fully composite problems. *SIAM Journal on Optimization*, 32(3): 2402–2427, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1410063>.

Dinh:2013:IPP

[DNSD13] Quoc Tran Dinh, Ion Necoara, Carlo Savorgnan, and Moritz Diehl. An inexact perturbed path-following method for Lagrangian decomposition in large-scale separable convex optimization. *SIAM Journal on Optimization*, 23(1):95–125, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DeLoera:2006:ALI

[DO06] Jesús A. De Loera and Shmuel Onn. All linear and integer programs are slim 3-way transportation programs. *SIAM Journal on Optimization*, 17(3): 806–821, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dahito:2019:CRM

[DO19a] Marie-Ange Dahito and Dominique Orban. The conjugate residual method in linesearch and trust-region methods. *SIAM Journal on Optimization*, 29(3): 1988–2025, 2019. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Diakonikolas:2019:ADG [Don16]
- [DO19b] Jelena Diakonikolas and Lorenzo Orecchia. The approximate duality gap technique: a unified theory of first-order methods. *SIAM Journal on Optimization*, 29(1):660–689, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Dolgopolik:2020:NCQ [Dos97]
- [Dol20] M. V. Dolgopolik. A new constraint qualification and sharp optimality conditions for non-smooth mathematical programming problems in terms of quasidifferentials. *SIAM Journal on Optimization*, 30(3):2603–2627, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Dontchev:2012:GDM [Don12]
- [Don12] Asen L. Dontchev. Generalizations of the Dennis–Moré theorem. *SIAM Journal on Optimization*, 22(3):821–830, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Dong:2014:STA [Don14]
- [Don14] Hongbo Dong. Symmetric tensor approximation hierarchies for the completely positive cone. *SIAM Journal on Optimization*, 23(3):1850–1866, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Dong:2016:RNQ [Don16]
- [Don16] Hongbo Dong. Relaxing non-convex quadratic functions by multiple adaptive diagonal perturbations. *SIAM Journal on Optimization*, 26(3):1962–1985, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Dostal:1997:BCQ [Dos97]
- [Dos97] Zdeněk Dostál. Box constrained quadratic programming with proportioning and projections. *SIAM Journal on Optimization*, 7(3):871–887, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26625>.
DeLeone:2000:AAS [DP00]
- [DP00] R. De Leone and D. Pretolani. Auction algorithms for shortest hyperpath problems. *SIAM Journal on Optimization*, 11(1):149–159, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34347>.
deKlerk:2002:ASN [dP02]
- [dP02] E. de Klerk and D. V. Pasechnik. Approximation of the stability number of a graph via copositive programming. *SIAM Journal on Optimization*, 12(4):875–892, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <http://epubs.siam.org/sam-bin/dbq/article/38324>.

Dao:2019:ADR

- [DP19] Minh N. Dao and Hung M. Phan. Adaptive Douglas–Rachford splitting algorithm for the sum of two operators. *SIAM Journal on Optimization*, 29(4):2697–2724, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Davis:2022:DCE

- [DP22] Maria M. Davis and Dávid Papp. Dual certificates and efficient rational sum-of-squares decompositions for polynomial optimization over compact sets. *SIAM Journal on Optimization*, 32(4):2461–2492, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1422574>.

Dinis:2023:SCA

- [DP23] Bruno Dinis and Pedro Pinto. Strong convergence for the alternating Halpern–Mann iteration in CAT(0) spaces. *SIAM Journal on Optimization*, 33(2):785–815, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1511199>.

deKlerk:2001:SGN

- [dPRT01] E. de Klerk, J. Peng, C. Roos, and T. Terlaky. A scaled Gauss–Newton primal–dual search di-

rection for semidefinite optimization. *SIAM Journal on Optimization*, 11(4):870–888, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35263>.

Durea:2017:NTD

- [DPS17] Marius Durea, Marian Pantiruc, and Radu Strugariu. A new type of directional regularity for mappings and applications to optimization. *SIAM Journal on Optimization*, 27(2):1204–1229, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Drusvyatskiy:2015:CSS

- [DPW15] Dmitriy Drusvyatskiy, Gábor Pataki, and Henry Wolkowicz. Coordinate shadows of semidefinite and Euclidean distance matrices. *SIAM Journal on Optimization*, 25(2):1160–1178, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Daniilidis:2024:ERT

- [DQ24] Aris Daniilidis and Marc Quincampoix. Extending the Rademacher theorem to set-valued maps. *SIAM Journal on Optimization*, 34(2):1784–1798, May 2024. CODEN SJOPE8. ISSN 1095-7189.

Dontchev:2002:NMS

- [DQQY02] Asen L. Dontchev, Hou-Duo Qi, Liqun Qi, and Hongxia

- Yin. A Newton method for shape-preserving spline interpolation. *SIAM Journal on Optimization*, 13(2):588–602, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39312>. [DR03]
- Dontchev:1996:CSR**
- [DR96] A. L. Dontchev and R. T. Rockafellar. Characterizations of strong regularity for variational inequalities over polyhedral convex sets. *SIAM Journal on Optimization*, 6(4):1087–1105, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28402>. [DR07]
- Dentcheva:2000:DST**
- [DR00] Darinka Dentcheva and Werner Römisch. Differential stability of two-stage stochastic programs. *SIAM Journal on Optimization*, 11(1):87–112, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31652>. [DR13]
- Dontchev:2001:APV**
- [DR01] A. L. Dontchev and R. T. Rockafellar. Ample parameterization of variational inclusions. *SIAM Journal on Optimization*, 12(1):170–187, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37101>. [DR03]
- Dentcheva:2003:OSD**
- Darinka Dentcheva and Andrzej Ruszczyński. Optimization with stochastic dominance constraints. *SIAM Journal on Optimization*, 14(2):548–566, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [DR07]
- Dentcheva:2007:SIV**
- Darinka Dentcheva and Julian Revalski. Special issue on variational analysis and optimization. *SIAM Journal on Optimization*, 18(3):ix, ????, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [DR00]
- Dentcheva:2013:CMF**
- [DR13] Darinka Dentcheva and Andrzej Ruszczyński. Common mathematical foundations of expected utility and dual utility theories. *SIAM Journal on Optimization*, 23(1):381–405, ????, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [DR01]
- Dentcheva:2014:SSS**
- [DR14] Darinka Dentcheva and Werner Römisch. Stability and sensitivity of stochastic dominance constrained optimization models. *SIAM Journal on Optimization*, 23(3):1672–1688, ????, 2014. CODEN SJOPE8. ISSN 1052-

6234 (print), 1095-7189 (electronic).

Duchi:2018:SMC

- [DR18] John C. Duchi and Feng Ruan. Stochastic methods for composite and weakly convex optimization problems. *SIAM Journal on Optimization*, 28(4):3229–3259, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dentcheva:2023:MBR

- [DR23] Darinka Dentcheva and Andrzej Ruszczyński. Mini-batch risk forms. *SIAM Journal on Optimization*, 33(2):615–637, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1503774>.

denHertog:1992:LSA

- [dRT92] D. den Hertog, C. Roos, and T. Terlaky. A large-step analytic center method for a class of smooth convex programming problems. *SIAM Journal on Optimization*, 2(1):55–70, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Davarnia:2017:SCB

- [DRT17] Danial Davarnia, Jean-Philippe P. Richard, and Mohit Tawarmalani. Simultaneous convexification of bilinear functions over polytopes with application to network interdiction. *SIAM Journal on Optimization*, 27(3):

1801–1833, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

denHertog:1992:CRL

- [dRV92] D. den Hertog, C. Roos, and J.-Ph. Vial. A complexity reduction for the long-step path-following algorithm for linear programming. *SIAM Journal on Optimization*, 2(1):71–87, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Durea:2012:CRL

- [DS12] Marius Durea and Radu Strugariu. Chain rules for linear openness in general Banach spaces. *SIAM Journal on Optimization*, 22(3):899–913, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dinh:2012:ABP

- [DSD12] Quoc Tran Dinh, Carlo Savorgnan, and Moritz Diehl. Adjoint-based predictor-corrector sequential convex programming for parametric nonlinear optimization. *SIAM Journal on Optimization*, 22(4):1258–1284, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Daneshmand:2020:SOG

- [DSK20] Amir Daneshmand, Gesualdo Scutari, and Vyacheslav Kungurtsev. Second-order guarantees of distributed gradient algorithms. *SIAM Journal on*

- Optimization*, 30(4):3029–3068, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dabbene:2010:RCP**
- [DSP10] F. Dabbene, P. S. Shcherbakov, and B. T. Polyak. A randomized cutting plane method with probabilistic geometric convergence. *SIAM Journal on Optimization*, 20(6):3185–3207, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Daniilidis:2009:ISN**
- [DSS09] Aris Daniilidis, Claudia Sagastizábal, and Mikhail Solodov. Identifying structure of nonsmooth convex functions by the bundle technique. *SIAM Journal on Optimization*, 20(2):820–840, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ding:2020:SOM**
- [DSST20] Chao Ding, Defeng Sun, Jie Sun, and Kim-Chuan Toh. Spectral operators of matrices: Semismoothness and characterizations of the generalized Jacobian. *SIAM Journal on Optimization*, 30(1):630–659, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dao:2023:LTD**
- [DST23] Minh N. Dao, Hassan Saoud, and Michel A. Théra. Locating theorems of differential inclusions governed by maximally monotone operators. *SIAM Journal on Optimization*, 33(4):2703–2720, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1523030>.
- diSerafino:2018:TPG**
- [dSTVB18] Daniela di Serafino, Gerardo Toraldo, Marco Viola, and Jesse Barlow. A two-phase gradient method for quadratic programming problems with a single linear constraint and bounds on the variables. *SIAM Journal on Optimization*, 28(4):2809–2838, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ding:2017:CRI**
- [DSZ17] Chao Ding, Defeng Sun, and Liwei Zhang. Characterization of the robust isolated calmness for a class of conic programming problems. *SIAM Journal on Optimization*, 27(1):67–90, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Dennis:1991:DSM**
- [DT91] J. E. Dennis, Jr. and Virginia Torczon. Direct search methods on parallel machines. *SIAM Journal on Optimization*, 1(4):448–474, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [DT98] **Doljansky:1998:IPA**
 Moshe Doljansky and Marc Teboulle. An interior proximal algorithm and the exponential multiplier method for semidefinite programming. *SIAM Journal on Optimization*, 9(1):1–13, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30940>.
- [DU21] **Ding:2021:SCL**
 Lijun Ding and Madeleine Udell. On the simplicity and conditioning of low rank semidefinite programs. *SIAM Journal on Optimization*, 31(4):2614–2637, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Dun93] **Dunn:1993:SOM**
 J. C. Dunn. Second-order multiplier update calculations for optimal control problems and related large scale nonlinear programs. *SIAM Journal on Optimization*, 3(3):489–502, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DV97] **Dennis:1997:CTT**
 J. E. Dennis and Luís N. Vicente. On the convergence theory of trust-region-based algorithms for equality-constrained optimization. *SIAM Journal on Optimization*, 7(4):927–950, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27602>.
- [DV14] **Doan:2014:FAR**
 Xuan Vinh Doan and Stephen Vavasis. Finding approximately rank-one submatrices with the nuclear norm and ℓ_1 -norm. *SIAM Journal on Optimization*, 23(4):2502–2540, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DV16] **Doan:2016:FLL**
 Xuan Vinh Doan and Stephen Vavasis. Finding the largest low-rank clusters with Ky Fan 2 - k -norm and ℓ_1 -norm. *SIAM Journal on Optimization*, 26(1):274–312, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DV23] **Dupuis:2023:GSA**
 Xavier Dupuis and Samuel Vaïter. The geometry of sparse analysis regularization. *SIAM Journal on Optimization*, 33(2):842–867, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1271877>.
- [DvTY91] **Dai:1991:SAN**
 Y. Dai, G. van der Laan, A. J. J. Talman, and Y. Yamamoto. A simplicial algorithm for the nonlinear stationary point problem on an unbounded polyhedron. *SIAM Journal on Optimization*,

1(2):151–165, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dey:2010:CIG

[DW10] Santanu S. Dey and Laurence A. Wolsey. Constrained infinite group relaxations of MIPs. *SIAM Journal on Optimization*, 20(6):2890–2912, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

DiSumma:2011:MSL

[DW11] Marco Di Summa and Laurence A. Wolsey. Mixing sets linked by bidirected paths. *SIAM Journal on Optimization*, 21(4):1594–1613, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1594_s1.

Dandurand:2015:DCP

[DW15a] Brian Dandurand and Margaret M. Wiecek. Distributed computation of Pareto sets. *SIAM Journal on Optimization*, 25(2):1083–1109, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Dentcheva:2015:OMS

[DW15b] Darinka Dentcheva and Eli Wolfhagen. Optimization with multivariate stochastic dominance constraints. *SIAM Journal on Optimization*, 25(1):

564–588, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Diakonikolas:2022:PFB

[DW22] Jelena Diakonikolas and Puqian Wang. Potential function-based framework for minimizing gradients in convex and min-max optimization. *SIAM Journal on Optimization*, 32(3):1668–1697, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1395302>.

Dzahini:2024:STR

[DW24] K. J. Dzahini and S. M. Wild. Stochastic trust-region algorithm in random subspaces with convergence and expected complexity analyses. *SIAM Journal on Optimization*, 34(3):2671–2699, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1524072>.

Dai:1999:NCG

[DY99] Y. H. Dai and Y. Yuan. A nonlinear conjugate gradient method with a strong global convergence property. *SIAM Journal on Optimization*, 10(1):177–182, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31899>.

- [DY04] **Deng:2004:WSM**
Sien Deng and X. Q. Yang. Weak sharp minima in multicriteria linear programming. *SIAM Journal on Optimization*, 15(2): 456–460, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43440>.
- [EA95] **El-Alem:1995:RTR**
Mahmoud El-Alem. A robust trust-region algorithm with a nonmonotonic penalty parameter scheme for constrained optimization. *SIAM Journal on Optimization*, 5(2):348–378, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DYC⁺21] **Ding:2021:OSA**
Lijun Ding, Alp Yurtsever, Volkan Cevher, Joel A. Tropp, and Madeleine Udell. An optimal-storage approach to semidefinite programming using approximate complementarity. *SIAM Journal on Optimization*, 31(4):2695–2725, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EA99] **El-Alem:1999:GCT**
Mahmoud El-Alem. A global convergence theory for Dennis, El-Alem, and Maciel’s class of trust-region algorithms for constrained optimization without assuming regularity. *SIAM Journal on Optimization*, 9(4): 965–990, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33176>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [DZ07] **Degerine:2007:DMN**
Serge Dégerine and Abdelhamid Zaïdi. Determinant maximization of a nonsymmetric matrix with quadratic constraints. *SIAM Journal on Optimization*, 17(4):997–1014, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [DZ14] **Dempe:2014:KRN**
Stephan Dempe and Alain B. Zemkoho. KKT reformulation and necessary conditions for optimality in nonsmooth bilevel optimization. *SIAM Journal on Optimization*, 24(4):1639–1669, 2014. CODEN SJOPE8.
- [EAV10] **Engau:2010:IPW**
Alexander Engau, Miguel F. Anjos, and Anthony Vannelli. On interior-point warmstarts for linear and combinatorial optimization. *SIAM Journal on Optimization*, 20(4):1828–1861, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [EB20] Alexander S. Estes and Michael O. Ball. Facets of the stochastic network flow problem. *SIAM Journal on Optimization*, 30(3): 2355–2378, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EG24] Leon Eifler and Ambros Gleixner. Safe and verified Gomory mixed-integer cuts in a rational mixed-integer program framework. *SIAM Journal on Optimization*, 34(1):742–763, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [Eck94] Jonathan Eckstein. Parallel branch-and-bound algorithms for general mixed integer programming on the CM-5. *SIAM Journal on Optimization*, 4(4): 794–814, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EGG09] Jennifer B. Erway, Philip E. Gill, and Joshua D. Griffin. Iterative methods for finding a trust-region step. *SIAM Journal on Optimization*, 20(2):1110–1131, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EF02] Marina Epelman and Robert M. Freund. A new condition measure, preconditioners, and relations between different measures of conditioning for conic linear systems. *SIAM Journal on Optimization*, 12(3):627–655, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37382>.
- [EH20] Armin Eftekhari and Raphael A. Hauser. Principal component analysis by optimization of symmetric functions has no spurious local optima. *SIAM Journal on Optimization*, 30(1):439–463, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EG10] Jennifer B. Erway and Philip E. Gill. A subspace minimization method for the trust-region step. *SIAM Journal on Optimization*, 20(3):1439–1461, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EI06] E. Erdogun and G. Iyengar. An active set method for single-cone second-order cone programs. *SIAM Journal on Optimization*, 17(2):459–484, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Eic09] **Eichfelder:2009:ASM**
 Gabriele Eichfelder. An adaptive scalarization method in multiobjective optimization. *SIAM Journal on Optimization*, 19(4):1694–1718, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EL08] **Epstein:2008:PC**
 Leah Epstein and Asaf Levin. On bin packing with conflicts. *SIAM Journal on Optimization*, 19(3):1270–1298, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EL09] **ElMaghri:2009:PSC**
 Mounir El Maghri and Mohamed Laghdir. Pareto subdifferential calculus for convex vector mappings and applications to vector optimization. *SIAM Journal on Optimization*, 19(4):1970–1994, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EL10] **Epstein:2010:ARC**
 Leah Epstein and Asaf Levin. AFPTAS results for common variants of bin packing: a new method for handling the small items. *SIAM Journal on Optimization*, 20(6):3121–3145, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EL14] **Epstein:2014:RAS**
 Leah Epstein and Asaf Levin. Robust approximation schemes for cube packing. *SIAM Journal on Optimization*, 23(2):1310–1343, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EM91] **Engels:1991:LSC**
 John R. Engels and Héctor J. Martínez. Local and superlinear convergence for partially known quasi-Newton methods. *SIAM Journal on Optimization*, 1(1):42–56, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [EMN22] **Elbassioni:2022:FSS**
 Khaled Elbassioni, Kazuhisa Makino, and Waleed Najy. Finding sparse solutions for packing and covering semidefinite programs. *SIAM Journal on Optimization*, 32(2):321–353, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M137570X>.
- [EN14] **Ermoliev:2014:SAA**
 Yuri M. Ermoliev and Vladimir I. Norkin. Sample average approximation method for compound stochastic optimization problems. *SIAM Journal on Optimization*, 23(4):2231–2263, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ent96] **Entriken:1996:PDR**
 Robert Entriken. Parallel decomposition: Results for stair-

- case linear programs. *SIAM Journal on Optimization*, 6(4): 961–977, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25328>. [Erg19]
- ElGhaoui:1998:RSU**
- [EOL98] Laurent El Ghaoui, François Oustry, and Hervé Lebret. Robust solutions to uncertain semidefinite programs. *SIAM Journal on Optimization*, 9(1):33–52, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30571>. [ES22]
- Eichfelder:2022:VSN**
- [EQR22] Gabriele Eichfelder, Ernest Quintana, and Stefan Rocktäschel. A vectorization scheme for nonconvex set optimization problems. *SIAM Journal on Optimization*, 32(2):1184–1209, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M143683X>. [ESKL18]
- Eichhorn:2005:PRM**
- [ER05] Andreas Eichhorn and Werner Römisch. Polyhedral risk measures in stochastic programming. *SIAM Journal on Optimization*, 16(1):69–95, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60521>. [Ergur:2019:ANP]
- Alperen A. Ergür. Approximating nonnegative polynomials via spectral sparsification. *SIAM Journal on Optimization*, 29(1): 852–873, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Eisenmann:2022:SCT]
- Monika Eisenmann and Tony Stillfjord. Sublinear convergence of a tamed stochastic gradient descent method in Hilbert space. *SIAM Journal on Optimization*, 32(3): 1642–1667, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1427450>. [Esfahani:2018:IFP]
- Peyman Mohajerin Esfahani, Tobias Sutter, Daniel Kuhn, and John Lygeros. From infinite to finite programs: Explicit error bounds with applications to approximate dynamic programming. *SIAM Journal on Optimization*, 28(3):1968–1998, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Ernst:2007:BHS]
- Emil Ernst and Michel Théra. Boundary half-strips and the strong CHIP. *SIAM Journal on Optimization*, 18(3):834–852,

???? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Eftekhari:2019:SIP

[ET19] Armin Eftekhari and Andrew Thompson. Sparse inverse problems over measures: Equivalence of the conditional gradient and exchange methods. *SIAM Journal on Optimization*, 29(2):1329–1349, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Etesami:2020:CAO

[Ete20] S. Rasoul Etesami. Complexity and approximability of optimal resource allocation and Nash equilibrium over networks. *SIAM Journal on Optimization*, 30(1):885–914, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Etesami:2022:MCT

[Ete22] S. Rasoul Etesami. Maximizing convergence time in network averaging dynamics subject to edge removal. *SIAM Journal on Optimization*, 32(4):2718–2744, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1458867>.

Eisenstat:1994:GCI

[EW94] Stanley C. Eisenstat and Homer F. Walker. Globally convergent inexact Newton methods. *SIAM Journal on Optimization*, 4

(2):393–422, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Eberhard:2009:SSO

[EW09] A. Eberhard and R. Wenczel. Some sufficient optimality conditions in nonsmooth analysis. *SIAM Journal on Optimization*, 20(1):251–296, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

ElDin:2010:CRP

[EZ10] Mohab Safey El Din and Lihong Zhi. Computing rational points in convex semialgebraic sets and sum of squares decompositions. *SIAM Journal on Optimization*, 20(6):2876–2889, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Farazmand:2020:MAA

[Far20] Mohammad Farazmand. Multi-scale analysis of accelerated gradient methods. *SIAM Journal on Optimization*, 30(3):2337–2354, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Faybusovich:1996:SPP

[Fay96] Leonid Faybusovich. Semidefinite programming: a path-following algorithm for a linear-quadratic functional. *SIAM Journal on Optimization*, 6(4):1007–1024, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- URL <http://epubs.siam.org/sam-bin/dbq/article/27074>.
- [Fay02] Leonid Faybusovich. Self-concordant barriers for cones generated by Chebyshev systems. *SIAM Journal on Optimization*, 12(3):770–781, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38678>.
- [Fay06] L. Faybusovich. Jordan-algebraic approach to convexity theorems for quadratic mappings. *SIAM Journal on Optimization*, 17(2):558–576, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FB00] Fabián Flores-Bazán. Existence theorems for generalized noncoercive equilibrium problems: The quasi-convex case. *SIAM Journal on Optimization*, 11(3):675–690, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36413>.
- [FB03] Fabián Flores-Bazán. Radial epiderivatives and asymptotic functions in nonconvex vector optimization. *SIAM Jour-*
- Faybusovich:2002:SCB**
- Faybusovich:2006:JAA**
- Flores-Bazan:2000:ETG**
- Flores-Bazan:2003:REA**
- Fercoq:2019:CDP**
- [FB19] Olivier Fercoq and Pascal Bianchi. A coordinate-descent primal-dual algorithm with large step size and possibly nonseparable functions. *SIAM Journal on Optimization*, 29(1):100–134, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Flores-Bazan:2022:CRV**
- [FBH22] F. Flores-Bazán and A. Hantoute. Convex representatives of the value function and Aumann integrals in normed spaces. *SIAM Journal on Optimization*, 32(4):2773–2796, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1471377>.
- Flores-Bazan:2024:VAF**
- [FBLV24] Fabián Flores-Bazán, Rubén López, and Cristian Vera. Vector asymptotic functions and their application to multiobjective optimization problems. *SIAM Journal on Optimization*, 34(2):1826–1851, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- Flores-Bazan:2013:SDC**
- [FBM13] Fabián Flores-Bazán and Giandomenico Mastroeni. Strong du-
- nal on Optimization*, 14(1):284–305, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39211>.

- ality in cone constrained nonconvex optimization. *SIAM Journal on Optimization*, 23(1):153–169, ????. 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FBM15] Fabián Flores-Bazán and Giandomenico Mastroeni. Characterizing FJ and KKT conditions in nonconvex mathematical programming with applications. *SIAM Journal on Optimization*, 25(1):647–676, ????. 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FBO21] Fabián Flores-Bazán and Felipe Opazo. Characterizing convexity of images for quadratic-linear mappings with applications in nonconvex quadratic optimization. *SIAM Journal on Optimization*, 31(3):1774–1796, ????. 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FCF07] Haitao Fang, Xiaojun Chen, and Masao Fukushima. Stochastic R_0 matrix linear complementarity problems. *SIAM Journal on Optimization*, 18(2):482–506, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FdOF07] Carlos Eduardo Ferreira and Fernando M. de Oliveira Filho. New reduction techniques for the group Steiner tree problem. *SIAM Journal on Optimization*, 17(4):1176–1188, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FDS09] J. Fliege, L. M. Graña Drummond, and B. F. Svaiter. Newton’s method for multiobjective optimization. *SIAM Journal on Optimization*, 20(2):602–626, ????. 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FFG99] Michael C. Ferris, Robert Fourer, and David M. Gay. Expressing complementarity problems in an algebraic modeling language and communicating them to solvers. *SIAM Journal on Optimization*, 9(4):991–1009, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33338>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [FFK98a] Francisco Facchinei, Andreas Fischer, and Christian Kanzow. On the accurate identification of active constraints. *SIAM Journal on Optimization*, 9(1):14–32, ????. 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30588>. [FG04a]
- Facchinei:1998:RPS**
- [FFK98b] Francisco Facchinei, Andreas Fischer, and Christian Kanzow. Regularity properties of a semismooth reformulation of variational inequalities. *SIAM Journal on Optimization*, 8(3): 850–869, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29819>. [FG04b]
- Facchinei:2000:IZV**
- [FFK00] Francisco Facchinei, Andreas Fischer, and Christian Kanzow. On the identification of zero variables in an interior-point framework. *SIAM Journal on Optimization*, 10(4):1058–1078, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33973>. [FGG04]
- Forsgren:1998:PDI**
- [FG98] Anders Forsgren and Philip E. Gill. Primal-dual interior methods for nonconvex nonlinear programming. *SIAM Journal on Optimization*, 8(4):1132–1152, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30556>. [FGG07]
- Faybusovich:2004:CUB**
- Leonid Faybusovich and Michael Gekhtman. Calculation of universal barrier functions for cones generated by Chebyshev systems over finite sets. *SIAM Journal on Optimization*, 14(4): 965–979, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42958>.
- Frangioni:2004:NPK**
- A. Frangioni and C. Gentile. New preconditioners for KKT systems of network flow problems. *SIAM Journal on Optimization*, 14(3): 894–913, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40519>.
- Fuduli:2004:MNN**
- A. Fuduli, M. Gaudioso, and G. Giallombardo. Minimizing nonconvex nonsmooth functions via cutting planes and proximity control. *SIAM Journal on Optimization*, 14(3): 743–756, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41145>.
- Forsgren:2007:ISA**
- Anders Forsgren, Philip E. Gill, and Joshua D. Griffin. Iterative solution of augmented systems arising in interior methods.

SIAM Journal on Optimization, 18(2):666–690, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fletcher:2002:GCT

[FGL⁺02] Roger Fletcher, Nicholas I. M. Gould, Sven Leyffer, Philippe L. Toint, and Andreas Wächter. Global convergence of a trust-region SQP-filter algorithm for general nonlinear programming. *SIAM Journal on Optimization*, 13(3):635–659, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35725>.

Forcier:2024:EQM

[FGL24] Maël Forcier, Stéphane Gaubert, and Vincent Leclère. Exact quantization of multistage stochastic linear problems. *SIAM Journal on Optimization*, 34(1):533–562, February 2024. CODEN SJOPE8. ISSN 1095-7189.

Ferreira:2012:MMP

[FGM12] Carlos E. Ferreira, Ute Günther, and Alexander Martin. Mathematical models and polyhedral studies for integral sheet metal design. *SIAM Journal on Optimization*, 22(4):1493–1517, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Freund:2017:EFW

[FGM17] Robert M. Freund, Paul Gri-

gas, and Rahul Mazumder. An extended Frank–Wolfe method with “in-face” directions, and its application to low-rank matrix completion. *SIAM Journal on Optimization*, 27(1):319–346, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ferreira:2014:CGN

[FGO14] O. P. Ferreira, M. L. N. Gonçalves, and P. R. Oliveira. Convergence of the Gauss–Newton method for convex composite optimization under a majorant condition. *SIAM Journal on Optimization*, 23(3):1757–1783, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fischer:2014:PBF

[FH14] Frank Fischer and Christoph Helmberg. A parallel bundle framework for asynchronous subspace optimization of nonsmooth convex functions. *SIAM Journal on Optimization*, 24(2):795–822, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fischer:2016:GCL

[FHIS16] Andreas Fischer, Markus Herrich, Alexey F. Izmailov, and Mikhail V. Solodov. A globally convergent LP–Newton method. *SIAM Journal on Optimization*, 26(4):2012–2033, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [FHKM06] **Fugenschuh:2006:CCM**
 A. Fügenschuh, M. Herty, A. Klar, and A. Martin. Combinatorial and continuous models for the optimization of traffic flows on networks. *SIAM Journal on Optimization*, 16(4): 1155–1176, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FHN09] **Fujishige:2009:MCE**
 Satoru Fujishige, Takumi Hayashi, and Kiyohito Nagano. Minimizing continuous extensions of discrete convex functions with linear inequality constraints. *SIAM Journal on Optimization*, 20(2): 856–867, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FHPS22] **Fornasier:2022:ADC**
 Massimo Fornasier, Hui Huang, Lorenzo Pareschi, and Philippe Sünnen. Anisotropic diffusion in consensus-based optimization on the sphere. *SIAM Journal on Optimization*, 32(3): 1984–2012, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M140941X>.
- [FI08] **Faraci:2008:WPO**
 Francesca Faraci and Antonio Iannizzotto. Well posed optimization problems and nonconvex Chebyshev sets in Hilbert spaces. *SIAM Journal on Optimization*, 19(1):211–216, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fie00] **Fielding:2000:SAO**
 Mark Fielding. Simulated annealing with an optimal fixed temperature. *SIAM Journal on Optimization*, 11(2): 289–307, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36395>.
- [Fil99] **Filipowski:1999:CSF**
 Sharon Filipowski. On the complexity of solving feasible linear programs specified with approximate data. *SIAM Journal on Optimization*, 9(4):1010–1040, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26846>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [FIS10] **Fernandez:2010:SPS**
 D. Fernández, A. F. Izmailov, and M. V. Solodov. Sharp primal superlinear convergence results for some Newtonian methods for constrained optimization. *SIAM Journal on Optimization*, 20(6):3312–3334, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [FIS20] **Fischer:2020:ADI**
 Andreas Fischer, Alexey F. Izmailov, and Wladimir Scheck. Adjusting dual iterates in the presence of critical Lagrange multipliers. *SIAM Journal on Optimization*, 30(2):1555–1581, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FJS98] **Facchinei:1998:ASN**
 Francisco Facchinei, Joaquim Júdice, and João Soares. An active set Newton algorithm for large-scale nonlinear programs with box constraints. *SIAM Journal on Optimization*, 8(1):158–186, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25399>.
- [FK00] **Feltenmark:2000:DAP**
 Stefan Feltenmark and Krzysztof C. Kiwiel. Dual applications of proximal bundle methods, including Lagrangian relaxation of nonconvex problems. *SIAM Journal on Optimization*, 10(3):697–721, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33233>.
- [FK10] **Facchinei:2010:PMS**
 Francisco Facchinei and Christian Kanzow. Penalty methods for the solution of generalized Nash equilibrium problems. *SIAM Journal on Optimization*, 20(5):2228–2253, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FKMN00] **Fukuda:2000:ESS**
 Mituhiro Fukuda, Masakazu Kojima, Kazuo Murota, and Kazuhide Nakata. Exploiting sparsity in semidefinite programming via matrix completion. I. General framework. *SIAM Journal on Optimization*, 11(3):647–674, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36621>.
- [FKP10] **Fukui:2010:TNI**
 Toshizumi Fukui, Krzysztof Kurdyka, and Laurentiu Paunescu. Tame nonsmooth inverse mapping theorems. *SIAM Journal on Optimization*, 20(3):1573–1590, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FKS02] **Fukuda:2002:LDI**
 Mituhiro Fukuda, Masakazu Kojima, and Masayuki Shida. Lagrangian dual interior-point methods for semidefinite programs. *SIAM Journal on Optimization*, 12(4):1007–1031, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38734>.

- [FL98] **Fletcher:1998:NEL**
 Roger Fletcher and Sven Leyffer. Numerical experience with lower bounds for MIQP branch-and-bound. *SIAM Journal on Optimization*, 8(2):604–616, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26845>.
- [FL16] **Friedland:2016:CCD**
 Shmuel Friedland and Lek-Heng Lim. The computational complexity of duality. *SIAM Journal on Optimization*, 26(4):2378–2393, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fle91] **Fletcher:1991:NVR**
 R. Fletcher. A new variational result for quasi-Newton formulae. *SIAM Journal on Optimization*, 1(1):18–21, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fle95] **Fletcher:1995:OPD**
 R. Fletcher. An optimal positive definite update for sparse Hessian matrices. *SIAM Journal on Optimization*, 5(1):192–218, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fle98] **Fletcher:1998:NDM**
 Roger Fletcher. A new degeneracy method and steepest-edge-based conditioning for LP. *SIAM Journal on Optimization*, 8(4):1038–1059, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27747>.
- [Fle01] **Fleischer:2001:FAQ**
 Lisa K. Fleischer. Faster algorithms for the quickest transshipment problem. *SIAM Journal on Optimization*, 12(1):18–35, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32729>.
- [Fle12] **Fletcher:2012:SLC**
 Roger Fletcher. A sequential linear constraint programming algorithm for NLP. *SIAM Journal on Optimization*, 22(3):772–794, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fle14] **Fletcher:2014:WMR**
 Roger Fletcher. On Wolfe’s method for resolving degeneracy in linearly constrained optimization. *SIAM Journal on Optimization*, 24(3):1122–1137, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FLLR14] **Fasano:2014:LBD**
 G. Fasano, G. Liuzzi, S. Lucidi, and F. Rinaldi. A linesearch-based derivative-free

- approach for nonsmooth constrained optimization. *SIAM Journal on Optimization*, 24(3): 959–992, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [FLRS06]
- Fang:2010:CQE**
- [FLN10] D. H. Fang, C. Li, and K. F. Ng. Constraint qualifications for extended Farkas’s lemmas and Lagrangian dualities in convex infinite programming. *SIAM Journal on Optimization*, 20(3): 1311–1332, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [FLS03]
- Facchinei:2002:TNA**
- [FLP02] Francisco Facchinei, Stefano Lucidi, and Laura Palagi. A truncated Newton algorithm for large scale box constrained optimization. *SIAM Journal on Optimization*, 12(4):1100–1125, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35989>. [FLT01]
- Ferreira:2019:GMO**
- [FLP19] O. P. Ferreira, M. S. Louzeiro, and L. F. Prudente. Gradient method for optimization on Riemannian manifolds with lower bounded curvature. *SIAM Journal on Optimization*, 29(4): 2517–2541, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [FLT02]
- Fletcher:2006:LCS**
- Roger Fletcher, Sven Leyffer, Danny Ralph, and Stefan Scholtes. Local convergence of SQP methods for mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 17(1):259–286, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ferris:2003:OAR**
- Michael C. Ferris, Jinho Lim, and David M. Shepard. An optimization approach for radiosurgery treatment planning. *SIAM Journal on Optimization*, 13(3):921–937, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39745>.
- Fukushima:2001:SFS**
- Masao Fukushima, Zhi-Quan Luo, and Paul Tseng. Smoothing functions for second-order cone complementarity problems. *SIAM Journal on Optimization*, 12(2):436–460, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38036>.
- Fletcher:2002:GCF**
- Roger Fletcher, Sven Leyffer, and Philippe L. Toint. On the global convergence of a Filter–

- SQP algorithm. *SIAM Journal on Optimization*, 13(1):44–59, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38081>. [FM94a]
- Fukushima:2003:SQC**
- [FLT03] Masao Fukushima, Zhi-Quan Luo, and Paul Tseng. A sequential quadratically constrained quadratic programming method for differentiable convex minimization. *SIAM Journal on Optimization*, 13(4):1098–1119, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39812>.
- Fang:2011:STF**
- [FLY11] D. H. Fang, C. Li, and X. Q. Yang. Stable and total Fenchel duality for DC optimization problems in locally convex spaces. *SIAM Journal on Optimization*, 21(3):730–760, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p730_s1.
- Ferris:1991:PCD**
- [FM91] M. C. Ferris and O. L. Mangasarian. Parallel constraint distribution. *SIAM Journal on Optimization*, 1(4):487–500, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [FM94b]
- Ferris:1994:PVD**
- M. C. Ferris and O. L. Mangasarian. Parallel variable distribution. *SIAM Journal on Optimization*, 4(4):815–832, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Friedlander:1994:MCQ**
- [FM94b] Ana Friedlander and José Mario Martínez. On the maximization of a concave quadratic function with box constraints. *SIAM Journal on Optimization*, 4(1):177–192, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Forsgren:1997:NML**
- [FM97] Anders Forsgren and Walter Murray. Newton methods for large-scale linear inequality-constrained minimization. *SIAM Journal on Optimization*, 7(1):162–176, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27912>.
- Ferris:2003:IPM**
- [FM03] Michael C. Ferris and Todd S. Munson. Interior-point methods for massive support vector machines. *SIAM Journal on Optimization*, 13(3):783–804, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <http://epubs.siam.org/sam-bin/dbq/article/37437>.

Friedlander:2014:GOD

- [FMP14] Michael P. Friedlander, Ives Macêdo, and Ting Kei Pong. Gauge optimization and duality. *SIAM Journal on Optimization*, 24(4):1999–2022, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Fadili:2018:SAM

- [FMP18] Jalal Fadili, Jérôme Malick, and Gabriel Peyré. Sensitivity analysis for mirror-stratifiable convex functions. *SIAM Journal on Optimization*, 28(4):2975–3000, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Friedlander:2019:PC

- [FMP19] Michael P. Friedlander, Ives Macêdo, and Ting Kei Pong. Polar convolution. *SIAM Journal on Optimization*, 29(2):1366–1391, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Friedlander:1994:RLC

- [FMS94] Ana Friedlander, José Mario Martínez, and Sandra A. Santos. On the resolution of linearly constrained convex minimization problems. *SIAM Journal on Optimization*, 4(2):331–339, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ferreira:1996:SMK

- [FMW96] C. E. Ferreira, A. Martin, and R. Weismantel. Solving multiple knapsack problems by cutting planes. *SIAM Journal on Optimization*, 6(3):858–877, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25445>.

Fang:2024:FST

- [FNMK24] Yuchen Fang, Sen Na, Michael W. Mahoney, and Mladen Kolar. Fully stochastic trust-region sequential quadratic programming for equality-constrained optimization problems. *SIAM Journal on Optimization*, 34(2):2007–2037, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1537862>.

Fortin:2005:CLN

- [For05] Charles Fortin. Computing the local-nonglobal minimizer of a large scale trust-region subproblem. *SIAM Journal on Optimization*, 16(1):263–296, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60229>.

Fox:1995:FSA

- [Fox95] Bennett L. Fox. Faster simulated annealing. *SIAM Journal on Optimization*, 5(3):488–505,

- August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FP97] Dan Feng and Thomas H. Puliham. Tensor-GMRES method for large systems of nonlinear equations. *SIAM Journal on Optimization*, 7(3):757–779, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27646>.
- [FP98] Masao Fukushima and Jong-Shi Pang. Some feasibility issues in mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 8(3):673–681, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31577>.
- [FPT22] Terunari Fuji, Pierre-Louis Poirion, and Akiko Takeda. Convexification with bounded gap for randomly projected quadratic optimization. *SIAM Journal on Optimization*, 32(2):874–899, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1433678>.
- [FQ96] Masao Fukushima and Liqun Qi. A globally and superlinearly convergent algorithm for non-smooth convex minimization. *SIAM Journal on Optimization*, 6(4):1106–1120, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27883>.
- [FR15] Olivier Fercoq and Peter Richtárik. Accelerated, parallel, and proximal coordinate descent. *SIAM Journal on Optimization*, 25(4):1997–2023, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fra02] Antonio Frangioni. Generalized bundle methods. *SIAM Journal on Optimization*, 13(1):117–156, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34218>.
- [Fre95] Robert M. Freund. A potential reduction algorithm with user-specified phase I–phase II balance for solving a linear program from an infeasible warm start. *SIAM Journal on Optimization*, 5(2):247–268, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Fre03] **Freund:2003:PDG**
 Robert M. Freund. On the primal-dual geometry of level sets in linear and conic optimization. *SIAM Journal on Optimization*, 13(4):1004–1013, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39364>.
- [FRMP18] Mahyar Fazlyab, Alejandro Ribeiro, Manfred Morari, and Victor M. Preciado. Analysis of optimization algorithms via integral quadratic constraints: Non-strongly convex problems. *SIAM Journal on Optimization*, 28(3):2654–2689, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FRW11] **Fornasier:2011:LRM**
 Massimo Fornasier, Holger Rauhut, and Rachel Ward. Low-rank matrix recovery via iteratively reweighted least squares minimization. *SIAM Journal on Optimization*, 21(4):1614–1640, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1614_s1.
- [FS96] **Feng:1996:TME**
 Dan Feng and Robert B. Schnabel. Tensor methods for equality constrained optimization. *SIAM Journal on Optimization*, 6(3):653–673, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27079>.
- [FS97] **Facchinei:1997:NMF**
 Francisco Facchinei and João Soares. A new merit function for nonlinear complementarity problems and a related algorithm. *SIAM Journal on Optimization*, 7(1):225–247, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27911>.
- [FS05] **Friedlander:2005:GCL**
 Michael P. Friedlander and Michael A. Saunders. A globally convergent linearly constrained Lagrangian method for nonlinear optimization. *SIAM Journal on Optimization*, 15(3):863–897, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41978>.
- [FS08] **Floudas:2008:ACA**
 Christodoulos A. Floudas and Oliver Stein. The adaptive convexification algorithm: a feasible point method for semi-infinite programming. *SIAM Journal on Optimization*, 18(4):1187–1208, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Fernandez:2012:LCE**
- [FS12] D. Fernández and M. V. Solodov. Local convergence of exact and inexact augmented Lagrangian methods under the second-order sufficient optimality condition. *SIAM Journal on Optimization*, 22(2):384–407, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ferreira:2017:KTN**
- [FS17] O. P. Ferreira and G. N. Silva. Kantorovich’s theorem on Newton’s method for solving strongly regular generalized equation. *SIAM Journal on Optimization*, 27(2):910–926, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Fawzi:2023:OSC**
- [FS23] Hamza Fawzi and James Saunderson. Optimal self-concordant barriers for quantum relative entropies. *SIAM Journal on Optimization*, 33(4):2858–2884, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1500216>.
- Fukuda:2012:DEP**
- [FSF12] Ellen H. Fukuda, Paulo J. S. Silva, and Masao Fukushima. Differentiable exact penalty functions for nonlinear second-order cone programs. *SIAM Journal on Optimization*, 22(4):1607–1633, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Fawzi:2015:ESL**
- [FSP15] Hamza Fawzi, James Saunderson, and Pablo A. Parrilo. Equivariant semidefinite lifts and sum-of-squares hierarchies. *SIAM Journal on Optimization*, 25(4):2212–2243, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Fukushima:2002:IAS**
- [FT02] Masao Fukushima and Paul Tseng. An implementable active-set algorithm for computing a B-stationary point of a mathematical program with linear complementarity constraints. *SIAM Journal on Optimization*, 12(3):724–739, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36323>. See erratum [FT07].
- Fukushima:2007:IAS**
- [FT07] Masao Fukushima and Paul Tseng. An implementable active-set algorithm for computing a B-stationary point of a mathematical program with linear complementarity constraints: Erratum. *SIAM Journal on Optimization*, 17(4):1253–1257, ??? 2007. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic). See [FT02].
- [FT08] Michael P. Friedlander and Paul Tseng. Exact regularization of convex programs. *SIAM Journal on Optimization*, 18(4): 1326–1350, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Fuk98] Masao Fukushima. Parallel variable transformation in unconstrained optimization. *SIAM Journal on Optimization*, 8(3): 658–672, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30987>.
- [Fus14] Peter Fusek. On metric regularity for weakly almost piecewise smooth functions and some applications in nonlinear semidefinite programming. *SIAM Journal on Optimization*, 23(2): 1041–1061, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FV99] Robert M. Freund and Jorge R. Vera. Condition-based complexity of convex optimization in conic linear form via the ellipsoid algorithm. *SIAM Journal on Optimization*, 10(1):155–176, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32829>.
- [FV07] Gustav Feichtinger and Vladimir M. Veliov. On a distributed control problem arising in dynamic optimization of a fixed-size population. *SIAM Journal on Optimization*, 18(3):980–1003, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FV16] Jörg Fliege and A. Ismael F. Vaz. A method for constrained multiobjective optimization based on SQP techniques. *SIAM Journal on Optimization*, 26(4):2091–2119, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [FWKS15] Csaba I. Fábián, Christian Wolf, Achim Koberstein, and Leena Suhl. Risk-averse optimization in two-stage stochastic models: Computational aspects and a study. *SIAM Journal on Optimization*, 25(1):28–52, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GACD14] Akshay Gupte, Shabbir Ahmed, Myun Seok Cheon, and Santanu Dey. Solving mixed integer bilinear problems using MILP

formulations. *SIAM Journal on Optimization*, 23(2):721–744, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gu:2020:EAL

[GAD20] Xiaoyi Gu, Shabbir Ahmed, and Santanu S. Dey. Exact augmented Lagrangian duality for mixed integer quadratic programming. *SIAM Journal on Optimization*, 30(1):781–797, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gavrea:2008:CCS

[GAP08] Bogdan I. Gavrea, Mihai Anitescu, and Florian A. Potra. Convergence of a class of semi-implicit time-stepping schemes for nonsmooth rigid multibody dynamics. *SIAM Journal on Optimization*, 19(2):969–1001, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

GarciaPalomares:1993:PPA

[Gar93] Ubaldo García Palomares. Parallel projected aggregation methods for solving the convex feasibility problem. *SIAM Journal on Optimization*, 3(4):882–900, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Garber:2021:CPG

[Gar21] Dan Garber. On the convergence of projected-gradient

methods with low-rank projections for smooth convex minimization over trace-norm balls and related problems. *SIAM Journal on Optimization*, 31(1):727–753, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gangammanavar:2022:SDM

[GB22] Harsha Gangammanavar and Manish Bansal. Stochastic decomposition method for two-stage distributionally robust linear optimization. *SIAM Journal on Optimization*, 32(3):1901–1930, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1378600>.

Garatti:2023:CRA

[GC23] Simone Garatti and Marco C. Campi. On conditional risk assessments in scenario optimization. *SIAM Journal on Optimization*, 33(2):455–480, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1451385>.

Gisbert:2018:COV

[GCPT18] M. J. Gisbert, M. J. Cánovas, J. Parra, and F. J. Toledo. Calmness of the optimal value in linear programming. *SIAM Journal on Optimization*, 28(3):2201–2221, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [GDG22] **Gorbunov:2022:AMD**
 Eduard Gorbunov, Pavel Dvurechen-
 sky, and Alexander Gasnikov. An accelerated method for derivative-free smooth stochastic convex optimization. *SIAM Journal on Optimization*, 32(2):1210–1238, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1259225>. [Ger11]
- [GdW00] **Gritzmam:2000:ABI**
 Peter Gritzmam, Sven de Vries, and Markus Wiegelmam. Approximating binary images from discrete X-rays. *SIAM Journal on Optimization*, 11(2):522–546, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35726>. [GER23]
- [GE14] **Greuet:2014:PAP**
 Aurélien Greuet and Mohab Safey El Din. Probabilistic algorithm for polynomial optimization over a real algebraic set. *SIAM Journal on Optimization*, 24(3):1313–1343, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ger08] **Gerdts:2008:GCN**
 Matthias Gerdts. Global convergence of a nonsmooth Newton method for control-state constrained optimal control problems. *SIAM Journal on Optimization*, 19(1):326–350, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [Ger11].
- Gerdts:2011:EGC**
 Matthias Gerdts. Erratum: “Global Convergence of a Nonsmooth Newton Method for Control-State Constrained Optimal Control Problems”. *SIAM Journal on Optimization*, 21(2):615–616, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p615_s1. See [Ger08].
- Gunzel:2023:SSS**
 Harald Günzel, Daniel Hernández Escobar, and Jan-J. Rückmann. Strongly stable stationary points for a class of generalized equations. *SIAM Journal on Optimization*, 33(2):950–977, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M146750X>.
- [GF08] **Guoyin:2008:efd**
 Li Guoyin and Ng Kung Fu. On extension of Fenchel duality and its application. *SIAM Journal on Optimization*, 19(3):1489–1509, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Gfr07] **Gfrerer:2007:SON**
 Helmut Gfrerer. Second-order necessary conditions for nonlinear optimization problems with abstract constraints: The degenerate case. *SIAM Journal on Optimization*, 18(2):589–612, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gfr11] **Gfrerer:2011:FOS**
 Helmut Gfrerer. First order and second order characterizations of metric subregularity and calmness of constraint set mappings. *SIAM Journal on Optimization*, 21(4):1439–1474, ????. 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1439_s1.
- [Gfr13] **Gfrerer:2013:DMS**
 Helmut Gfrerer. On directional metric subregularity and second-order optimality conditions for a class of nonsmooth mathematical programs. *SIAM Journal on Optimization*, 23(1):632–665, ????. 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gfr14] **Gfrerer:2014:OCD**
 Helmut Gfrerer. Optimality conditions for disjunctive programs based on generalized differentiation with application to mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 24(2):898–931, ????. 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GG03] **Gondzio:2003:RPD**
 Jacek Gondzio and Andreas Grothey. Reoptimization with the primal-dual interior point method. *SIAM Journal on Optimization*, 13(3):842–864, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39314>.
- [GG08] **Gondzio:2008:NUT**
 Jacek Gondzio and Andreas Grothey. A new unblocking technique to warmstart interior point methods based on sensitivity analysis. *SIAM Journal on Optimization*, 19(3):1184–1210, ????. 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GG18a] **Gao:2018:BBM**
 Wenbo Gao and Donald Goldfarb. Block BFGS methods. *SIAM Journal on Optimization*, 28(2):1205–1231, ????. 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GG18b] **Grussler:2018:LRI**
 Christian Grussler and Pontus Giselsson. Low-rank inducing norms with optimality interpretations. *SIAM Journal on Optimization*, 28(4):3057–3078,

???? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Graf:2015:FGO

- [GH15] Manuel Gräf and Ralf Hielscher. Fast global optimization on the torus, the sphere, and the rotation group. *SIAM Journal on Optimization*, 25(1):540–563, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Garber:2016:LCV

- [GH16] Dan Garber and Elad Hazan. A linearly convergent variant of the conditional gradient algorithm under strong convexity, with applications to online and stochastic optimization. *SIAM Journal on Optimization*, 26(3):1493–1528, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ghate:2017:DCI

- [Gha17] Archis Ghate. Duality in countably infinite monotropic programs. *SIAM Journal on Optimization*, 27(3):2010–2033, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ghate:2023:DAP

- [Gha23] Archis Ghate. Dual ascent and primal-dual algorithms for infinite-horizon nonstationary Markov decision processes. *SIAM Journal on Optimization*, 33(3):1391–1415, 2023. CODEN

SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M149185X>.

Gonzalez-Hernandez:2006:SMT

- [GHGHL06] Juan González-Hernández, J. Rigoberto Gabriel, and Onésimo Hernández-Lerma. On solutions to the mass transfer problem. *SIAM Journal on Optimization*, 17(2):485–499, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gonzalez-Hernandez:2005:EPS

- [GHHL05] Juan González-Hernández and Onésimo Hernández-Lerma. Extreme points of sets of randomized strategies in constrained optimization and control problems. *SIAM Journal on Optimization*, 15(4):1085–1104, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60534>.

Gairing:2017:CAC

- [GHK17] Martin Gairing, Tobias Harks, and Max Klimm. Complexity and approximation of the continuous network design problem. *SIAM Journal on Optimization*, 27(3):1554–1582, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Geletu:2017:IOA**
- [GHKL17] Abebe Geletu, Armin Hoffmann, Michael Klöppel, and Pu Li. An inner-outer approximation approach to chance constrained optimization. *SIAM Journal on Optimization*, 27(3):1834–1857, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gutierrez:2019:LBA**
- [GHNS19] César Gutiérrez, Lidia Huerga, Vicente Novo, and Miguel Sama. Limit behavior of approximate proper solutions in vector optimization. *SIAM Journal on Optimization*, 29(4):2677–2696, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goring:2014:MSW**
- [GHR14] Frank Göring, Christoph Helmberg, and Susanna Reiss. On minimizing the spectral width of graph Laplacians and associated graph realizations. *SIAM Journal on Optimization*, 23(2):834–856, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Greenberg:1998:DSR**
- [GHRT98] Harvey J. Greenberg, Allen G. Holder, Kees Roos, and Tamás Terlaky. On the dimension of the set of Rim perturbations for optimal partition invariance. *SIAM Journal on Optimization*, 9(1):207–216, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31679>.
- Gramlich:1995:LCS**
- [GHS95] G. Gramlich, R. Hettich, and E. W. Sachs. Local convergence of SQP methods in semi-infinite programming. *SIAM Journal on Optimization*, 5(3):641–658, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goring:2008:ESS**
- [GHW08] Frank Göring, Christoph Helmberg, and Markus Wappler. Embedded in the shadow of the separator. *SIAM Journal on Optimization*, 19(1):472–501, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gong:1999:SCA**
- [GHZ99] Wei-Bo Gong, Yu-Chi Ho, and Wengang Zhai. Stochastic comparison algorithm for discrete optimization with estimation. *SIAM Journal on Optimization*, 10(2):384–404, December/February 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29068>.
- Glover:1996:CCG**
- [GLJT96] B. M. Glover, Y. Ishizuka, V. Jeyakumar, and H. D. Tuan. Complete characterizations of global optimality for problems

- involving the pointwise minimum of sublinear functions. *SIAM Journal on Optimization*, 6(2):362–372, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [GJ17]
- Gilbert:1997:RWC**
- [Gil97] Jean Charles Gilbert. On the realization of the Wolfe conditions in reduced quasi-Newton methods for equality constrained optimization. *SIAM Journal on Optimization*, 7(3):780–813, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25960>.
- Giselsson:2021:NFB**
- [Gis21] Pontus Giselsson. Nonlinear forward-backward splitting with projection correction. *SIAM Journal on Optimization*, 31(3):2199–2226, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gotz:1999:LMR**
- [GJ99] Arnulf Götz and Johannes Jahn. The Lagrange multiplier rule in set-valued optimization. *SIAM Journal on Optimization*, 10(2):331–344, December/February 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31169>.
- Gowda:2017:CPE**
- M. Seetharama Gowda and Juyoung Jeong. Commutation principles in Euclidean Jordan algebras and normal decomposition systems. *SIAM Journal on Optimization*, 27(3):1390–1402, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goberna:2014:RSM**
- [GJLVP14] M. A. Goberna, V. Jeyakumar, G. Li, and J. Vicente-Pérez. Robust solutions of MultiObjective linear semi-infinite programs under constraint data uncertainty. *SIAM Journal on Optimization*, 24(3):1402–1419, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gutierrez:2006:UAO**
- [GJN06] César Gutiérrez, Bienvenido Jiménez, and Vicente Novo. A unified approach and optimality conditions for approximate solutions of vector optimization problems. *SIAM Journal on Optimization*, 17(3):688–710, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gunzel:2008:SFS**
- [GJR08] Harald Günzel, Hubertus Th. Jongen, and Jan-J. Rückmann. On stable feasible sets in generalized semi-infinite programming. *SIAM Journal on Optimization*, 19(2):644–654, ???

2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [GK95a]
- [GJT23] Serge Gratton, Sadok Jerad, and Philippe L. Toint. Convergence properties of an objective-function-free optimization regularization algorithm, including an $O(\epsilon^{-3/2})$ complexity bound. *SIAM Journal on Optimization*, 33(3):1621–1646, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1499522>.
- [GJV16] R. Garmanjani, D. Júdice, and L. N. Vicente. Trust-region methods without using derivatives: Worst case complexity and the NonSmooth case. *SIAM Journal on Optimization*, 26(4):1987–2011, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [GK96]
- [GK94] Michael D. Grigoriadis and Leonid G. Khachiyan. Fast approximation schemes for convex programs with many blocks and coupling constraints. *SIAM Journal on Optimization*, 4(1):86–107, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [GK99]
- [GK95a] P. Gilmore and C. T. Kelley. An implicit filtering algorithm for optimization of functions with many local minima. *SIAM Journal on Optimization*, 5(2):269–285, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GK95b] Roland Glowinski and Anthony J. Kearsley. On the simulation and control of some friction constrained motions. *SIAM Journal on Optimization*, 5(3):681–694, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GK96] Michael D. Grigoriadis and Leonid G. Khachiyan. An interior point method for bordered block-diagonal linear programs. *SIAM Journal on Optimization*, 6(4):913–932, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26360>.
- [GK99] Mark S. Gockenbach and Anthony J. Kearsley. Optimal signal sets for non-Gaussian detectors. *SIAM Journal on Optimization*, 9(2):316–326, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26360>.

[//epubs.siam.org/sam-bin/dbq/article/30655](http://epubs.siam.org/sam-bin/dbq/article/30655).

Gutierrez:2017:EVP

- [GKNRP17] C. Gutiérrez, G. Kassay, V. Novo, and J. L. Ródenas-Pedregosa. Ekeland variational principles in vector equilibrium problems. *SIAM Journal on Optimization*, 27(4):2405–2425, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Grigoriadis:2001:AMM

- [GKPV01] M. D. Grigoriadis, L. G. Khachiyan, L. Porkolab, and J. Villavicencio. Approximate max-min resource sharing for structured concave optimization. *SIAM Journal on Optimization*, 11(4):1081–1091, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35868>.

Gonzaga:2014:OAC

- [GKR14] Clóvis C. Gonzaga, Elizabeth W. Karas, and Diane R. Rossetto. An optimal algorithm for constrained differentiable convex optimization. *SIAM Journal on Optimization*, 23(4):1939–1955, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gill:2020:SPD

- [GKR20] Philip E. Gill, Vyacheslav Kungurtsev, and Daniel P. Robinson.

A shifted primal-dual penalty-barrier method for nonlinear optimization. *SIAM Journal on Optimization*, 30(2):1067–1093, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Guigues:2018:CLT

- [GKS18] Vincent Guigues, Volker Krätschmer, and Alexander Shapiro. A central limit theorem and hypotheses testing for risk-averse stochastic programs. *SIAM Journal on Optimization*, 28(2):1337–1366, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gratton:2023:MOF

- [GKT23] Serge Gratton, Alena Kopanicáková, and Philippe L. Toint. Multi-level objective-function-free optimization with an application to neural networks training. *SIAM Journal on Optimization*, 33(4):2772–2800, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1553455>.

Gunther:2024:NCS

- [GKT24] Christian Günther, Bahareh Khazayel, and Christiane Tammer. Nonlinear cone separation theorems in real topological linear spaces. *SIAM Journal on Optimization*, 34(1):225–250, January 2024. CODEN SJOPE8. ISSN 1095-7189.

- [GKV03] **Gonzaga:2003:GCF** Clóvis C. Gonzaga, Elizabeth Karas, and Márcia Vanti. A globally convergent filter method for nonlinear programming. *SIAM Journal on Optimization*, 14(3):646–669, ??? 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39932>.
- [GL01] **Gill:2001:RHQ** Philip E. Gill and Michael W. Leonard. Reduced-Hessian quasi-Newton methods for unconstrained optimization. *SIAM Journal on Optimization*, 12(1):209–237, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30795>.
- [GL03] **Gill:2003:LMR** Philip E. Gill and Michael W. Leonard. Limited-memory reduced-Hessian methods for large-scale unconstrained optimization. *SIAM Journal on Optimization*, 14(2):380–401, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GL08a] **Gvozdenovic:2008:CSP** Nebojša Gvozdenović and Monique Laurent. Computing semidefinite programming lower bounds for the (fractional) chromatic number via block-diagonalization. *SIAM Journal on Optimization*, 19(2):592–615, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GL08b] **Gvozdenovic:2008:OCN** Nebojša Gvozdenović and Monique Laurent. The operator Ψ for the chromatic number of a graph. *SIAM Journal on Optimization*, 19(2):572–591, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GL10] **Gourion:2010:FES** Daniel Gourion and Dinh The Luc. Finding efficient solutions by free disposal outer approximation. *SIAM Journal on Optimization*, 20(6):2939–2958, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GL12] **Ghadimi:2012:OSA** Saeed Ghadimi and Guanghui Lan. Optimal stochastic approximation algorithms for strongly convex stochastic composite optimization I: a generic algorithmic framework. *SIAM Journal on Optimization*, 22(4):1469–1492, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GL14a] **Ghadimi:2014:OSA** Saeed Ghadimi and Guanghui Lan. Optimal stochastic approximation algorithms for strongly convex stochastic composite optimization, II: Shrinking proce-

dures and optimal algorithms. *SIAM Journal on Optimization*, 23(4):2061–2089, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ghadimi:2014:SFZ

[GL14b] Saeed Ghadimi and Guanghui Lan. Stochastic first- and zeroth-order methods for non-convex stochastic programming. *SIAM Journal on Optimization*, 23(4):2341–2368, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Goldberg:2015:ASM

[GL15] Noam Goldberg and Sven Leyffer. An active-set method for second-order conic-constrained quadratic programming. *SIAM Journal on Optimization*, 25(3):1455–1477, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Guo:2018:NVP

[GL18] Jiayi Guo and A. S. Lewis. Nonsmooth variants of Powell’s BFGS convergence theorem. *SIAM Journal on Optimization*, 28(2):1301–1311, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gao:2018:NFO

[GLCxY18] Bin Gao, Xin Liu, Xiaojun Chen, and Ya xiang Yuan. A new first-order algorithmic framework for optimiza-

tion problems with orthogonality constraints. *SIAM Journal on Optimization*, 28(1):302–332, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Goberna:2005:SEP

[GLdS05] Miguel A. Goberna, Mercedes Larriqueta, and Virginia Vera de Serio. On the stability of the extreme point set in linear optimization. *SIAM Journal on Optimization*, 15(4):1155–1169, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60792>.

Gonzalez-Lima:2011:ASI

[GLHZ11] Maria D. Gonzalez-Lima, William W. Hager, and Hongchao Zhang. An affine-scaling interior-point method for continuous knapsack constraints with application to support vector machines. *SIAM Journal on Optimization*, 21(1):361–390, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p361_s1.

Geoghegan:1998:THD

[GLM98] Ross Geoghegan, Jeffrey C. Lagarias, and Robert C. Melville. Threading homotopies and DC operating points of nonlinear circuits. *SIAM Journal on Optimization*, 9(1):159–178, October/December 1998. CO-

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25158>.

Gratton:2007:AGN

[GLN07] S. Gratton, A. S. Lawless, and N. K. Nichols. Approximate Gauss–Newton methods for nonlinear least squares problems. *SIAM Journal on Optimization*, 18(1):106–132, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gould:2014:FMU

[GLR14] Nicholas I. M. Gould, Yueling Loh, and Daniel P. Robinson. A filter method with unified step computation for nonlinear optimization. *SIAM Journal on Optimization*, 24(1):175–209, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gould:2015:NFS

[GLR15] Nicholas I. M. Gould, Yueling Loh, and Daniel P. Robinson. A nonmonotone filter SQP method: Local convergence and numerical results. *SIAM Journal on Optimization*, 25(3):1885–1911, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Giandomenico:2015:ERS

[GLRS15] Monia Giandomenico, Adam N. Letchford, Fabrizio Rossi, and Stefano Smriglio. Ellipsoidal relaxations of the stable set problem: Theory and algorithms.

SIAM Journal on Optimization, 25(3):1944–1963, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gould:1999:STR

[GLRT99] Nicholas I. M. Gould, Stefano Lucidi, Massimo Roma, and Philippe L. Toint. Solving the trust-region subproblem using the Lanczos method. *SIAM Journal on Optimization*, 9(2):504–525, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32273>.

Geiersbach:2021:SAO

[GLRW21] Caroline Geiersbach, Estefania Loayza-Romero, and Kathrin Welker. Stochastic approximation for optimization in shape spaces. *SIAM Journal on Optimization*, 31(1):348–376, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Goberna:1997:STL

[GLT97] M. A. Goberna, M. A. López, and M. I. Todorov. Stability theory for linear inequality systems. II. Upper semicontinuity of the solution set mapping. *SIAM Journal on Optimization*, 7(4):1138–1151, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28901>.

Goberna:2003:EAC

- [GLT03] M. A. Goberna, M. A. López, and M. I. Todorov. Extended active constraints in linear optimization with applications. *SIAM Journal on Optimization*, 14(2):608–619, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gould:2004:MFA

- [GLT04] Nicholas I. M. Gould, Sven Leyffer, and Philippe L. Toint. A multidimensional filter algorithm for nonlinear equations and nonlinear least-squares. *SIAM Journal on Optimization*, 15(1):17–38, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42263>.

Gonzalez-Lima:1998:ECA

- [GLTP98] María D. González-Lima, Richard A. Tapia, and Florian A. Potra. On effectively computing the analytic center of the solution set by primal-dual interior-point methods. *SIAM Journal on Optimization*, 8(1):1–25, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29179>.

Goldfarb:1991:LBF

- [GLW91] Donald Goldfarb, Shu Cheng Liu, and Si Yun Wang. A logarithmic barrier function al-

gorithm for quadratically constrained convex quadratic programming. *SIAM Journal on Optimization*, 1(2):252–267, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Goffin:1996:CAI

- [GLY96] Jean-Louis Goffin, Zhi-Quan Luo, and Yinyu Ye. Complexity analysis of an interior cutting plane method for convex feasibility problems. *SIAM Journal on Optimization*, 6(3):638–652, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25863>.

Guo:2012:SAP

- [GLY12] Lei Guo, Gui-Hua Lin, and Jane J. Ye. Stability analysis for parametric mathematical programs with geometric constraints and its applications. *SIAM Journal on Optimization*, 22(3):1151–1176, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Guo:2014:SAV

- [GLYZ14] Lei Guo, Gui-Hua Lin, Jane J. Ye, and Jin Zhang. Sensitivity analysis of the value function for parametric mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 24(3):1206–1237, 2014. CODEN SJOPE8.

- ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GM12a] Mehdi Ghasemi and Murray Marshall. Lower bounds for polynomials using geometric programming. *SIAM Journal on Optimization*, 22(2):460–473, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GM12b] Donald Goldfarb and Shiqian Ma. Fast multiple-splitting algorithms for convex optimization. *SIAM Journal on Optimization*, 22(2):533–556, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GM15] Helmut Gfrerer and Boris S. Mordukhovich. Complete characterizations of tilt stability in nonlinear programming under weakest qualification conditions. *SIAM Journal on Optimization*, 25(4):2081–2119, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GM17] Helmut Gfrerer and Boris S. Mordukhovich. Robinson stability of parametric constraint systems via variational analysis. *SIAM Journal on Optimization*, 27(1):438–465, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GM19] Helmut Gfrerer and Boris S. Mordukhovich. Second-order variational analysis of parametric constraint and variational systems. *SIAM Journal on Optimization*, 29(1):423–453, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GMM17] Max L. N. Gonçalves, Jefferson G. Melo, and Renato D. C. Monteiro. Improved pointwise iteration-complexity of a regularized ADMM and of a regularized non-Euclidean HPE framework. *SIAM Journal on Optimization*, 27(1):379–407, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GMO14] Chen Greif, Erin Moulding, and Dominique Orban. Bounds on eigenvalues of matrices arising from interior-point methods. *SIAM Journal on Optimization*, 24(1):49–83, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GMR91] J. H. Glick, R. S. Maier, and J. B. Rosen. Parallel solution of large-scale, block-diagonal concave maximization problems. *SIAM Journal on Optimization*, 1(4):501–514, November 1991. CODEN SJOPE8. ISSN 1052-

6234 (print), 1095-7189 (electronic).

Grotschel:1992:FPA

- [GMS92] Martin Grötschel, Clyde L. Monma, and Mechthild Stoer. Facets for polyhedra arising in the design of communication networks with low-connectivity constraints. *SIAM Journal on Optimization*, 2(3):474–504, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gill:2002:SSA

- [GMS02] Philip E. Gill, Walter Murray, and Michael A. Saunders. SNOPT: An SQP algorithm for large-scale constrained optimization. *SIAM Journal on Optimization*, 12(4):979–1006, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35001>.

Guigues:2021:ICS

- [GMS21] Vincent Guigues, Renato Monteiro, and Benar Svaiter. Inexact cuts in stochastic dual dynamic programming applied to multistage stochastic non-differentiable problems. *SIAM Journal on Optimization*, 31(3):2084–2110, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Geissler:2017:PAD

- [GMSS17] Björn Geißler, Antonio Morsi, Lars Schewe, and Martin

Schmidt. Penalty alternating direction methods for mixed-integer optimization: a new view on feasibility pumps. *SIAM Journal on Optimization*, 27(3):1611–1636, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gilbert:1992:GCP

- [GN92] Jean Charles Gilbert and Jorge Nocedal. Global convergence properties of conjugate gradient methods for optimization. *SIAM Journal on Optimization*, 2(1):21–42, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gouveia:2011:PPP

- [GN11] João Gouveia and Tim Netzer. Positive polynomials and projections of spectrahedra. *SIAM Journal on Optimization*, 21(3):960–976, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p960_s1.

Grapiglia:2017:RNM

- [GN17] G. N. Grapiglia and Yu. Nesterov. Regularized Newton methods for minimizing functions with Hölder continuous Hessians. *SIAM Journal on Optimization*, 27(1):478–506, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [GN19] **Grapiiglia:2019:ARN**
 Geovani N. Grapiiglia and Yurii Nesterov. Accelerated regularized Newton methods for minimizing composite convex functions. *SIAM Journal on Optimization*, 29(1):77–99, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GN20] **Grapiiglia:2020:TMM**
 G. N. Grapiiglia and Yu. Nesterov. Tensor methods for minimizing convex functions with Hölder continuous higher-order derivatives. *SIAM Journal on Optimization*, 30(4):2750–2779, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GN23] **Grapiiglia:2023:ATO**
 G. N. Grapiiglia and Yu. Nesterov. Adaptive third-order methods for composite convex optimization. *SIAM Journal on Optimization*, 33(3):1855–1883, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1480872>.
- [GNL11] **Guerra:2011:CSD**
 A. Guerra, A. M. Newman, and S. Leyffer. Concrete structure design using mixed-integer nonlinear programming with complementarity constraints. *SIAM Journal on Optimization*, 21(3):833–863, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p833_s1.
- [Gutierrez:2016:NSF] **Gutierrez:2016:NSF**
 César Gutiérrez, Vicente Novo, Juan Luis Ródenas-Pedregosa, and Tamaki Tanaka. Nonconvex separation functional in linear spaces with applications to vector equilibria. *SIAM Journal on Optimization*, 26(4):2677–2695, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GNS08] **Gollmer:2008:SPF**
 Ralf Gollmer, Frederike Neise, and Rüdiger Schultz. Stochastic programs with first-order dominance constraints induced by mixed-integer linear recourse. *SIAM Journal on Optimization*, 19(2):552–571, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GO12] **Gurbuzbalaban:2012:SRR**
 Mert Gürbüzbalaban and Michael L. Overton. Some regularity results for the pseudospectral abscissa and pseudospectral radius of a matrix. *SIAM Journal on Optimization*, 22(2):281–285, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GO16] **Gfrerer:2016:LPI**
 Helmut Gfrerer and Jirí V. Outrata. On Lipschitzian properties

- of implicit multifunctions. *SIAM Journal on Optimization*, 26(4): 2160–2189, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gon99] **Gfrerer:2021:SNM** Helmut Gfrerer and Jiri V. Outrata. On a semismooth* Newton method for solving generalized equations. *SIAM Journal on Optimization*, 31(1):489–517, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gón21] **Gomez:2021:ODT** Andrés Gómez. Outlier detection in time series via mixed-integer conic quadratic optimization. *SIAM Journal on Optimization*, 31(3):1897–1925, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gon91a] **Gonzaga:1991:LSPb** Clovis C. Gonzaga. Large step path-following methods for linear programming. I. Barrier function method. *SIAM Journal on Optimization*, 1(2):268–279, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gon91b] **Gonzaga:1991:LSPa** Clovis C. Gonzaga. Large step path-following methods for linear programming. II. Potential reduction method. *SIAM Journal on Optimization*, 1(2): 280–292, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gon99] **Gonzaga:1999:CPC** Clovis C. Gonzaga. Complexity of predictor-corrector algorithms for LCP based on a large neighborhood of the central path. *SIAM Journal on Optimization*, 10(1):183–194, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30414>.
- [Gon14] **Gondzio:2014:CAI** Jacek Gondzio. Convergence analysis of an inexact feasible interior point method for convex quadratic programming. *SIAM Journal on Optimization*, 23(3): 1510–1527, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GOP17] **Gurbuzbalaban:2017:CRI** M. Gürbüzbalaban, A. Ozdaglar, and P. A. Parrilo. On the convergence rate of incremental aggregated gradient algorithms. *SIAM Journal on Optimization*, 27(2):1035–1048, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GOP19] **Gurbuzbalaban:2019:CRI** M. Gürbüzbalaban, A. Ozdaglar, and P. A. Parrilo. Convergence rate of incremental gradient and incremental Newton methods.

SIAM Journal on Optimization, 29(4):2542–2565, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gorissen:2022:IPM

[Gor22]

Bram L. Gorissen. Interior point methods can exploit structure of convex piecewise linear functions with application in radiation therapy. *SIAM Journal on Optimization*, 32(1):256–275, ????. 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1402364>.

Gould:2001:SCP

[GOST01]

Nicholas I. M. Gould, Dominique Orban, Annick Sartenaer, and Philippe L. Toint. Superlinear convergence of primal-dual interior point algorithms for nonlinear programming. *SIAM Journal on Optimization*, 11(4):974–1002, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37051>.

Gould:1999:MFL

[Gou99]

Nicholas Ian Mark Gould. On modified factorizations for large-scale linearly constrained optimization. *SIAM Journal on Optimization*, 9(4):1041–1063, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <http://epubs.siam.org/sam-bin/dbq/article/29066>. Dedicated to John E. Dennis, Jr., on his 60th birthday.

Gowda:1992:CSM

[Gow92]

M. Seetharama Gowda. On the continuity of the solution map in linear complementarity problems. *SIAM Journal on Optimization*, 2(4):619–634, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Giloni:2004:FSB

[GP04]

Avi Giloni and Manfred Padberg. The finite sample breakdown point of ℓ_1 -regression. *SIAM Journal on Optimization*, 14(4):1028–1042, ????. 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42415>.

Geiersbach:2019:PSG

[GP19a]

Caroline Geiersbach and Georg Ch. Pflug. Projected stochastic gradients for convex constrained problems in Hilbert spaces. *SIAM Journal on Optimization*, 29(3):2079–2099, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gutman:2019:CRP

[GP19b]

David H. Gutman and Javier F. Peña. Convergence rates of proximal gradient methods via the convex conjugate. *SIAM Journal*

- on *Optimization*, 29(1):162–174, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Garcia-Palomares:2002:NSP**
- [GPR02] U. M. García-Palomares and J. F. Rodríguez. New sequential and parallel derivative-free algorithms for unconstrained minimization. *SIAM Journal on Optimization*, 13(1):79–96, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37060>.
- Gouveia:2010:TBP**
- [GPT10] João Gouveia, Pablo A. Parrilo, and Rekha R. Thomas. Theta bodies for polynomial ideals. *SIAM Journal on Optimization*, 20(4):2097–2118, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Glick:1994:LSN**
- [GR94] J. H. Glick and J. B. Rosen. Large-scale, nonlinearly constrained optimization on a 1024-processor nCUBE. *SIAM Journal on Optimization*, 4(4):691–707, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gruber:2003:CES**
- [GR03] Gerald Gruber and Franz Rendl. Computational experience with stable set relaxations. *SIAM Journal on Optimization*, 13(4):1014–1028, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39409>.
- Gould:2010:SDSa**
- [GR10a] Nicholas I. M. Gould and Daniel P. Robinson. A second derivative SQP method: Global convergence. *SIAM Journal on Optimization*, 20(4):2023–2048, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gould:2010:SDSb**
- [GR10b] Nicholas I. M. Gould and Daniel P. Robinson. A second derivative SQP method: Local convergence and practical issues. *SIAM Journal on Optimization*, 20(4):2049–2079, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gu:2010:CCI**
- [GR10c] G. Gu and C. Roos. Counterexample to a conjecture on an infeasible interior-point method. *SIAM Journal on Optimization*, 20(4):1862–1867, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guigues:2012:SBD**
- [GR12] Vincent Guigues and Werner Römisch. Sampling-based decomposition methods for multi-stage stochastic programs based on extended polyhedral risk

- measures. *SIAM Journal on Optimization*, 22(2):286–312, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GR14] Philip E. Gill and Daniel P. Robinson. A globally convergent stabilized SQP method. *SIAM Journal on Optimization*, 23(4):1983–2010, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gri24] **Gill:2014:GCS** Benjamin Grimmer. Provably faster gradient descent via long steps. *SIAM Journal on Optimization*, 34(3):2588–2608, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1588408>.
- [Gre00] **Greenberg:2000:SPD** Harvey J. Greenberg. Simultaneous primal-dual right-hand-side sensitivity analysis from a strictly complementary solution of a linear program. *SIAM Journal on Optimization*, 10(2):427–442, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31033>.
- [Gri18] **Grimmer:2018:RSM** Benjamin Grimmer. Radial subgradient method. *SIAM Journal on Optimization*, 28(1):459–469, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gri19] **Grimmer:2019:CRD** Benjamin Grimmer. Convergence rates for deterministic and stochastic subgradient methods without Lipschitz continuity. *SIAM Journal on Optimization*, 29(2):1350–1365, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Gri24] **Grimmer:2024:PFG** Benjamin Grimmer. Provably faster gradient descent via long steps. *SIAM Journal on Optimization*, 34(3):2588–2608, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1588408>.
- [Gro95] **Grover:1995:FIP** Lov K. Grover. Fast interior point methods for bipartite matching. *SIAM Journal on Optimization*, 5(4):740–769, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GRS21] **Ghate:2021:SMC** Archis Ghate, Christopher T. Ryan, and Robert L. Smith. A simplex method for countably infinite linear programs. *SIAM Journal on Optimization*, 31(4):3157–3183, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [GRVZ15] **Gratton:2015:DSB** S. Gratton, C. W. Royer, L. N. Vicente, and Z. Zhang. Direct search based on probabilistic descent. *SIAM Journal on Optimization*, 25(3):1515–1541, 2015. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Ghadimi:2020:STS

- [GRW20] Saeed Ghadimi, Andrzej Ruszczyński, and Mengdi Wang. A single timescale stochastic approximation method for nested stochastic optimization. *SIAM Journal on Optimization*, 30(1):960–979, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Goldfarb:1998:IPT

- [GS98] D. Goldfarb and K. Scheinberg. Interior point trajectories in semidefinite programming. *SIAM Journal on Optimization*, 8(4):871–886, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30009>.

Guo:2001:LAC

- [GS01] Xianping Guo and Peng Shi. Limiting average criteria for nonstationary Markov decision processes. *SIAM Journal on Optimization*, 11(4):1037–1053, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35523>.

Gowda:2007:SGU

- [GS07] M. Seetharama Gowda and R. Sznajder. Some global uniqueness and solvability results for linear complementarity

problems over symmetric cones. *SIAM Journal on Optimization*, 18(2):461–481, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gangammanavar:2021:SDL

Harsha Gangammanavar and Suvrajeet Sen. Stochastic dynamic linear programming: a sequential sampling algorithm for multistage stochastic linear programming. *SIAM Journal on Optimization*, 31(3):2111–2140, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gao:2021:ROS

- [GSAS21] Bin Gao, Nguyen Thanh Son, P.-A. Absil, and Tatjana Stykel. Riemannian optimization on the symplectic Stiefel manifold. *SIAM Journal on Optimization*, 31(2):1546–1575, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gnecco:2012:SST

- [GSG12] Giorgio Gnecco, Marcello Sanguineti, and Mauro Gaggero. Suboptimal solutions to team optimization problems with stochastic information structure. *SIAM Journal on Optimization*, 22(1):212–243, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Gould:2005:FTR

- [GST05] Nick I. M. Gould, Caroline Sainvitu, and Philippe L. Toint.

- A filter-trust-region method for unconstrained optimization. *SIAM Journal on Optimization*, 16(2):341–357, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60385>. [GSW97]
- Gratton:2008:RTR**
- [GST08] Serge Gratton, Annick Sartenaer, and Philippe L. Toint. Recursive trust-region methods for multiscale nonlinear optimization. *SIAM Journal on Optimization*, 19(1):414–444, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gratton:2011:CLM**
- [GST11] S. Gratton, A. Sartenaer, and J. Tshimanga. On a class of limited memory preconditioners for large scale linear systems with multiple right-hand sides. *SIAM Journal on Optimization*, 21(3):912–935, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p912_s1.
- Garreis:2021:IPA**
- [GSU21] Sebastian Garreis, Thomas M. Surowiec, and Michael Ulbrich. An interior-point approach for solving risk-averse PDE-constrained optimization problems with coherent risk measures. *SIAM Journal on Optimization*, 31(1):1–29, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gulliksson:1997:ACW**
- Mårten Gulliksson, Inge Söderkvist, and Per-Åke Wedin. Algorithms for constrained and weighted nonlinear least squares. *SIAM Journal on Optimization*, 7(1):208–224, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24880>.
- Guruswami:2014:CFL**
- [GSZ14] Venkatesan Guruswami, Ali Kemal Sinop, and Yuan Zhou. Constant factor Lasserre integrality gaps for graph partitioning problems. *SIAM Journal on Optimization*, 24(4):1698–1717, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gonzaga:1992:ILS**
- [GT92] C. C. Gonzaga and M. J. Todd. An $O(\sqrt[3]{L})$ -iteration large-step primal-dual affine algorithm for linear programming. *SIAM Journal on Optimization*, 2(3):349–359, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gonzaga:1997:CMT**
- [GT97a] Clovis C. Gonzaga and Richard A. Tapia. On the convergence of the Mizuno–Todd–Ye algorithm to the analytic center of the solution set. *SIAM*

- Journal on Optimization*, 7(1): 47–65, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24355>. [GU22]
- Gonzaga:1997:QCS**
- [GT97b] Clovis C. Gonzaga and Richard A. Tapia. On the quadratic convergence of the simplified Mizuno–Todd–Ye algorithm for linear programming. *SIAM Journal on Optimization*, 7(1):66–85, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24356>. [Gui16]
- Goberna:2006:SCV**
- [GTdS06] Miguel A. Goberna, Maxim I. Todorov, and Virginia N. Vera de Serio. On the stability of convex-valued mappings and their relative boundary and extreme points set mappings. *SIAM Journal on Optimization*, 17(1):147–158, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gu:2000:PDI**
- [Gu00] Ming Gu. Primal-dual interior-point methods for semidefinite programming in finite precision. *SIAM Journal on Optimization*, 10(2):462–502, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31950>.
- Grzybowski:2022:MPC**
- Jerzy Grzybowski and Ryszard Urbański. Minimal pairs of convex sets which share a recession cone. *SIAM Journal on Optimization*, 32(2):1049–1068, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1410695>.
- Guigues:2016:CAS**
- Vincent Guigues. Convergence analysis of sampling-based decomposition methods for risk-averse multistage stochastic convex programs. *SIAM Journal on Optimization*, 26(4):2468–2494, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guigues:2020:ICS**
- Vincent Guigues. Inexact cuts in stochastic dual dynamic programming. *SIAM Journal on Optimization*, 30(1):407–438, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guler:1992:NPP**
- [Gül92] Osman Güler. New proximal point algorithms for convex minimization. *SIAM Journal on Optimization*, 2(4):649–664, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Guler:1997:SCU**
- [Gül97] Osman Güler. On the self-concordance of the universal barrier function. *SIAM Journal on Optimization*, 7(2):295–303, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29180>. [GV00]
- Gunzel:2014:SPS**
- [Gün14] Harald Günzel. Stationary point sets: Convex quadratic optimization is universal in nonlinear optimization. *SIAM Journal on Optimization*, 24(1):415–434, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gurwitz:1994:LCT**
- [Gur94] Chaya Gurwitz. Local convergence of a two-piece update of a projected Hessian matrix. *SIAM Journal on Optimization*, 4(3):461–485, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [GV14]
- Gurtuna:2010:DEA**
- [Gür10] Filiz Gürtuna. Duality of ellipsoidal approximations via semi-infinite programming. *SIAM Journal on Optimization*, 20(3):1421–1438, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goffin:1994:SSK**
- [GV94] J.-L. Goffin and J.-Ph. Vial. Short steps with Karmarkar’s projective algorithm for linear programming. *SIAM Journal on Optimization*, 4(1):193–207, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goffin:2000:MCA**
- [GV00] Jean-Louis Goffin and Jean-Philippe Vial. Multiple cuts in the analytic center cutting plane method. *SIAM Journal on Optimization*, 11(1):266–288, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34026>.
- Gratton:2014:MFA**
- [GV14] S. Gratton and L. N. Vicente. A merit function approach for direct search. *SIAM Journal on Optimization*, 24(4):1980–1998, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gillis:2015:SPB**
- [GV15] Nicolas Gillis and Stephen A. Vavasis. Semidefinite programming based preconditioning for more robust near-separable non-negative matrix factorization. *SIAM Journal on Optimization*, 25(1):677–698, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ghaddar:2011:SOC**
- [GVA11] Bissan Ghaddar, Juan C. Vera, and Miguel F. Anjos. Second-order cone relaxations for binary

- quadratic polynomial programs. *SIAM Journal on Optimization*, 21(1):391–414, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p391_s1. [GW18]
- Gunzel:2006:CVF**
- [GVJ06] Harald Günzel, Francisco Guerra Vazquez, and Hubertus Th. Jongen. Critical value functions have finite modulus of concavity. *SIAM Journal on Optimization*, 16(4):1044–1053, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guerra-Vazquez:2010:GSI**
- [GVJS10] F. Guerra-Vázquez, H. Th. Jongen, and V. Shikhman. General semi-infinite programming: Symmetric Mangasarian–Fromovitz constraint qualification and the closure of the feasible set. *SIAM Journal on Optimization*, 20(5):2487–2503, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Goldfarb:1993:PUN**
- [GW93] Donald Goldfarb and Si Yun Wang. Partial-update Newton methods for unary, factorable, and partially separable optimization. *SIAM Journal on Optimization*, 3(2):382–397, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gutkunst:2018:UIG**
- Samuel C. Gutkunst and David P. Williamson. The unbounded integrality gap of a semidefinite relaxation of the traveling salesman problem. *SIAM Journal on Optimization*, 28(3):2073–2096, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Griewank:2019:RKQ**
- [GW19] Andreas Griewank and Andrea Walther. Relaxing kink qualifications and proving convergence rates in piecewise smooth optimization. *SIAM Journal on Optimization*, 29(1):262–289, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Geiersbach:2021:OCC**
- [GW21] Caroline Geiersbach and Winfried Wollner. Optimality conditions for convex stochastic optimization problems in Banach spaces with almost sure state constraints. *SIAM Journal on Optimization*, 31(4):2455–2480, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guo:2015:SRN**
- [GWZ15] Feng Guo, Chu Wang, and Lihong Zhi. Semidefinite representations of noncompact convex sets. *SIAM Journal on Optimization*, 25(1):377–395, 2015. CODEN SJOPE8. ISSN

- 1052-6234 (print), 1095-7189 (electronic).
- Guo:2017:CAM**
- [GXZ17] Shaoyan Guo, Huifu Xu, and Liwei Zhang. Convergence analysis for mathematical programs with distributionally robust chance constraint. *SIAM Journal on Optimization*, 27(2): 784–816, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Guo:2021:EAC**
- [GXZ21] Shaoyan Guo, Huifu Xu, and Liwei Zhang. Existence and approximation of continuous Bayesian Nash equilibria in games with continuous type and action spaces. *SIAM Journal on Optimization*, 31(4):2481–2507, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gfrerer:2017:NCQ**
- [GY17] Helmut Gfrerer and Jane J. Ye. New constraint qualifications for mathematical programs with equilibrium constraints via variational analysis. *SIAM Journal on Optimization*, 27(2):842–865, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gu:2020:TSC**
- [GY20] Guoyong Gu and Junfeng Yang. Tight sublinear convergence rate of the proximal point algorithm for maximal monotone inclusion problems. *SIAM Journal on Optimization*, 30(3):1905–1921, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Gao:2023:MDI**
- [GY23] Mingjie Gao and Ka-Fai Cedric Yiu. Moderate deviations and invariance principles for sample average approximations. *SIAM Journal on Optimization*, 33(2): 816–841, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1484584>.
- Guo:2014:MPG**
- [GYZ14] Lei Guo, Jane J. Ye, and Jin Zhang. Mathematical programs with geometric constraints in Banach spaces: Enhanced optimality, exact penalty, and sensitivity. *SIAM Journal on Optimization*, 23(4):2295–2319, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Grechuk:2017:SAA**
- [GZ17] Bogdan Grechuk and Michael Zabarankin. Sensitivity analysis in applications with deviation, risk, regret, and error measures. *SIAM Journal on Optimization*, 27(4):2481–2507, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hamedani:2021:PDA**
- [HA21] Erfan Yazdandoost Hamedani and Necdet Serhat Aybat.

- A primal-dual algorithm with line search for general convex-concave saddle point problems. [Hal24] *SIAM Journal on Optimization*, 31(2):1299–1329, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hab98] Abderrahmane Habbal. Nonsmooth shape optimization applied to linear acoustics. *SIAM Journal on Optimization*, 8(4):989–1006, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29581>.
- [Hag01] William W. Hager. Minimizing a quadratic over a sphere. [Har98] *SIAM Journal on Optimization*, 12(1):188–208, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35607>.
- [HAG18] Wen Huang, P.-A. Absil, and K. A. Gallivan. A Riemannian BFGS method without differentiated retraction for nonconvex optimization problems. [Har09] *SIAM Journal on Optimization*, 28(1):470–495, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hallak:2024:PBA] Nadav Hallak. A path-based approach to constrained sparse optimization. *SIAM Journal on Optimization*, 34(1):790–816, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [He:2011:PCS] Qie He, Shabbir Ahmed, and George L. Nemhauser. A probabilistic comparison of split and type 1 triangle cuts for two-row mixed-integer programs. *SIAM Journal on Optimization*, 21(3):617–632, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p617_s1.
- [Hart:1998:SSR] William E. Hart. Sequential stopping rules for random optimization methods with applications to multistart local search. *SIAM Journal on Optimization*, 9(1):270–290, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27731>.
- [Hare:2009:PAN] W. L. Hare. A proximal average for nonconvex functions: a proximal stability perspective. *SIAM Journal on Optimization*, 20(2):650–666, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hare:2014:NAD

- [Har14] W. Hare. Numerical analysis of $\mathcal{V}\mathcal{U}$ -decomposition, \mathcal{U} -gradient, and \mathcal{U} -hessian approximations. *SIAM Journal on Optimization*, 24(4):1890–1913, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hendrikx:2021:OAD

- [HBM21] Hadrien Hendrikx, Francis Bach, and Laurent Massoulié. An optimal algorithm for decentralized finite-sum optimization. *SIAM Journal on Optimization*, 31(4):2753–2783, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Haber:2012:EMP

- [HCH12] Eldad Haber, Matthias Chung, and Felix Herrmann. An effective method for parameter estimation with PDE constraints with multiple right-hand sides. *SIAM Journal on Optimization*, 22(3):739–757, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hu:2020:SCS

- [HCH20] Yifan Hu, Xin Chen, and Niao He. Sample complexity of sample average approximation for conditional stochastic optimization. *SIAM Journal on Optimization*, 30(3):2103–2133, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Huang:2021:EBB

- [HDL21] Ya-Kui Huang, Yu-Hong Dai, and Xin-Wei Liu. Equipping the Barzilai–Borwein method with the two dimensional quadratic termination property. *SIAM Journal on Optimization*, 31(4):3068–3096, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Halicka:2002:CCP

- [HdR02] M. Halická, E. de Klerk, and C. Roos. On the convergence of the central path in semidefinite optimization. *SIAM Journal on Optimization*, 12(4):1090–1099, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39079>.

Heinkenschloss:1993:MIN

- [Hei93] Matthias Heinkenschloss. Mesh independence for nonlinear least squares problems with norm constraints. *SIAM Journal on Optimization*, 3(1):81–117, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Heinkenschloss:1996:PSQ

- [Hei96] Matthias Heinkenschloss. Projected sequential quadratic programming methods. *SIAM Journal on Optimization*, 6(2):373–417, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Hen95] **Hendrickson:1995:MPE**
Bruce Hendrickson. The molecule problem: exploiting structure in global optimization. *SIAM Journal on Optimization*, 5(4):835–857, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hen15] **Hennig:2015:PIL**
Philipp Hennig. Probabilistic interpretation of linear solvers. *SIAM Journal on Optimization*, 25(1):234–260, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Her09] **Hermant:2009:SAO**
Audrey Hermant. Stability analysis of optimal control problems with a second-order state constraint. *SIAM Journal on Optimization*, 20(1):104–129, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HF14] **Hu:2014:EUC**
Ming Hu and Masao Fukushima. Existence, uniqueness, and computation of robust Nash equilibria in a class of multi-leader-follower games. *SIAM Journal on Optimization*, 23(2):894–916, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HFD16] **Houska:2016:ALB**
Boris Houska, Janick Frasch, and Moritz Diehl. An augmented Lagrangian based algorithm for distributed Non-Convex optimization. *SIAM Journal on Optimization*, 26(2):1101–1127, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HG16] **Huang:2016:MAV**
Yonghui Huang and Xianping Guo. Minimum average value-at-risk for finite horizon semi-Markov decision processes in continuous time. *SIAM Journal on Optimization*, 26(1):1–28, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HGA15] **Huang:2015:BCQ**
Wen Huang, K. A. Gallivan, and P.-A. Absil. A Broyden class of quasi-Newton methods for Riemannian optimization. *SIAM Journal on Optimization*, 25(3):1660–1685, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HH96a] **Hartmann:1996:CMP**
Wolfgang M. Hartmann and Robert E. Hartwig. Computing the Moore–Penrose inverse for the covariance matrix in constrained nonlinear estimation. *SIAM Journal on Optimization*, 6(3):727–747, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26079>.

- [HH96b] **Hochbaum:1996:CPT**
Dorit S. Hochbaum and Sung-Pil Hong. On the complexity of the production-transportation problem. *SIAM Journal on Optimization*, 6(1):250–264, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HH06] **Hintermuller:2006:SSN**
M. Hintermüller and M. Hinze. A SQP-semismooth Newton-type algorithm applied to control of the instationary Navier–Stokes system subject to control constraints. *SIAM Journal on Optimization*, 16(4):1177–1200, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HHI⁺20] **Hamada:2020:TPS**
Naoki Hamada, Kenta Hayano, Shunsuke Ichiki, Yutaro Kabata, and Hiroshi Teramoto. Topology of Pareto sets of strongly convex problems. *SIAM Journal on Optimization*, 30(3):2659–2686, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HHJL23] **He:2023:ATN**
Simai He, Haodong Hu, Bo Jiang, and Zhening Li. Approximating tensor norms via sphere covering: Bridging the gap between primal and dual. *SIAM Journal on Optimization*, 33(3):2062–2088, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1482391>.
- [HHP18] **He:2018:OLN**
Xinyu He, Yangzhou Hu, and Warren B. Powell. Optimal learning for nonlinear parametric belief models over multi-dimensional continuous spaces. *SIAM Journal on Optimization*, 28(4):2945–2974, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HHY15] **He:2015:FJD**
Bingsheng He, Liusheng Hou, and Xiaoming Yuan. On full Jacobian decomposition of the augmented Lagrangian method for separable convex programming. *SIAM Journal on Optimization*, 25(4):2274–2312, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HHY18] **Hosseini:2018:LSA**
S. Hosseini, W. Huang, and R. Yousefpour. Line search algorithms for locally Lipschitz functions on Riemannian manifolds. *SIAM Journal on Optimization*, 28(1):596–619, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HIK03] **Hintermuller:2003:PDA**
M. Hintermüller, K. Ito, and K. Kunisch. The primal-dual active set strategy as a semismooth Newton method. *SIAM Journal*

- on *Optimization*, 13(3):865–888, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38355>. [HK92]
- Henrion:2002:SCC**
- [HJ02] R. Henrion and A. Jourani. Subdifferential conditions for calmness of convex constraints. *SIAM Journal on Optimization*, 13(2):520–534, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38607>. [HK06]
- Hare:2020:CIG**
- [HJB20] Warren Hare and Gabriel Jarry-Bolduc. Calculus identities for generalized simplex gradients: Rules and applications. *SIAM Journal on Optimization*, 30(1):853–884, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HK09]
- Henrion:2002:CCM**
- [HJO02] René Henrion, Abderrahim Jourani, and Jiří Outrata. On the calmness of a class of multifunctions. *SIAM Journal on Optimization*, 13(2):603–618, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39555>. [HK10]
- Hwang:1992:CBM**
- D. M. Hwang and C. T. Kelley. Convergence of Broyden’s method in Banach spaces. *SIAM Journal on Optimization*, 2(3):505–532, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hintermuller:2006:PFM**
- Michael Hintermüller and Karl Kunisch. Path-following methods for a class of constrained minimization problems in function space. *SIAM Journal on Optimization*, 17(1):159–187, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hintermuller:2009:MPC**
- M. Hintermüller and I. Kopacka. Mathematical programs with complementarity constraints in function space: C - and strong stationarity and a path-following algorithm. *SIAM Journal on Optimization*, 20(2):868–902, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hintermuller:2010:PCO**
- Michael Hintermüller and Karl Kunisch. PDE-constrained optimization subject to pointwise constraints on the control, the state, and its derivative. *SIAM Journal on Optimization*, 20(3):1133–1156, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [HKK11] **Hintermuller:2011:OPC**
 M. Hintermüller, V. A. Kovtunenکو, and K. Kunisch. Obstacle problems with cohesion: a hemivariational inequality approach and its efficient numerical solution. *SIAM Journal on Optimization*, 21(2): 491–516, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p491_s1.
- [HKKRZ24] **Henrion:2024:OMR**
 Didier Henrion, Milan Korda, Martin Kruzik, and Rodolfo Rios-Zertuche. Occupation measure relaxations in variational problems: The role of convexity. *SIAM Journal on Optimization*, 34(2):1708–1731, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- [HKMS20] **Hassani:2020:SCG**
 Hamed Hassani, Amin Karbasi, Aryan Mokhtari, and Zebang Shen. Stochastic conditional gradient++: (non)Convex minimization and continuous submodular maximization. *SIAM Journal on Optimization*, 30(4): 3315–3344, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HKP18] **Harks:2018:SAC**
 Tobias Harks, Max Klimm, and Britta Peis. Sensitivity analysis for convex separable optimization over integral polymatroids. *SIAM Journal on Optimization*, 28(3):2222–2245, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HKP24] **Hrga:2024:COB**
 Timotej Hrga, Igor Klep, and Janez Povh. Certifying optimality of Bell inequality violations: Noncommutative polynomial optimization through semidefinite programming and local optimization. *SIAM Journal on Optimization*, 34(2): 1341–1373, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [HL98] **Han:1998:GAD**
 Lixing Han and Guanghui Liu. Global analysis of the Dennis–Wolkowicz least-change secant algorithm. *SIAM Journal on Optimization*, 8(3):813–832, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28037>.
- [HL02] **Hauser:2002:SSB**
 Raphael A. Hauser and Yongdo Lim. Self-scaled barriers for irreducible symmetric cones. *SIAM Journal on Optimization*, 12(3):715–723, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37095>.

- [HL06] **Hochbaum:2006:OCC** Dorit S. Hochbaum and Asaf Levin. Optimizing over consecutive 1's and circular 1's constraints. *SIAM Journal on Optimization*, 17(2):311–330, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HL08a] **Hartvigsen:2008:PRR** David Hartvigsen and Yanjun Li. Polyhedral results for 1-restricted simple 2-matchings. *SIAM Journal on Optimization*, 19(3):1131–1149, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HL08b] **Heyde:2008:GDM** Frank Heyde and Andreas Löhne. Geometric duality in multiple objective linear programming. *SIAM Journal on Optimization*, 19(2):836–845, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HL08c] **Ho:2008:IAA** Hann-Jang Ho and SingLing Lee. Improved approximation algorithms for weighted hypergraph embedding in a cycle. *SIAM Journal on Optimization*, 18(4):1490–1500, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HL11] **Hartvigsen:2011:MCS** David Hartvigsen and Yanjun Li. Maximum cardinality simple 2-matchings in subcubic graphs. *SIAM Journal on Optimization*, 21(3):1027–1045, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p1027_s1.
- [HL14] **Hesse:2014:NNR** Robert Hesse and D. Russell Luke. Nonconvex notions of regularity and convergence of fundamental algorithms for feasibility problems. *SIAM Journal on Optimization*, 23(4):2397–2419, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HL17] **Hochbaum:2017:FAS** Dorit S. Hochbaum and Cheng Lu. A faster algorithm solving a generalization of isotonic median regression and a class of fused lasso problems. *SIAM Journal on Optimization*, 27(4):2563–2596, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [HL20].
- [HL20] **Hochbaum:2020:EFA** Dorit S. Hochbaum and Cheng Lu. Erratum: A Faster Algorithm Solving a Generalization of Isotonic Median Regression and a Class of Fused Lasso Problems. *SIAM Journal on Optimization*, 30(1):1048, 2020.

CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See [HL17].

Han:2023:SDM

[HL23a] X. Y. Han and Adrian S. Lewis. Survey descent: A multipoint generalization of gradient descent for nonsmooth optimization. *SIAM Journal on Optimization*, 33(1):36–62, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1468450>.

He:2023:NCBa

[HL23b] Chuan He and Zhaosong Lu. A Newton-CG based barrier method for finding a second-order stationary point of non-convex conic optimization with complexity guarantees. *SIAM Journal on Optimization*, 33(2):1191–1222, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1457011>.

Ha:2020:EBC

[HLB20] Wooseok Ha, Haoyang Liu, and Rina Foygel Barber. An equivalence between critical points for rank constraints versus low-rank factorizations. *SIAM Journal on Optimization*, 30(4):2927–2955, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

[HLL98]

Hernandez-Lerma:1998:ASI

Onésimo Hernández-Lerma and Jean B. Lasserre. Approximation schemes for infinite linear programs. *SIAM Journal on Optimization*, 8(4):973–988, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31576>.

He:2008:SRB

[HLNZ08]

Simai He, Zhi-Quan Luo, Jiawang Nie, and Shuzhong Zhang. Semidefinite relaxation bounds for indefinite homogeneous quadratic optimization. *SIAM Journal on Optimization*, 19(2):503–523, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

He:2023:NCBb

[HLP23]

Chuan He, Zhaosong Lu, and Ting Kei Pong. A Newton-CG based augmented Lagrangian method for finding a second-order stationary point of non-convex equality constrained optimization with complexity guarantees. *SIAM Journal on Optimization*, 33(3):1734–1766, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1489824>.

Hong:2016:CAA

[HLR16]

Mingyi Hong, Zhi-Quan Luo, and Meisam Razaviyayn. Con-

- vergence analysis of alternating direction method of multipliers for a family of nonconvex problems. *SIAM Journal on Optimization*, 26(1):337–364, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HLZ08] **Haines:2014:CRW**
Sheena Haines, Jason Loepky, Paul Tseng, and Xianfu Wang. Convex relaxations of the weighted maxmin dispersion problem. *SIAM Journal on Optimization*, 23(4):2264–2294, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HLTW14] **He:2014:SCP**
Bingsheng He, Han Liu, Zhaoran Wang, and Xiaoming Yuan. A strictly contractive Peaceman–Rachford splitting method for convex programming. *SIAM Journal on Optimization*, 24(3):1011–1040, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HLWY14] **Hu:2016:CRL**
Yaohua Hu, Chong Li, and Xiaoli Yang. On convergence rates of linearized proximal algorithms for convex composite optimization with applications. *SIAM Journal on Optimization*, 26(2):1207–1235, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HLY16] **Hantoute:2008:SCR**
A. Hantoute, M. A. López, and C. Zălinescu. Subdifferential calculus rules in convex analysis: a unifying approach via pointwise supremum functions. *SIAM Journal on Optimization*, 19(2):863–882, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HM02] **Hough:2002:CTR**
P. D. Hough and J. C. Meza. A class of trust-region methods for parallel optimization. *SIAM Journal on Optimization*, 13(1):264–282, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34379>.
- [HM15] **He:2015:ABD**
Yunlong He and Renato D. C. Monteiro. Accelerating block-decomposition first-order methods for solving composite saddle-point and two-player Nash equilibrium problems. *SIAM Journal on Optimization*, 25(4):2182–2211, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HM16] **He:2016:AHT**
Yunlong He and Renato D. C. Monteiro. An accelerated HPE-type algorithm for a class of composite convex-concave saddle-point problems. *SIAM Journal on Optimization*, 26

- (1):29–56, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HMW13]
- Han:2023:RHM**
- [HMJ⁺23] Andi Han, Bamdev Mishra, Pratik Jawanpuria, Pawan Kumar, and Junbin Gao. Riemannian Hamiltonian methods for min-max optimization on manifolds. *SIAM Journal on Optimization*, 33(3):1797–1827, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1492684>. [HMW21]
- Henrion:2010:SOA**
- [HMN10] René Henrion, Boris S. Morokhovich, and Nguyen Mau Nam. Second-order analysis of polyhedral systems in finite and infinite dimensions with applications to robust stability of variational inequalities. *SIAM Journal on Optimization*, 20(5):2199–2227, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HN03]
- Hu:2008:GSL**
- [HMP⁺08] Jing Hu, John E. Mitchell, Jong-Shi Pang, Kristin P. Bennett, and Gautam Kunapuli. On the global solution of linear programs with linear complementarity constraints. *SIAM Journal on Optimization*, 19(1):445–471, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HN04]
- Herzog:2013:SSO**
- Roland Herzog, Christian Meyer, and Gerd Wachsmuth. B - and strong stationarity for optimal control of static plasticity with hardening. *SIAM Journal on Optimization*, 23(1):321–352, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Harder:2021:RSC**
- Felix Harder, Patrick Mehlitz, and Gerd Wachsmuth. Reformulation of the M -stationarity conditions as a system of discontinuous equations and its solution by a semismooth Newton method. *SIAM Journal on Optimization*, 31(2):1459–1488, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Huyer:2003:NEP**
- Waltraud Huyer and Arnold Neumaier. A new exact penalty function. *SIAM Journal on Optimization*, 13(4):1141–1158, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39053>.
- Huang:2004:FSO**
- L. R. Huang and K. F. Ng. On first- and second-order conditions for error bounds. *SIAM Journal on Optimization*, 14(4):1057–1073, 2004. CODEN SJOPE8. ISSN 1052-6234

(print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/39054>.

Hauser:2005:CNR

- [HN05] Raphael Hauser and Jelena Nedic. The continuous Newton–Raphson method can look ahead. *SIAM Journal on Optimization*, 15(3):915–925, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43263>.

Hauser:2007:RBC

- [HN07] Raphael Hauser and Jelena Nedi. On the relationship between the convergence rates of iterative and continuous processes. *SIAM Journal on Optimization*, 18(1):52–64, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Helton:2009:SNC

- [HN09] J. William Helton and Jiawang Nie. Sufficient and necessary conditions for semidefinite representability of convex hulls and sets. *SIAM Journal on Optimization*, 20(2):759–791, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Halman:2019:TBC

- [HN19] Nir Halman and Giacomo Nannicini. Toward breaking the curse of dimensionality: an FP-TAS for stochastic dynamic pro-

grams with multidimensional actions and scalar states. *SIAM Journal on Optimization*, 29(2):1131–1163, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Henrion:2016:EAL

- [HNE16] Didier Henrion, Simone Naldi, and Mohab Safey El Din. Exact algorithms for linear matrix inequalities. *SIAM Journal on Optimization*, 26(4):2512–2539, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ho-Nguyen:2017:SOC

- [HNKK17] Nam Ho-Nguyen and Fatma Kiliç-Karzan. A second-order cone based approach for solving the trust-region subproblem and its variants. *SIAM Journal on Optimization*, 27(3):1485–1512, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Halman:2015:CEF

- [HNO15] Nir Halman, Giacomo Nannicini, and James Orlin. A computationally efficient FP-TAS for convex stochastic dynamic programs. *SIAM Journal on Optimization*, 25(1):317–350, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Huang:2000:MCS

- [HNP00] L. R. Huang, K. F. Ng, and J.-P. Penot. On minimizing

- and critical sequences in non-smooth optimization. *SIAM Journal on Optimization*, 10(4): 999–1019, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34125>. [HP07]
- [Hol04] A. Holder. Simultaneous data perturbations and analytic center convergence. *SIAM Journal on Optimization*, 14(3): 841–868, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40931>. [HP09]
- [HOR99] Frank K. Hwang, Shmuel Onn, and Uriel G. Rothblum. A polynomial time algorithm for shaped partition problems. *SIAM Journal on Optimization*, 10(1):70–81, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34400>. [HP18]
- [HP94] David Hartvigsen and W. R. Pulleyblank. Outer-facial graphs and the traveling salesman problem. *SIAM Journal on Optimization*, 4(3):676–689, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HPD14]
- [Hou:2007:MPB] Xiaoling Hou and András Prékopa. Monge property and bounding multivariate probability distribution functions with given marginals and covariances. *SIAM Journal on Optimization*, 18(1):138–155, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hager:2009:EBB] William W. Hager and Dzung T. Phan. An ellipsoidal branch and bound algorithm for global optimization. *SIAM Journal on Optimization*, 20(2):740–758, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [He:2018:OLS] Xinyu He and Warren B. Powell. Optimal learning for stochastic optimization with nonlinear parametric belief models. *SIAM Journal on Optimization*, 28(3): 2327–2359, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Han:2024:CSS] Shaoning Han and Jong-Shi Pang. Continuous selections of solutions to parametric variational inequalities. *SIAM Journal on Optimization*, 34(1):870–892, February 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hannah:2014:SRM] Lauren A. Hannah, Warren B. Powell, and David B. Dun-

- son. Semiconvex regression for metamodeling-based optimization. *SIAM Journal on Optimization*, 24(2):573–597, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [HR12]
- [HPU19] Oliver Habeck, Marc E. Pfetsch, and Stefan Ulbrich. Global optimization of mixed-integer ODE constrained network problems using the example of stationary gas transport. *SIAM Journal on Optimization*, 29(4):2949–2985, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Habeck:2019:GOM**
- [HPW23] Christoph Hunkenschroder, Sebastian Pokutta, and Robert Weismantel. Minimizing a low-dimensional convex function over a high-dimensional cube. *SIAM Journal on Optimization*, 33(2):538–552, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1489988>. **Hunkenschroder:2023:MLD**
- [HR00] C. Helmberg and F. Rendl. A spectral bundle method for semidefinite programming. *SIAM Journal on Optimization*, 10(3):673–696, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32898>. **Helmberg:2000:SBM**
- [HR12] Michael Hintermüller and Carlos N. Rautenberg. A sequential minimization technique for elliptic quasi-variational inequalities with gradient constraints. *SIAM Journal on Optimization*, 22(4):1224–1257, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Hintermuller:2012:SMT**
- [HR14a] Matthias Heinkenschloss and Denis Ridzal. A matrix-free trust-region SQP method for equality constrained optimization. *SIAM Journal on Optimization*, 24(3):1507–1541, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Heinkenschloss:2014:MFT**
- [HR14b] Michael Hintermüller and Carlos N. Rautenberg. Parabolic quasi-variational inequalities with gradient-type constraints. *SIAM Journal on Optimization*, 23(4):2090–2123, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Hintermuller:2014:PQV**
- [HR15] P. Hungerländer and F. Rendl. A feasible active set method for strictly convex quadratic problems with simple bounds. *SIAM Journal on Optimization*, 25(3):

- 1633–1659, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HR22] Matthew Hough and London Roberts. Model-based derivative-free methods for convex-constrained optimization. *SIAM Journal on Optimization*, 32(4):2552–2579, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1460971>. **Hough:2022:MBD**
- [HRK14] Jong hyun Ryu and Sujin Kim. A derivative-free trust-region method for biobjective optimization. *SIAM Journal on Optimization*, 24(1):334–362, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Ryu:2014:DFT**
- [HRS06] H. Heitsch, W. Römisch, and C. Strugarek. Stability of multistage stochastic programs. *SIAM Journal on Optimization*, 17(2):511–525, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Heitsch:2006:SMS**
- [HRVW96] Christoph Helmberg, Franz Rendl, Robert J. Vanderbei, and Henry Wolkowicz. An interior-point method for semidefinite programming. *SIAM Journal on Optimization*, 6(2):342–361, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Helmberg:1996:IPM**
- [HS06] Yiran He and Jie Sun. Second-order sufficient conditions for error bounds in Banach spaces. *SIAM Journal on Optimization*, 17(3):795–805, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **He:2006:SOS**
- [HS10] Warren Hare and Claudia Sagastizábal. A redistributed proximal bundle method for non-convex optimization. *SIAM Journal on Optimization*, 20(5):2442–2473, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Hare:2010:RPB**
- [HS11] M. Hintermüller and T. Surowiec. First-order optimality conditions for elliptic mathematical programs with equilibrium constraints via variational analysis. *SIAM Journal on Optimization*, 21(4):1561–1593, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1561_s1. **Hintermuller:2011:FOO**
- [HS17] Jian Hu and Gevorg Stepanyan. Optimization with reference-based robust preference con-

- straints. *SIAM Journal on Optimization*, 27(4):2230–2257, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HS19] Christian Hess and Raffaello Seri. Generic consistency for approximate stochastic programming and statistical problems. *SIAM Journal on Optimization*, 29(1):290–317, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HS21] Nguyen T. V. Hang and M. Ebrahim Sarabi. Local convergence analysis of augmented Lagrangian methods for piecewise linear-quadratic composite optimization problems. *SIAM Journal on Optimization*, 31(4):2665–2694, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HS23] Tobias Harks and Julian Schwarz. A unified framework for pricing in nonconvex resource allocation games. *SIAM Journal on Optimization*, 33(2):1223–1249, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1400924>.
- [HS24] Nguyen T. V. Hang and M. Ebrahim Sarabi. A chain rule for strict twice epidifferentiability and its applications. *SIAM Journal on Optimization*, 34(1):918–945, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [HSK15] M. Hintermüller, T. Surowiec, and A. Kämmler. Generalized Nash equilibrium problems in Banach spaces: Theory, Nikaido–Isoda-based path-following methods, and applications. *SIAM Journal on Optimization*, 25(3):1826–1856, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HSS93] Ryuichi Hirabayashi, Masayuki Shida, and Susumu Shin-doh. Manifold structure of the Karush–Kuhn–Tucker stationary solution set with two parameters. *SIAM Journal on Optimization*, 3(3):564–581, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HSS17] William B. Haskell, J. George Shanthikumar, and Z. Max Shen. Primal-dual algorithms for optimization with stochastic dominance. *SIAM Journal on Optimization*, 27(1):34–66, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [HSS20] **Helou:2020:NSO**
Elias S. Helou, Sandra A. Santos, and Lucas E. A. Simões. A new sequential optimality condition for constrained nonsmooth optimization. *SIAM Journal on Optimization*, 30(2):1610–1637, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HST24] **Hintermuller:2024:DGN**
Michael Hintermüller, Thomas M. Surowiec, and Mike Theiß. On a differential generalized Nash equilibrium problem with mean field interaction. *SIAM Journal on Optimization*, 34(3):2821–2855, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1489952>.
- [HSW14] **Hintermuller:2014:LPD**
Michael Hintermüller, Anton Schiela, and Winnifried Wollner. The length of the primal-dual path in Moreau–Yosida-based path-following methods for state constrained optimal control. *SIAM Journal on Optimization*, 24(1):108–126, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HSX24] **Han:2024:RDR**
Deren Han, Yansheng Su, and Jiaxin Xie. Randomized Douglas–Rachford methods for linear systems: Improved accuracy and efficiency. *SIAM Journal on Optimization*, 34(1):1045–1070, March 2024. CODEN SJOPE8. ISSN 1095-7189.
- [HT24] **He:2024:MRF**
Taotao He and Mohit Tawarmalani. MIP relaxations in factorable programming. *SIAM Journal on Optimization*, 34(3):2856–2882, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1515537>.
- [HTT⁺15] **Han:2015:COU**
Shuo Han, Molei Tao, Ufuk Topcu, Houman Owhadi, and Richard M. Murray. Convex optimal uncertainty quantification. *SIAM Journal on Optimization*, 25(3):1368–1387, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [HTY12] **He:2012:ADM**
Bingsheng He, Min Tao, and Xiaoming Yuan. Alternating direction method with Gaussian back substitution for separable convex programming. *SIAM Journal on Optimization*, 22(2):313–340, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Hu07] **Hu:2007:CLG**
Hui Hu. Characterizations of local and global error bounds for convex inequalities in Banach spaces. *SIAM Journal on Optimization*, 18(1):309–321,

???? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hosseini:2017:RGS

[HU17] Seyedehsomayeh Hosseini and André Uschmajew. A Riemannian gradient sampling algorithm for nonsmooth optimization on manifolds. *SIAM Journal on Optimization*, 27(1):173–189, ????. 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hosseini:2019:GSM

[HU19] Seyedehsomayeh Hosseini and André Uschmajew. A gradient sampling method on algebraic varieties and application to nonsmooth low-rank optimization. *SIAM Journal on Optimization*, 29(4):2853–2880, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Huschens:1994:UPS

[Hus94] J. Huschens. On the use of product structure in secant methods for nonlinear least squares problems. *SIAM Journal on Optimization*, 4(1):108–129, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Heinkenschloss:2001:AIT

[HV01] Matthias Heinkenschloss and Luís N. Vicente. Analysis of inexact trust-region SQP algorithms. *SIAM Journal on Optimization*, 12(2):283–302,

November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36154>.

Hintermuller:2005:SMO

[HV05] Michael Hintermüller and Luís N. Vicente. Space mapping for optimal control of partial differential equations. *SIAM Journal on Optimization*, 15(4):1002–1025, ????. 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42907>.

Hemmecke:2007:RSL

[HW07] Raymond Hemmecke and Robert Weismantel. Representation of sets of lattice points. *SIAM Journal on Optimization*, 18(1):133–137, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hayashi:2010:EEA

[HW10] Shunsuke Hayashi and Soon-Yi Wu. An explicit exchange algorithm for linear semi-infinite programming problems with second-order cone constraints. *SIAM Journal on Optimization*, 20(3):1527–1546, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hamadouche:2024:SBP

[HWWM24] Anis Hamadouche, Yun Wu, Andrew M. Wallace, and João F. C.

Mota. Sharper bounds for proximal gradient algorithms with errors. *SIAM Journal on Optimization*, 34(1):278–305, January 2024. CODEN SJOPE8. ISSN 1095-7189.

Hong:2023:TTS

[HWWY23] Mingyi Hong, Hoi-To Wai, Zhaoran Wang, and Zhuoran Yang. A two-timescale stochastic algorithm framework for bilevel optimization: Complexity analysis and application to actor-critic. *SIAM Journal on Optimization*, 33(1):147–180, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1387341>.

Haskell:2022:PRO

[HXH22] William B. Haskell, Huifu Xu, and Wenjie Huang. Preference robust optimization for choice functions on the space of CDFs. *SIAM Journal on Optimization*, 32(2):1446–1470, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1316524>.

Hu:2023:IUA

[HXL23] Xiaoyin Hu, Nachuan Xiao, Xin Liu, and Kim-Chuan Toh. An improved unconstrained approach for bilevel optimization. *SIAM Journal on Optimization*, 33(4):2801–2829, 2023. CODEN

SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1513034>.

Hung:1996:AIP

[HY96]

Pi-Fang Hung and Yinyu Ye. An asymptotical $O(\sqrt[3]{L})$ -iteration path-following linear programming algorithm that uses wide neighborhoods. *SIAM Journal on Optimization*, 6(3):570–586, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26686>.

Huang:2002:NLM

[HY02]

X. X. Huang and X. Q. Yang. Nonlinear Lagrangian for multi-objective optimization and applications to duality and exact penalization. *SIAM Journal on Optimization*, 13(3):675–692, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38485>.

Huang:2006:GLP

[HY06]

X. X. Huang and X. Q. Yang. Generalized Levitin–Polyak well-posedness in constrained optimization. *SIAM Journal on Optimization*, 17(1):243–258, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Hua:2015:ICB**
- [HY15] Xiaoqin Hua and Nobuo Yamashita. Iteration complexity of a block coordinate gradient descent method for convex optimization. *SIAM Journal on Optimization*, 25(3):1298–1313, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Huyen:2016:CSM**
- [HY16] Duong Thi Kim Huyen and Nguyen Dong Yen. Coderivatives and the solution map of a linear constraint system. *SIAM Journal on Optimization*, 26(2):986–1007, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hayashi:2005:CSR**
- [HYF05] Shunsuke Hayashi, Nobuo Yamashita, and Masao Fukushima. A combined smoothing and regularization method for monotone second-order cone complementarity problems. *SIAM Journal on Optimization*, 15(2):593–615, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42151>.
- Hynd:2023:EMS**
- [Hyn23] Ryan Hynd. Evolution of mixed strategies in monotone games. *SIAM Journal on Optimization*, 33(4):2750–2771, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1486066>.
- Huong:2016:PVV**
- [HYY16] N. T. T. Huong, J.-C. Yao, and N. D. Yen. Polynomial vector variational inequalities under polynomial constraints and applications. *SIAM Journal on Optimization*, 26(2):1060–1071, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hale:2008:FPC**
- [HYZ08] Elaine T. Hale, Wotao Yin, and Yin Zhang. Fixed-point continuation for ℓ_1 -minimization: Methodology and convergence. *SIAM Journal on Optimization*, 19(3):1107–1130, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Hager:2005:NCG**
- [HZ05] William W. Hager and Hongchao Zhang. A new conjugate gradient method with guaranteed descent and an efficient line search. *SIAM Journal on Optimization*, 16(1):170–192, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60188>.
- Hager:2006:NAS**
- [HZ06a] William W. Hager and Hongchao Zhang. A new active set algorithm for box constrained optimization. *SIAM Journal on Op-*

timization, 17(2):526–557, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hu:2006:NIU

[HZ06b] Qiya Hu and Jun Zou. Non-linear inexact Uzawa algorithms for linear and nonlinear saddle-point problems. *SIAM Journal on Optimization*, 16(3):798–825, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hager:2014:LMC

[HZ14] William W. Hager and Hongchao Zhang. The limited memory conjugate gradient method. *SIAM Journal on Optimization*, 23(4):2150–2168, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Hager:2016:PPE

[HZ16] William W. Hager and Hongchao Zhang. Projection onto a polyhedron that exploits sparsity. *SIAM Journal on Optimization*, 26(3):1773–1798, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Huang:2022:NFO

[HZ22] Kevin Huang and Shuzhong Zhang. New first-order algorithms for stochastic variational inequalities. *SIAM Journal on Optimization*, 32(4):2745–2772, 2022. CODEN SJOPE8. ISSN 1052-6234

(print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1441778>.

He:2022:QQN

[HZZC22] Xiaoyu He, Zibin Zheng, Yuren Zhou, and Chuan Chen. QNG: A quasi-natural gradient method for large-scale statistical learning. *SIAM Journal on Optimization*, 32(1):228–255, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1376753>.

Hong:2022:DDN

[HZZS22] Mingyi Hong, Siliang Zeng, Junyu Zhang, and Haoran Sun. On the divergence of decentralized nonconvex optimization. *SIAM Journal on Optimization*, 32(4):2879–2908, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1353149>.

Iliman:2016:LBP

[IdW16] Sadik Iliman and Timo de Wolff. Lower bounds for polynomials with simplex Newton polytopes based on geometric programming. *SIAM Journal on Optimization*, 26(2):1128–1146, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [IH14] Hideaki Iiduka and Kazuhiro Hishinuma. Acceleration method combining broadcast and incremental distributed optimization algorithms. *SIAM Journal on Optimization*, 24(4):1840–1863, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Iiduka:2014:AMC**
- [Iid12] Hideaki Iiduka. Iterative algorithm for triple-hierarchical constrained nonconvex optimization problem and its application to network bandwidth allocation. *SIAM Journal on Optimization*, 22(3):862–878, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Iiduka:2012:IAT**
- [Iid13] Hideaki Iiduka. Fixed point optimization algorithms for distributed optimization in networked systems. *SIAM Journal on Optimization*, 23(1):1–26, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Iiduka:2013:FPO**
- [IJOT17] A. N. Iusem, A. Jofré, R. I. Oliveira, and P. Thompson. Extragradiant method with variance reduction for stochastic variational inequalities. *SIAM Journal on Optimization*, 27(2):686–724, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Iusem:2017:EMV**
- [IJOT19] Alfredo N. Iusem, Alejandro Jofré, Roberto I. Oliveira, and Philip Thompson. Variance-based extragradiant methods with line search for stochastic variational inequalities. *SIAM Journal on Optimization*, 29(1):175–206, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Iusem:2019:VBE**
- [Ito1992] K. Ito and K. Kunisch. On the choice of the regularization parameter in nonlinear inverse problems. *SIAM Journal on Optimization*, 2(3):376–404, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Ito:1992:CRP**
- [Ito1996] Kazufumi Ito and Karl Kunisch. Augmented Lagrangian–SQP-methods in Hilbert spaces and application to control in the coefficients problems. *SIAM Journal on Optimization*, 6(1):96–125, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Ito:1996:ALS**
- [Ito2000] Kazufumi Ito and Karl Kunisch. Newton’s method for a class of weakly singular optimal control problems. *SIAM Journal on Optimization*, 10(3):896–916, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Ito:2000:NMC**
- [IK92] K. Ito and K. Kunisch. On the choice of the regularization parameter in nonlinear inverse problems. *SIAM Journal on Optimization*, 2(3):376–404, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **IK92**
- [IK96] Kazufumi Ito and Karl Kunisch. Augmented Lagrangian–SQP-methods in Hilbert spaces and application to control in the coefficients problems. *SIAM Journal on Optimization*, 6(1):96–125, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **IK96**
- [IK00] Kazufumi Ito and Karl Kunisch. Newton’s method for a class of weakly singular optimal control problems. *SIAM Journal on Optimization*, 10(3):896–916, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **IK00**

URL <http://epubs.siam.org/sam-bin/dbq/article/32084>.

Izmailov:2014:ANF

- [IK14] A. F. Izmailov and A. S. Kurennoy. Abstract Newtonian frameworks and their applications. *SIAM Journal on Optimization*, 23(4):2369–2396, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ito:2016:SMC

- [IK16] Kazufumi Ito and Karl Kunisch. A sequential method for a class of stable mathematical programming problems. *SIAM Journal on Optimization*, 26(2):1262–1292, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Irani:1991:ECG

- [IKR⁺91] Kashmira M. Irani, Manohar P. Kamat, Calvin J. Ribbens, Homer F. Walker, and Layne T. Watson. Experiments with conjugate gradient algorithms for homotopy curve tracking. *SIAM Journal on Optimization*, 1(2):222–251, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ioffe:2001:VPP

- [ILR01] A. D. Ioffe, R. E. Lucchetti, and J. P. Revalski. A variational principle for problems with functional constraints. *SIAM Journal on Optimization*, 12(2):461–478, November/January 2001. CODEN

SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37827>.

Iwata:2015:CSD

- [INT15] Satoru Iwata, Yuji Nakatsukasa, and Akiko Takeda. Computing the signed distance between overlapping ellipsoids. *SIAM Journal on Optimization*, 25(4):2359–2384, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Igbida:2017:UNA

- [INT17] Nouredine Igbida, Van Thanh Nguyen, and Julián Toledo. On the uniqueness and numerical approximations for a matching problem. *SIAM Journal on Optimization*, 27(4):2459–2480, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ioffe:1994:SAN

- [Iof94] Alexander Ioffe. On sensitivity analysis of nonlinear programs in Banach spaces: the approach via composite unconstrained optimization. *SIAM Journal on Optimization*, 4(1):1–43, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ioffe:2009:ITO

- [Iof09] A. D. Ioffe. An invitation to tame optimization. *SIAM Journal on Optimization*, 19(4):1894–1917, 2009. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Iof11] A. D. Ioffe. Regularity on a fixed set. *SIAM Journal on Optimization*, 21(4):1345–1370, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1345_s1.
- [Ios01] Ilya Ioslovich. Robust reduction of a class of large-scale linear programs. *SIAM Journal on Optimization*, 12(1):262–282, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32545>.
- [IPRT00] Tibor Illés, Jiming Peng, Cornelis Roos, and Tamás Terlaky. A strongly polynomial rounding procedure yielding a maximally complementary solution for $P_*(\kappa)$ linear complementarity problems. *SIAM Journal on Optimization*, 11(2):320–340, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33659>.
- [IPS03] A. N. Iusem, T. Pennanen, and B. F. Svaiter. Inexact variants of the proximal point algorithm without monotonicity. *SIAM Journal on Optimization*, 13(4):1080–1097, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39958>.
- [IS02a] G. Iyengar, D. J. Phillips, and C. Stein. Approximating semidefinite packing programs. *SIAM Journal on Optimization*, 21(1):231–268, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p231_s1.
- [IS02b] A. F. Izmailov and M. V. Solodov. Complementarity constraint qualification via the theory of 2-regularity. *SIAM*

Iusem:2003:IVP**Ioffe:2011:RFS****Iyengar:2011:ASP****Ioslovich:2001:RRC****Iwata:2002:CSA****Illés:2000:SPR****Izmailov:2002:CCQ**

- Journal on Optimization*, 13(2): 368–385, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36529>. [IS10]
- Izmailov:2002:SCA**
- [IS02c] A. F. Izmailov and M. V. Solodov. Superlinearly convergent algorithms for solving singular equations and smooth reformulations of complementarity problems. *SIAM Journal on Optimization*, 13(2):386–405, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37294>. [ISU12]
- Izmailov:2004:NTM**
- [IS04] A. F. Izmailov and M. V. Solodov. Newton-type methods for optimization problems without constraint qualifications. *SIAM Journal on Optimization*, 15(1):210–228, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42726>. [iT17]
- Izmailov:2008:ASN**
- [IS08] A. F. Izmailov and M. V. Solodov. An active-set Newton method for mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 19(3):1003–1027, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [IT18]
- Izmailov:2010:TSM**
- A. F. Izmailov and M. V. Solodov. A truncated SQP method based on inexact interior-point solutions of subproblems. *SIAM Journal on Optimization*, 20(5):2584–2613, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Izmailov:2012:GCA**
- A. F. Izmailov, M. V. Solodov, and E. I. Uskov. Global convergence of augmented Lagrangian methods applied to optimization problems with degenerate constraints, including problems with complementarity constraints. *SIAM Journal on Optimization*, 22(4):1579–1606, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Tanigawa:2017:SDP**
- Shin ichi Tanigawa. Singularity degree of the positive semidefinite matrix completion problem. *SIAM Journal on Optimization*, 27(2):986–1009, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ivanov:2018:ICO**
- Grigorii E. Ivanov and Lionel Thibault. Infimal convolution and optimal time control problem III: Minimal time projection

set. *SIAM Journal on Optimization*, 28(1):30–44, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Iusem:1991:DCR

[Ius91] Alfredo N. Iusem. On dual convergence and the rate of primal convergence of Bregman’s convex programming method. *SIAM Journal on Optimization*, 1(3):401–423, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Iiduka:2009:UCG

[IY09] Hideaki Iiduka and Isao Yamada. A use of conjugate gradient direction for the convex optimization problem over the fixed point set of a nonexpansive mapping. *SIAM Journal on Optimization*, 19(4):1881–1893, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Jasour:2015:SPC

[JAL15] A. M. Jasour, N. S. Aybat, and C. M. Lagoa. Semidefinite programming for chance constrained optimization over semi-algebraic sets. *SIAM Journal on Optimization*, 25(3):1411–1440, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Jansson:2004:RLU

[Jan04] Christian Jansson. Rigorous lower and upper bounds in linear programming. *SIAM Journal*

on Optimization, 14(3):914–935, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41683>; <http://www.ti3.tu-harburg.de/paper/jansson/siam41683-1.ps>.

Jansen:2006:AAM

[Jan06] Klaus Jansen. Approximation algorithm for the mixed fractional packing and covering problem. *SIAM Journal on Optimization*, 17(2):331–352, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Journee:2010:LRO

[JBAS10] M. Journée, F. Bach, P.-A. Absil, and R. Sepulchre. Low-rank optimization on the cone of positive semidefinite matrices. *SIAM Journal on Optimization*, 20(5):2327–2351, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Joki:2018:DBM

[JBK⁺18] Kaisa Joki, Adil M. Bagirov, Napsu Karmitsa, Marko M. Mäkelä, and Sona Taheri. Double bundle method for finding Clarke stationary points in nonsmooth DC programming. *SIAM Journal on Optimization*, 28(2):1892–1919, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [JBS⁺23] **Jakovetic:2023:NGM**
 Dušan Jakovetić, Dragana Bajović, Anit Kumar Sahu, Soumya Kar, Nemanja Milošević, and Dušan Stamenković. Non-linear gradient mappings and stochastic optimization: a general framework with applications to heavy-tail noise. *SIAM Journal on Optimization*, 33(2):394–423, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M145896X>.
- [JE19] Patrick R. Johnstone and Jonathan Eckstein. Convergence rates for projective splitting. *SIAM Journal on Optimization*, 29(3):1931–1957, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Jey91] **Jeyakumar:1991:CNP**
 V. Jeyakumar. Composite nonsmooth programming with Gateaux differentiability. *SIAM Journal on Optimization*, 1(1):30–41, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Jey03] **Jeyakumar:2003:CSC**
 V. Jeyakumar. Characterizing set containments involving infinite convex constraints and reverse-convex constraints. *SIAM Journal on Optimization*, 13(4):947–959, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40194>.
- [JFQS98] **Jiang:1998:TRM**
 Houyuan Jiang, Masao Fukushima, Liqun Qi, and Defeng Sun. A trust region method for solving generalized complementarity problems. *SIAM Journal on Optimization*, 8(1):140–157, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29654>.
- [JFX17] **Jalali:2017:VGF**
 Amin Jalali, Maryam Fazel, and Lin Xiao. Variational Gram functions: Convex analysis and optimization. *SIAM Journal on Optimization*, 27(4):2634–2661, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JH14] **Jarre:2014:SRN**
 Florian Jarre and Chantal Hergenroeder. A symmetric reduction of the NT direction. *SIAM Journal on Optimization*, 24(2):714–732, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JHR23] **Jaiswal:2023:BJC**
 Prateek Jaiswal, Harsha Honnappa, and Vinayak A. Rao. Bayesian joint chance constrained optimization: Approximations and statistical consistency. *SIAM Journal*

- on *Optimization*, 33(3):1968–1995, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1430005>.
Jofre:2015:CFD
- [JJ15] Alejandro Jofré and Abderrahim Jourani. Characterizations of the free disposal condition for nonconvex economies on infinite dimensional commodity spaces. *SIAM Journal on Optimization*, 25(1):699–712, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Junger:2000:SP
- [JK00] Michael Junger and Volker Kaibel. On the SQAP-polytope. *SIAM Journal on Optimization*, 11(2):444–463, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31057>.
Jia:2023:CAP
- [JKM23] Xiaoxi Jia, Christian Kanzow, and Patrick Mehlitz. Convergence analysis of the proximal gradient method in the presence of the Kurdyka–Lojasiewicz property without global Lipschitz assumptions. *SIAM Journal on Optimization*, 33(4):3038–3056, November 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Johnson:2015:ASM
- [JKW15] Travis C. Johnson, Christian Kirches, and Andreas Wächter. An active-set method for quadratic programming based on sequential hot-starts. *SIAM Journal on Optimization*, 25(2):967–994, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
Jarre:1998:OTD
- [JKZ98] Florian Jarre, Michal Kočvara, and Jochem Zowe. Optimal truss design by interior-point methods. *SIAM Journal on Optimization*, 8(4):1084–1107, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29709>.
Jeyakumar:2003:SVC
- [JL03] V. Jeyakumar and D. T. Luc. Sharp variational conditions for convex composite nonsmooth functions. *SIAM Journal on Optimization*, 13(3):904–920, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39650>.
Jibetean:2005:SAG
- [JL05] Dorina Jibetean and Monique Laurent. Semidefinite approximations for global unconstrained polynomial optimization. *SIAM Journal on Optimization*, 16(2):490–514, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60562>.

- [JL10] **Jeyakumar:2010:SDR**
 V. Jeyakumar and G. Y. Li. Strong duality in robust convex programming: Complete characterizations. *SIAM Journal on Optimization*, 20(6): 3384–3407, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3384_s1.
- [JL16] **Jiang:2016:SDM**
 Rujun Jiang and Duan Li. Simultaneous diagonalization of matrices and its applications in quadratically constrained quadratic programming. *SIAM Journal on Optimization*, 26(3): 1649–1668, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JL18] **Jeyakumar:2018:ESO**
 V. Jeyakumar and G. Li. Exact second-order cone programming relaxations for some non-convex minimax quadratic optimization problems. *SIAM Journal on Optimization*, 28(1): 760–787, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JL19] **Jiang:2019:NRE**
 Rujun Jiang and Duan Li. Novel reformulations and efficient algorithms for the generalized trust region subproblem. *SIAM Journal on Optimization*, 29(2): 1603–1633, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JL20] **Jiang:2020:LTA**
 Rujun Jiang and Duan Li. A linear-time algorithm for generalized trust region subproblems. *SIAM Journal on Optimization*, 30(1):915–932, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JL23] **Josz:2023:CAS**
 Cédric Josz and Xiaopeng Li. Certifying the absence of spurious local minima at infinity. *SIAM Journal on Optimization*, 33(3):1416–1439, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1479531>.
- [JL24] **Josz:2024:SCI**
 Cédric Josz and Lexiao Lai. Sufficient conditions for instability of the subgradient method with constant step size. *SIAM Journal on Optimization*, 34(1): 57–70, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [JLD03] **Jeyakumar:2003:NSL**
 V. Jeyakumar, G. M. Lee, and N. Dinh. New sequential Lagrange multiplier conditions characterizing optimality without constraint qualification for convex programs. *SIAM Journal on Optimization*, 14(2): 534–547, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [JLL09] **Jeyakumar:2009:ATQ** V. Jeyakumar, G. M. Lee, and G. Y. Li. Alternative theorems for quadratic inequality systems and global quadratic optimization. *SIAM Journal on Optimization*, 20(2):983–1001, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JLL23] **Josz:2023:CMM** Cédric Josz, Lexiao Lai, and Xiaopeng Li. Convergence of the momentum method for semi-algebraic functions with locally Lipschitz gradients. *SIAM Journal on Optimization*, 33(4):3012–3037, November 2023. CODEN SJOPE8. ISSN 1095-7189.
- [JLLP16] **Jeyakumar:2016:CSP** V. Jeyakumar, J. B. Lasserre, G. Li, and T. S. Phàm. Convergent semidefinite programming relaxations for global bilevel polynomial optimization problems. *SIAM Journal on Optimization*, 26(1):753–780, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JLW16] **Jiang:2016:NRA** Bo Jiang, Ya-Feng Liu, and Zaiwen Wen. L_p -norm regularization algorithms for optimization over permutation matrices. *SIAM Journal on Optimization*, 26(4):2284–2313, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JLZ20] **Jiang:2020:UAT** Bo Jiang, Tianyi Lin, and Shuzhong Zhang. A unified adaptive tensor approximation scheme to accelerate composite convex optimization. *SIAM Journal on Optimization*, 30(4):2897–2926, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JM18] **Josz:2018:LHL** Cédric Josz and Daniel K. Molzahn. Lasserre hierarchy for large scale polynomial optimization in real and complex variables. *SIAM Journal on Optimization*, 28(2):1017–1048, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JMW08] **Jach:2008:CEC** Matthias Jach, Dennis Michaels, and Robert Weismantel. The convex envelope of $(n - 1)$ -convex functions. *SIAM Journal on Optimization*, 19(3):1451–1466, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JNN21] **Jain:2021:MLI** Prateek Jain, Dheeraj M. Nagaraj, and Praneeth Netrapalli. Making the last iterate of SGD information theoretically optimal. *SIAM Journal on Optimization*, 31(2):1108–1130, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [JPS99] Jun Ji, Florian A. Potra, and Rongqin Sheng. On the local convergence of a predictor-corrector method for semidefinite programming. *SIAM Journal on Optimization*, 10(1):195–210, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31682>. **Ji:1999:LCP**
- [JPT13] Gabriela Jeronimo, Daniel Perucci, and Elias Tsigaridas. On the minimum of a polynomial function on a basic closed semi-algebraic set and applications. *SIAM Journal on Optimization*, 23(1):241–255, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Jeronimo:2013:MPF**
- [JR00] Houyuan Jiang and Daniel Ralph. Smooth SQP methods for mathematical programs with nonlinear complementarity constraints. *SIAM Journal on Optimization*, 10(3):779–808, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33232>. **Jiang:2000:SSM**
- [JR08] Florian Jarre and Franz Rendl. An augmented primal-dual method for linear conic programs. *SIAM Journal on Optimization*, 19(2):808–823, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Jarre:2008:APD**
- [JRJ10] Hubertus Th. Jongen and Jan-J. Rückmann. On interior logarithmic smoothing and strongly stable stationary points. *SIAM Journal on Optimization*, 20(5):2137–2156, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Jongen:2010:ILS**
- [JRS09] H. Th. Jongen, Jan.-J. Rückmann, and V. Shikhman. MPCC: Critical point theory. *SIAM Journal on Optimization*, 20(1):473–484, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Jongen:2009:MCP**
- [JRS10] H. Th. Jongen, Jan.-J. Rückmann, and V. Shikhman. On stability of the feasible set of a mathematical problem with complementarity problems. *SIAM Journal on Optimization*, 20(3):1157–1170, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Johansson:2010:RIS**
- [JRS10] H. Th. Jongen, Jan.-J. Rückmann, and V. Shikhman. On stability of the feasible set of a mathematical problem with complementarity problems. *SIAM Journal on Optimization*, 20(3):1157–1170, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Jongen:2010:SFS**

- Journal on Optimization*, 20(3): 1171–1184, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jansen:1997:FPA**
- [JRT97] B. Jansen, C. Roos, and T. Terlaky. A family of polynomial affine scaling algorithms for positive semidefinite linear complementarity problems. *SIAM Journal on Optimization*, 7(1): 126–140, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26234>.
- Jongen:1994:OPS**
- [JRW94] Hubertus Th. Jongen, Jan-J. Rückmann, and Gerd-Wilhelm Weber. One-parametric semi-infinite optimization: on the stability of the feasible set. *SIAM Journal on Optimization*, 4(3): 637–648, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jarre:1995:PIP**
- [JS95] Florian Jarre and Michael A. Saunders. A practical interior-point method for convex programming. *SIAM Journal on Optimization*, 5(1):149–171, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jongen:1997:GOP**
- [JS97] H. Th. Jongen and O. Stein. On generic one-parametric semi-infinite optimization. *SIAM Journal on Optimization*, 7(4): 1103–1137, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28909>.
- Johnson:2000:PDM**
- [JS00] Calvin A. Johnson and Ariela Sofer. A primal-dual method for large-scale image reconstruction in emission tomography. *SIAM Journal on Optimization*, 11(3):691–715, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33014>.
- Jongen:2011:GSI**
- [JS11] H. Th. Jongen and V. Shikhman. Generalized semi-infinite programming: The nonsmooth symmetric reduction ansatz. *SIAM Journal on Optimization*, 21(1):193–211, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p193_s1.
- Jiang:2016:SSO**
- [JS16] Hao Jiang and Uday V. Shanbhag. On the solution of stochastic optimization and variational problems in imperfect information regimes. *SIAM Journal on Optimization*, 26(4): 2394–2429, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Jourani:2020:ELM**
- [JS20] A. Jourani and F. J. Silva. Existence of Lagrange multipliers under Gâteaux differentiable data with applications to stochastic optimal control problems. *SIAM Journal on Optimization*, 30(1):319–348, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jiang:1995:GOC**
- [JSC95] Y. Jiang, W. R. Smith, and G. R. Chapman. Global optimality conditions and their geometric interpretation for the chemical and phase equilibrium problem. *SIAM Journal on Optimization*, 5(4):813–834, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jiang:2012:IAP**
- [JST12] Kaifeng Jiang, Defeng Sun, and Kim-Chuan Toh. An inexact accelerated proximal gradient method for large scale linearly constrained convex SDP. *SIAM Journal on Optimization*, 22(3):1042–1064, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jog:1991:PGA**
- [JSV91] Prasanna Jog, Jung Y. Suh, and Dirk Van Gucht. Parallel generic algorithms applied to the traveling salesman problem. *SIAM Journal on Optimization*, 1(4): 515–529, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jin:2024:HPC**
- [JSX24] Billy Jin, Katya Scheinberg, and Miaolan Xie. High probability complexity bounds for adaptive step search based on stochastic oracles. *SIAM Journal on Optimization*, 34(3): 2411–2439, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1512764>.
- Jofre:2014:VCB**
- [JW14] Alejandro Jofré and Roger J.-B. Wets. Variational convergence of bifunctions: Motivating applications. *SIAM Journal on Optimization*, 24(4):1952–1979, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jia:2021:CGL**
- [JW21] Zhongxiao Jia and Fa Wang. The convergence of the generalized Lanczos trust-region method for the trust-region subproblem. *SIAM Journal on Optimization*, 31(1):887–914, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Jiang:2024:DFO**
- [JX24] Nan Jiang and Weijun Xie. Distributionally favorable optimization: a framework for data-driven decision-making with en-

- dogenous outliers. *SIAM Journal on Optimization*, 34(1):419–458, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [JY94] Jun Ji and Yinyu Ye. A complexity analysis for interior-point algorithms based on Karmarkar’s potential function. *SIAM Journal on Optimization*, 4(3):512–520, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JYZ94] Elizabeth R. Jessup, Dafeng Yang, and Stavros A. Zenios. Parallel factorization of structured matrices arising in stochastic programming. *SIAM Journal on Optimization*, 4(4):833–846, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JY04] V. Jeyakumar and N. D. Yen. Solution stability of nonsmooth continuous systems with applications to cone-constrained optimization. *SIAM Journal on Optimization*, 14(4):1106–1127, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41923>.
- [JZZ20] Bangti Jin, Zehui Zhou, and Jun Zou. On the convergence of stochastic gradient descent for nonlinear ill-posed problems. *SIAM Journal on Optimization*, 30(2):1421–1450, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [JYK24] Wouter Jongeneel, Man-Chung Yue, and Daniel Kuhn. Small errors in random zeroth-order optimization are imaginary. *SIAM Journal on Optimization*, 34(3):2638–2670, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1510261>.
- [Kal18] Barbara Kaltenbacher. Minimization based formulations of inverse problems and their regularization. *SIAM Journal on Optimization*, 28(1):620–645, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kan96] Christian Kanzow. Global convergence properties of some iterative methods for linear complementarity problems. *SIAM Journal on Optimization*, 6(2):326–341, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kan14] Nader Kanzi. Constraint qualifications in semi-infinite systems

Ji:1994:CAI**Jin:2020:CSG****Jeyakumar:2004:SSN****Kaltenbacher:2018:MBF****Jongeneel:2024:SER****Kanzow:1996:GCP****Jessup:1994:PFS****Kanzi:2014:CQS**

- and their applications in non-smooth semi-infinite problems with mixed constraints. *SIAM Journal on Optimization*, 24(2): 559–572, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kas10] Refail Kasimbeyli. A non-linear cone separation theorem and scalarization in nonconvex vector optimization. *SIAM Journal on Optimization*, 20(3): 1591–1619, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kau99] Linda Kaufman. Reduced storage, quasi-Newton trust region approaches to function optimization. *SIAM Journal on Optimization*, 10(1):56–69, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30377>.
- [KB08] Seung-Jean Kim and Stephen Boyd. A minimax theorem with applications to machine learning, signal processing, and finance. *SIAM Journal on Optimization*, 19(3):1344–1367, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KBGY22] Nurdan Kuru, S. Ilker Birbil, Mert Gürbüzbalaban, and Sinan Yildirim. Differentially private accelerated optimization algorithms. *SIAM Journal on Optimization*, 32(2): 795–821, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1355847>.
- [KBS93] H. Fayez Khalfan, R. H. Byrd, and R. B. Schnabel. A theoretical and experimental study of the symmetric rank-one update. *SIAM Journal on Optimization*, 3(1):1–24, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KCS97] Tuvia Kotzer, Nir Cohen, and Joseph Shamir. A projection-based algorithm for consistent and inconsistent constraints. *SIAM Journal on Optimization*, 7(2):527–546, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27834>.
- [KDB09] Abdeslam Kadrani, Jean-Pierre Dussault, and Abdelhamid Benchakroun. A new regularization scheme for mathematical programs with complementarity constraints. *SIAM Journal*

- on *Optimization*, 20(1):78–103, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KdK23] **Kirschner:2023:CMP**
Felix Kirschner and Etienne de Klerk. Construction of multivariate polynomial approximation kernels via semidefinite programming. *SIAM Journal on Optimization*, 33(2): 513–537, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1494476>.
- [Kea11] **Kearfott:2011:EVL**
R. Baker Kearfott. Erratum: Validated linear relaxations and preprocessing: Some experiments. *SIAM Journal on Optimization*, 21(1): 415–416, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p415_s1. See [KH05].
- [Kel99] **Kelley:1999:DRS**
C. T. Kelley. Detection and remediation of stagnation in the Nelder–Mead algorithm using a sufficient decrease condition. *SIAM Journal on Optimization*, 10(1):43–55, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KF18a] **Kim:2018:ALF**
Donghwan Kim and Jeffrey A. Fessler. Another look at the Fast Iterative Shrinkage/Thresholding Algorithm (FISTA). *SIAM Journal on Optimization*, 28(1):223–250, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31520>.
- [KF18b] **Kim:2018:GOG**
Donghwan Kim and Jeffrey A. Fessler. Generalizing the optimized gradient method for smooth convex minimization. *SIAM Journal on Optimization*, 28(2):1920–1950, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KFF09] **Kanzow:2009:LCS**
Christian Kanzow, Izabella Ferenczi, and Masao Fukushima. On the local convergence of semismooth Newton methods for linear and nonlinear second-order cone programs without strict complementarity. *SIAM Journal on Optimization*, 20(1): 297–320, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KFGT21] **Khazayel:2021:ICC**
Bahareh Khazayel, Ali Farajzadeh, Christian Günther, and Christiane Tammer. On the intrinsic core of convex cones

- in real linear spaces. *SIAM Journal on Optimization*, 31(2): 1276–1298, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Kiw97]
- [KGM23] Olga Kuryatnikova, Bissan Ghaddar, and Daniel K. Molzahn. Two-stage robust quadratic optimization with equalities and its application to optimal power flow. *SIAM Journal on Optimization*, 33(4): 2830–2857, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1469651>. **Kuryatnikova:2023:TSR**
- [KH05] R. Baker Kearfott and Sriporn Hongthong. Validated linear relaxations and preprocessing: Some experiments. *SIAM Journal on Optimization*, 16(2): 418–433, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60218>. See errata [Kea11]. **Kearfott:2005:VLR**
- [Kiw96] Krzysztof C. Kiwiel. Restricted step and Levenberg–Marquardt techniques in proximal bundle methods for nonconvex nondifferentiable optimization. *SIAM Journal on Optimization*, 6(1): 227–249, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Kiwiel:1996:RSL**
- [Kiw04] Krzysztof C. Kiwiel. Convergence of approximate and incremental subgradient methods for convex optimization. *SIAM Journal on Optimization*, 14(3): 807–840, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37636>. **Kiwiel:2004:CAI**
- [Kiw06] Krzysztof C. Kiwiel. A proximal bundle method with approximate subgradient linearizations. *SIAM Journal on Optimization*, 16(4):1007–1023, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Kiwiel:2006:PBM**
- [Kiw07a] Krzysztof C. Kiwiel. Convergence of the gradient sampling algorithm for nonsmooth nonconvex optimization. *SIAM Journal on Optimization*, 18(2): 379–388, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Kiwiel:2007:CGS**
- [Kiw97] Krzysztof C. Kiwiel. Efficiency of the analytic center cutting plane method for convex minimization. *SIAM Journal on Optimization*, 7(2): 336–346, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27576>. **Kiwiel:1997:EAC**

- [Kiw07b] **Kiwiel:2007:PPB** Krzysztof C. Kiwiel. A proximal-projection bundle method for Lagrangian relaxation, including semidefinite programming. *SIAM Journal on Optimization*, 17(4):1015–1034, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KK92]
- [Kiw08] **Kiwiel:2008:MCA** Krzysztof C. Kiwiel. A method of centers with approximate subgradient linearizations for non-smooth convex optimization. *SIAM Journal on Optimization*, 18(4):1467–1489, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KK02]
- [Kiw10] **Kiwiel:2010:NVG** Krzysztof C. Kiwiel. A non-derivative version of the gradient sampling algorithm for non-smooth nonconvex optimization. *SIAM Journal on Optimization*, 20(4):1983–1994, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KK05]
- [KJ17] **Kungurtsev:2017:PCP** Vyacheslav Kungurtsev and Johannes Jäschke. A predictor-corrector path-following algorithm for dual-degenerate parametric optimization problems. *SIAM Journal on Optimization*, 27(1):538–564, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KKM93]
- Khachiyan:1992:DMS** Leonid Khachiyan and Bahman Kalantari. Diagonal matrix scaling and linear programming. *SIAM Journal on Optimization*, 2(4):668–672, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Klatte:2002:CML** Diethard Klatte and Bernd Kummer. Constrained minima and Lipschitzian penalties in metric spaces. *SIAM Journal on Optimization*, 13(2):619–633, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39625>.
- Klatte:2005:SLS** Diethard Klatte and Bernd Kummer. Strong Lipschitz stability of stationary solutions for nonlinear programs and variational inequalities. *SIAM Journal on Optimization*, 16(1):96–119, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60156>.
- Kojima:1993:LSI** Masakazu Kojima, Yoshifumi Kurita, and Shinji Mizuno. Large-step interior point algorithms for linear complementarity problems. *SIAM Journal on Optimization*, 3(2):398–412,

May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Khanh:2024:VSV

- [KKMP24] P. D. Khanh, V. V. H. Khoa, B. S. Mordukhovich, and V. T. Phat. Variational and strong variational convexity in infinite-dimensional variational analysis. *SIAM Journal on Optimization*, 34(3): 2756–2787, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1604667>.

Kainen:2003:MEF

- [KKS03] Paul C. Kainen, Věra Kůrková, and Marcello Sanguineti. Minimization of error functionals over variable-basis functions. *SIAM Journal on Optimization*, 14(3):732–742, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40123>.

Kanzow:2019:MPM

- [KKS19] C. Kanzow, V. Karl, D. Steck, and D. Wachsmuth. The multiplier-penalty method for generalized Nash equilibrium problems in Banach spaces. *SIAM Journal on Optimization*, 29(1):767–793, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Khanh:2015:ITN

- [KKT15] Phan Q. Khanh, Alexander Y. Kruger, and Nguyen H. Thao. An induction theorem and nonlinear regularity models. *SIAM Journal on Optimization*, 25(4): 2561–2588, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kim:2020:GAC

- [KKT20] Sunyoung Kim, Masakazu Kojima, and Kim-Chuan Toh. A geometrical analysis on convex conic reformulations of quadratic and polynomial optimization problems. *SIAM Journal on Optimization*, 30(2): 1251–1273, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kim:2005:GLD

- [KKW05] Sunyoung Kim, Masakazu Kojima, and Hayato Waki. Generalized Lagrangian duals and sums of squares relaxations of sparse polynomial optimization problems. *SIAM Journal on Optimization*, 15(3): 697–719, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60126>.

Kim:2009:ESS

- [KKW09] Sunyoung Kim, Masakazu Kojima, and Hayato Waki. Exploiting sparsity in SDP relaxation for sensor network localization. *SIAM Journal on Optimization*,

- 20(1):192–215, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KLL22b]
- Kiwiel:1997:SPM**
- [KL97] Krzysztof C. Kiwiel and Bożena Lopuch. Surrogate projection methods for finding fixed points of firmly nonexpansive mappings. *SIAM Journal on Optimization*, 7(4):1084–1102, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27956>.
- Kisialiou:2010:PAS**
- [KL10] Mikalai Kisialiou and Zhi-Quan Luo. Probabilistic analysis of semidefinite relaxation for binary quadratic minimization. *SIAM Journal on Optimization*, 20(4):1906–1922, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kotsalis:2022:SOMa**
- [KLL22a] Georgios Kotsalis, Guanghui Lan, and Tianjiao Li. Simple and optimal methods for stochastic variational inequalities, I: Operator extrapolation. *SIAM Journal on Optimization*, 32(3):2041–2073, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1381678>. [KLW18]
- Kotsalis:2022:SOMb**
- Georgios Kotsalis, Guanghui Lan, and Tianjiao Li. Simple and optimal methods for stochastic variational inequalities, II: Markovian noise and policy evaluation in reinforcement learning. *SIAM Journal on Optimization*, 32(2):1120–1155, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1381691>.
- Kirches:2022:SLM**
- [KLLM22] Christian Kirches, Jeffrey Larson, Sven Leyffer, and Paul Manns. Sequential linearization method for bound-constrained mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 32(1):75–99, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1370501>.
- Kolda:2007:SRG**
- [KLT07] Tamara G. Kolda, Robert Michael Lewis, and Virginia Torczon. Stationarity results for generating set search for linearly constrained optimization. *SIAM Journal on Optimization*, 17(4):943–968, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Khan:2018:MSO**
- Kamil A. Khan, Jeffrey Larson, and Stefan M. Wild. Mani-

- fold sampling for optimization of nonconvex functions that are piecewise linear compositions of smooth components. *SIAM Journal on Optimization*, 28(4):3001–3024, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KM09] Refail Kasimbeyli and Musa Mammadov. On weak subdifferentials, directional derivatives, and radial epiderivatives for nonconvex functions. *SIAM Journal on Optimization*, 20(2):841–855, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KM21a] Cheolmin Kim and Sanjay Mehrotra. Solution approaches to linear fractional programming and its stochastic generalizations using second order cone approximations. *SIAM Journal on Optimization*, 31(1):945–971, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KM21b] Weiwei Kong and Renato D. C. Monteiro. An accelerated inexact proximal point method for solving nonconvex-concave min-max problems. *SIAM Journal on Optimization*, 31(4):2558–2585, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KM24] Weiwei Kong and Renato D. C. Monteiro. Global complexity bound of a proximal ADMM for linearly constrained nonseparable nonconvex composite programming. *SIAM Journal on Optimization*, 34(1):201–224, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [KMM19] Weiwei Kong, Jefferson G. Melo, and Renato D. C. Monteiro. Complexity of a quadratic penalty accelerated inexact proximal point method for solving linearly constrained nonconvex composite programs. *SIAM Journal on Optimization*, 29(4):2566–2593, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KMM23] Weiwei Kong, Jefferson G. Melo, and Renato D. C. Monteiro. Iteration complexity of an inner accelerated inexact proximal augmented Lagrangian method based on the classical Lagrangian function. *SIAM*
- Kasimbeyli:2009:WSD**
- Kocuk:2019:SDC**
- Kim:2021:SAL**
- Kong:2021:AIP**
- Kong:2019:CQP**
- Kong:2023:ICI**
- Kong:2024:GCB**

- Journal on Optimization*, 33(1): 181–210, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M136147X>. [KN04]
- Khanh:2023:VCF**
- [KMP23] Pham Duy Khanh, Boris S. Mordukhovich, and Vo Thanh Phat. Variational convexity of functions and variational sufficiency in optimization. *SIAM Journal on Optimization*, 33(2): 1121–1158, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1519250>. [KN05]
- Kortanek:1993:CCP**
- [KN93] K. O. Kortanek and Hoon No. A central cutting plane algorithm for convex semi-infinite programming problems. *SIAM Journal on Optimization*, 3(4): 901–918, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kanzow:2002:SPN** [KN20]
- [KN02] Christian Kanzow and Christian Nagel. Semidefinite programs: New search directions, smoothing-type methods, and numerical results. *SIAM Journal on Optimization*, 13(1):1–23, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39052>. See corrigendum [KN04].
- Kanzow:2004:CSP**
- Christian Kanzow and Christian Nagel. Corrigendum: Semidefinite programs: New search directions, smoothing-type methods, and numerical results. *SIAM Journal on Optimization*, 14(3):936–937, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43310>. See [KN02].
- Kanzow:2005:QCN**
- Christian Kanzow and Christian Nagel. Quadratic convergence of a nonsmooth Newton-type method for semidefinite programs without strict complementarity. *SIAM Journal on Optimization*, 15(3): 654–672, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43114>.
- Klep:2020:MPL**
- Igor Klep and Jiawang Nie. A matrix Positivstellensatz with lifting polynomials. *SIAM Journal on Optimization*, 30(1): 240–261, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kirjner-Neto:1998:COP** [KNP98]
- C. Kirjner-Neto and E. Polak. On the conversion of optimization problems with max-min constraints to standard optimization problems. *SIAM*

- Journal on Optimization*, 8(4): 887–915, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29853>. [Kol05]
- [KNS11] Jayash Koshal, Angelia Nedić, and Uday V. Shanbhag. Multiuser optimization: Distributed algorithms and error analysis. *SIAM Journal on Optimization*, 21(3):1046–1081, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p1046_s1.
- [KNT10] Alexander Kruger, Huynh Van Ngai, and Michel Théra. Stability of error bounds for convex constraint systems in Banach spaces. *SIAM Journal on Optimization*, 20(6):3280–3296, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KNX16] Michal Kocvara, Yurii Nesterov, and Yu Xia. A subgradient method for free material design. *SIAM Journal on Optimization*, 26(4):2314–2354, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KON98] Tamara G. Kolda, Dianne P. O’Leary, and Larry Nazareth. BFGS with update skipping and varying memory. *SIAM Journal on Optimization*, 8(4):1060–1083, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30645>.
- [Kor00] Janos Korzak. Convergence analysis of inexact infeasible-interior-point algorithms for solving linear programming problems. *SIAM Journal on Optimization*, 11(1):133–148, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32999>.
- [KP98] Anders Klarbring and Jong-Shi Pang. Existence of solutions to discrete semicoercive frictional contact problems. *SIAM*

Kolda:2005:RAP**Koshal:2011:MOD****Kolda:1998:BUS****Kruger:2010:SEB****Korzak:2000:CAI****Kocvara:2016:SMF****Klarbring:1998:ESD**

- Journal on Optimization*, 8(2): 414–442, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29784>. [KPZ19]
- [KP99] Christian Kanzow and Heiko Pieper. Jacobian smoothing methods for nonlinear complementarity problems. *SIAM Journal on Optimization*, 9(2): 342–373, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32878>. [KQ19]
- [KP22] Dionysios S. Kalogieras and Warren B. Powell. Zeroth-order stochastic compositional algorithms for risk-aware learning. *SIAM Journal on Optimization*, 32(2):386–416, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1315403>. [KR02]
- [KPV18] Igor Klep, Janez Povh, and Jurij Volcic. Minimizer extraction in polynomial optimization is robust. *SIAM Journal on Optimization*, 28(4):3177–3207, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KR03]
- Kim:2019:ABT**
Kibaek Kim, Cosmin G. Petra, and Victor M. Zavala. An asynchronous bundle-trust-region method for dual decomposition of stochastic mixed-integer programming. *SIAM Journal on Optimization*, 29(1): 318–342, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Khanh:2019:VWT**
Phan Quoc Khanh and Nguyen Hong Quan. Versions of the Weierstrass theorem for bifunctions and solution existence in optimization. *SIAM Journal on Optimization*, 29(2):1502–1523, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kunisch:2002:PDA**
K. Kunisch and A. Rösch. Primal-dual active set strategy for a general class of constrained optimal control problems. *SIAM Journal on Optimization*, 13(2):321–334, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35800>.
- Kunisch:2003:IAS**
K. Kunisch and F. Rendl. An infeasible active set method for quadratic problems with simple bounds. *SIAM Journal on Optimization*, 14(1):35–52, 2003. CODEN SJOPE8.

- ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37613>. [KRT07]
- Kratschmer:2024:NUE**
- [Krä24] Volker Krätschmer. Nonasymptotic upper estimates for errors of the sample average approximation method to solve risk-averse stochastic programs. *SIAM Journal on Optimization*, 34(2):1264–1294, April 2024. CODEN SJOPE8. ISSN 1095-7189. [KRZ17]
- Kiwiel:1999:PDA**
- [KRR99] Krzysztof C. Kiwiel, Charles H. Rosa, and Andrzej Ruszczyński. Proximal decomposition via alternating linearization. *SIAM Journal on Optimization*, 9(3):668–689, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28806>. [KS91]
- Kassay:2011:IMS**
- [KRS11] Gábor Kassay, Simeon Reich, and Shoham Sabach. Iterative methods for solving systems of variational inequalities in reflexive Banach spaces. *SIAM Journal on Optimization*, 21(4):1319–1344, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1319_s1. [KS93]
- Krastanov:2007:ESD**
- M. I. Krastanov, N. K. Ribarska, and Ts. Y. Tsachev. On the existence of solutions to differential inclusions with nonconvex right-hand sides. *SIAM Journal on Optimization*, 18(3):733–751, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kolobov:2017:WSL**
- Victor I. Kolobov, Simeon Reich, and Rafal Zalas. Weak, strong, and linear convergence of a double-layer fixed point algorithm. *SIAM Journal on Optimization*, 27(3):1431–1458, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kelley:1991:NPS**
- C. T. Kelley and E. W. Sachs. A new proof of superlinear convergence for Broyden’s method in Hilbert space. *SIAM Journal on Optimization*, 1(1):146–150, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kelley:1993:PBM**
- C. T. Kelley and E. W. Sachs. Pointwise Broyden methods. *SIAM Journal on Optimization*, 3(2):423–441, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Kelley:1999:TRM**
- [KS99] C. T. Kelley and E. W. Sachs. A trust region method

- for parabolic boundary control problems. *SIAM Journal on Optimization*, 9(4):1064–1081, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30896>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [KS00] **Kleis:2000:OCS**
D. Kleis and E. W. Sachs. Optimal control of the sterilization of prepackaged food. *SIAM Journal on Optimization*, 10(4):1180–1195, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33120>.
- [KS05a] **Kohler:2005:FTL**
Ekkehard Köhler and Martin Skutella. Flows over time with load-dependent transit times. *SIAM Journal on Optimization*, 15(4):1185–1202, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43264>.
- [KS05b] **Kurkova:2005:EEA**
Vera Kurková and Marcello Sanguineti. Error estimates for approximate optimization by the extended Ritz method. *SIAM Journal on Optimization*, 15(2):461–487, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KS10] **Kanzow:2010:MPE**
Christian Kanzow and Alexandra Schwartz. Mathematical programs with equilibrium constraints: Enhanced Fritz John conditions, new constraint qualifications, and improved exact penalty results. *SIAM Journal on Optimization*, 20(5):2730–2753, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42650>.
- [KS12] **Kannan:2012:DCE**
Aswin Kannan and Uday V. Shanbhag. Distributed computation of equilibria in monotone Nash games via iterative regularization techniques. *SIAM Journal on Optimization*, 22(4):1177–1205, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KS14] **Kanzow:2014:NRM**
Christian Kanzow and Alexandra Schwartz. A new regularization method for mathematical programs with complementarity constraints with strong convergence properties. *SIAM Journal on Optimization*, 23(2):770–798, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KS15] **Kurdyka:2015:CPP**
Krzysztof Kurdyka and Stanisław Spodzieja. Convexifying positive polynomials and sums

of squares approximation. *SIAM Journal on Optimization*, 25(4): 2512–2536, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kanzow:2016:ALM

[KS16a] Christian Kanzow and Daniel Steck. Augmented Lagrangian methods for the solution of generalized Nash equilibrium problems. *SIAM Journal on Optimization*, 26(4):2034–2058, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kouri:2016:RAP

[KS16b] D. P. Kouri and T. M. Surowiec. Risk-averse PDE-constrained optimization using the conditional value-at-risk. *SIAM Journal on Optimization*, 26(1): 365–396, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kriel:2018:ELR

[KS18] Tom-Lukas Kriel and Markus Schweighofer. On the exactness of Lasserre relaxations for compact convex basic closed semialgebraic sets. *SIAM Journal on Optimization*, 28(2):1796–1816, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kanzow:2019:QVI

[KS19] Christian Kanzow and Daniel Steck. Quasi-variational inequalities in Banach spaces: Theory and augmented Lagrangian

methods. *SIAM Journal on Optimization*, 29(4):3174–3200, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kleywegt:2001:SA

[KSdM01] Anton J. Kleywegt, Alexander Shapiro, and Tito Homem de Mello. The sample average approximation method for stochastic discrete optimization. *SIAM Journal on Optimization*, 12(2):479–502, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36322>.

Kojima:1997:IPM

[KSH97] Masakazu Kojima, Susumu Shindoh, and Shinji Hara. Interior-point methods for the monotone semidefinite linear complementarity problem in symmetric matrices. *SIAM Journal on Optimization*, 7(1): 86–125, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26903>.

Kojima:1999:PCI

[KSS99] Masakazu Kojima, Masayuki Shida, and Susumu Shindoh. A predictor-corrector interior-point algorithm for the semidefinite linear complementarity problem using the Alizadeh–Haeberly–Overton search direction. *SIAM Journal on Opti-*

- mization*, 9(2):444–465, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30062>. [KT03]
- [KSW94] Linda Kaufman, Garrett S. Sylvester, and Margaret H. Wright. Structured linear least-squares problems in system identification and separable nonlinear data fitting. *SIAM Journal on Optimization*, 4(4):847–871, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kong:2008:RSN] Lingchen Kong, Jie Sun, and Naihua Xiu. A regularized smoothing Newton method for symmetric cone complementarity problems. *SIAM Journal on Optimization*, 19(3):1028–1047, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [KT08]
- [KT00] Masakazu Kojima and Levent Tunçel. Cones of matrices and successive convex relaxations of nonconvex sets. *SIAM Journal on Optimization*, 10(3):750–778, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33645>.
- [Kamimura:2003:SCP] Shoji Kamimura and Wataru Takahashi. Strong convergence of a proximal-type algorithm in a Banach space. *SIAM Journal on Optimization*, 13(3):938–945, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39611>.
- [Kolda:2004:CAP] Tamara G. Kolda and Virginia J. Torczon. On the convergence of asynchronous parallel pattern search. *SIAM Journal on Optimization*, 14(4):939–964, ??? 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39810>.
- [Kohsaka:2008:EAF] Fumiaki Kohsaka and Wataru Takahashi. Existence and approximation of fixed points of firmly nonexpansive-type mappings in Banach spaces. *SIAM Journal on Optimization*, 19(2):824–835, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kitahara:2014:SVM] Tomonari Kitahara and Takashi Tsuchiya. A simple variant of the Mizuno–Todd–Ye predictor-corrector algorithm and its objective-function-free complexity. *SIAM Journal on Optimization*, 23(3):1890–1903, ???

2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Khanh:2018:HOK

- [KT18] Phan Quoc Khanh and Nguyen Minh Tung. Higher-order Karush–Kuhn–Tucker conditions in non-smooth optimization. *SIAM Journal on Optimization*, 28(1):820–848, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kuntz:2021:ACI

- [KTSB21] Juan Kuntz, Philipp Thomas, Guy-Bart Stan, and Mauricio Barahona. Approximations of countably infinite linear programs over bounded measure spaces. *SIAM Journal on Optimization*, 31(1):604–625, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kellner:2014:CPP

- [KTT14] Kai Kellner, Thorsten Theobald, and Christian Trabant. Containment problems for polytopes and spectrahedra. *SIAM Journal on Optimization*, 23(2):1000–1020, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kellner:2015:SHC

- [KTT15] Kai Kellner, Thorsten Theobald, and Christian Trabant. A semidefinite hierarchy for containment of spectrahedra. *SIAM Journal on Optimization*, 25(2):

1013–1033, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kruse:2015:SCI

Florian Kruse and Michael Ulrich. A self-concordant interior point approach for optimal control with state constraints. *SIAM Journal on Optimization*, 25(2):770–806, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kucera:2008:CRO

Radek Kučera. Convergence rate of an optimization algorithm for minimizing quadratic functions with separable convex constraints. *SIAM Journal on Optimization*, 19(2):846–862, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kuchler:2008:SMS

Christian Kuchler. On stability of multistage stochastic programs. *SIAM Journal on Optimization*, 19(2):952–968, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Kummer:2016:TRS

Mario Kummer. Two results on the size of spectrahedral descriptions. *SIAM Journal on Optimization*, 26(1):589–601, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Kup96] **Kupfer:1996:IDC**
F.-S. Kupfer. An infinite-dimensional convergence theory for reduced SQP methods in Hilbert space. *SIAM Journal on Optimization*, 6(1):126–163, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Kur24] **Kurtz:2024:AGM**
Jannis Kurtz. Approximation guarantees for min-max-min robust optimization and k -adaptability under objective uncertainty. *SIAM Journal on Optimization*, 34(2):2121–2149, ??? 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1595084>.
- [KV17] **Karimi:2017:IPQ**
Sahar Karimi and Stephen Vavasis. IMRO: a proximal quasi-Newton method for solving ℓ_1 -regularized least squares problems. *SIAM Journal on Optimization*, 27(2):583–615, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KVZ24] **Kuryatnikova:2024:RNG**
Olga Kuryatnikova, Juan C. Vera, and Luis F. Zuluaga. Reducing nonnegativity over general semialgebraic sets to nonnegativity over simple sets. *SIAM Journal on Optimization*, 34(2):1970–2006, ??? 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1501027>.
- [KW10] **Krislock:2010:ESN**
Nathan Krislock and Henry Wolkowicz. Explicit sensor network localization using semidefinite representations and facial reductions. *SIAM Journal on Optimization*, 20(5):2679–2708, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KY21] **Kaushik:2021:MCR**
Harshal D. Kaushik and Farzad Yousefian. A method with convergence rates for optimization problems with variational inequality constraints. *SIAM Journal on Optimization*, 31(3):2171–2198, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [KYYZ22] **Ke:2022:GPP**
Rongzhu Ke, Wei Yao, Jane J. Ye, and Jin Zhang. Generic property of the partial calmness condition for bilevel programming problems. *SIAM Journal on Optimization*, 32(2):604–634, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1371403>.
- [LA08] **Luedtke:2008:SA**
James Luedtke and Shabbir Ahmed. A sample approxima-

tion approach for optimization with probabilistic constraints. *SIAM Journal on Optimization*, 19(2):674–699, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Las04]

Lagarias:1993:CSI

[Lag93] J. C. Lagarias. A collinear scaling interpretation of Karmarkar’s linear programming algorithm. *SIAM Journal on Optimization*, 3(3):630–636, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2001:GOP

[Las01] Jean B. Lasserre. Global optimization with polynomials and the problem of moments. *SIAM Journal on Optimization*, 11(3):796–817, November/February 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36680>. [Las06a]

Lasserre:2002:EEP

[Las02] Jean B. Lasserre. An explicit equivalent positive semidefinite program for nonlinear 0-1 programs. *SIAM Journal on Optimization*, 12(3):756–769, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38007>. [Las06b]

Lasserre:2004:PPL

Jean B. Lasserre. Polynomial programming: LP-relaxations also converge. *SIAM Journal on Optimization*, 15(2):383–393, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60394>.

Lasserre:2005:SSA

Jean B. Lasserre. Sum of squares approximation of polynomials, nonnegative on a real algebraic set. *SIAM Journal on Optimization*, 16(2):610–628, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61414>.

Lasserre:2006:CSR

Jean B. Lasserre. Convergent SDP-relaxations in polynomial optimization with sparsity. *SIAM Journal on Optimization*, 17(3):822–843, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2006:SSA

Jean B. Lasserre. A sum of squares approximation of nonnegative polynomials. *SIAM Journal on Optimization*, 16(3):751–765, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Las09] **Lasserre:2009:CSG**
Jean B. Lasserre. Convexity in semialgebraic geometry and polynomial optimization. *SIAM Journal on Optimization*, 19(4):1995–2014, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Las10] **Lasserre:2010:JMA**
Jean B. Lasserre. A “joint + marginal” approach to parametric polynomial optimization. *SIAM Journal on Optimization*, 20(4):1995–2022, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Las11] **Lasserre:2011:NLN**
Jean B. Lasserre. A new look at nonnegativity on closed sets and polynomial optimization. *SIAM Journal on Optimization*, 21(3):864–885, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p864_s1.
- [Las14] **Lasserre:2014:LRV**
Jean B. Lasserre. A Lagrangian relaxation view of linear and semidefinite hierarchies. *SIAM Journal on Optimization*, 23(3):1742–1756, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Las16] **Lasserre:2016:COP**
Jean B. Lasserre. Convex optimization and parsimony of L_p -balls representation. *SIAM Journal on Optimization*, 26(1):247–273, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Lás17] **Laszlo:2017:MRD**
Szilárd László. Minimax results on dense sets and dense families of functionals. *SIAM Journal on Optimization*, 27(2):661–685, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Las22] **Lasserre:2022:OEU**
Jean B. Lasserre. Optimization on the Euclidean unit sphere. *SIAM Journal on Optimization*, 32(2):1430–1445, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1433150>.
- [Lau94] **Laursen:1994:CPB**
Per S. Laursen. Can parallel branch and bound without communication be effective. *SIAM Journal on Optimization*, 4(2):288–296, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Lau00] **Laumen:2000:NMC**
Manfred Laumen. Newton’s method for a class of optimal shape design problems. *SIAM Journal on Optimization*, 10(2):503–533, December/February 2000. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30287>. [LBH22]
- Laurent:2001:TLS**
- [Lau01] Monique Laurent. Tighter linear and semidefinite relaxations for max-cut based on the Lovász–Schrijver lift-and-project procedure. *SIAM Journal on Optimization*, 12(2):345–375, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37937>. [LBP20]
- Luthi:2000:ACQ**
- [LB00] Hans-Jakob Lüthi and Benno Büeler. The analytic center quadratic cut method for strongly monotone variational inequality problems. *SIAM Journal on Optimization*, 10(2):415–426, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33832>. [LBT22]
- Lebair:2018:AMF**
- [LB18] Teresa M. Lebair and Amitabh Basu. Approximation of minimal functions by extreme functions. *SIAM Journal on Optimization*, 28(3):2518–2540, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LC24]
- Louzeiro:2022:FDS**
- Maurício Silva Louzeiro, Ronny Bergmann, and Roland Herzog. Fenchel duality and a separation theorem on Hadamard manifolds. *SIAM Journal on Optimization*, 32(2):854–873, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1400699>.
- Liu:2020:SCS**
- Yulan Liu, Shujun Bi, and Shao-hua Pan. Several classes of stationary points for rank regularized minimization problems. *SIAM Journal on Optimization*, 30(2):1756–1775, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2022:DCA**
- Wenjing Li, Wei Bian, and Kim-Chuan Toh. Difference-of-convex algorithms for a class of sparse group ℓ_0 regularized optimization problems. *SIAM Journal on Optimization*, 32(3):1614–1641, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1443455>.
- Li:2024:DAT**
- Hanyang Li and Ying Cui. A decomposition algorithm for two-stage stochastic programs with nonconvex recourse functions.

- SIAM Journal on Optimization*, 34(1):306–335, January 2024. CODEN SJOPE8. ISSN 1095-7189. [LdF08]
- Leclere:2020:ECB**
- [LCC⁺20] Vincent Leclère, Pierre Carpentier, Jean-Philippe Chancelier, Arnaud Lenoir, and François Pacaud. Exact converging bounds for stochastic dual dynamic programming via Fenchel duality. *SIAM Journal on Optimization*, 30(2):1223–1250, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LDLS20]
- Li:2021:WCO**
- [LCD⁺21] Xiao Li, Shixiang Chen, Zengde Deng, Qing Qu, Zihui Zhu, and Anthony Man-Cho So. Weakly convex optimization over Stiefel manifold using Riemannian subgradient-type methods. *SIAM Journal on Optimization*, 31(3):1605–1634, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LdQ11]
- Liu:2020:TSS**
- [LCPS20] Junyi Liu, Ying Cui, Jong-Shi Pang, and Suvrajeet Sen. Two-stage stochastic programming with linearly bi-parameterized quadratic recourse. *SIAM Journal on Optimization*, 30(3):2530–2558, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LDS22]
- Lakshmanan:2008:DRA**
- Hariharan Lakshmanan and Daniela Pucci de Farias. Decentralized resource allocation in dynamic networks of agents. *SIAM Journal on Optimization*, 19(2):911–940, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Luedtke:2020:SCN**
- James Luedtke, Claudia D’Ambrosio, Jeff Linderoth, and Jonas Schweiger. Strong convex nonlinear relaxations of the pooling problem. *SIAM Journal on Optimization*, 30(2):1582–1609, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2011:SSN**
- [LdQ11] Qingna Li and Hou duo Qi. A sequential semismooth Newton method for the nearest low-rank correlation matrix problem. *SIAM Journal on Optimization*, 21(4):1641–1666, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1641_s1.
- Li:2022:BWN**
- [LDS22] Dawei Li, Tian Ding, and Ruoyu Sun. On the benefit of width for neural networks: Disappearance of basins. *SIAM Journal on Optimization*, 32(3):1728–1758, ??? 2022. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic).
URL <https://epubs.siam.org/doi/10.1137/21M1394205>.
- Lemaire:1998:DRC**
- [Lem98] B. Lemaire. Duality in reverse convex optimization. *SIAM Journal on Optimization*, 8(4):1029–1037, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29585>.
- Levy:2000:CMP**
- [Lev00] A. B. Levy. Calm minima in parameterized finite-dimensional optimization. *SIAM Journal on Optimization*, 11(1):160–178, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34078>.
- Levy:2002:SSV**
- [Lev02] A. B. Levy. Scaled stability in variational problems. *SIAM Journal on Optimization*, 12(4):861–874, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37689>.
- Levy:2004:GAS**
- [Lev04] Adam B. Levy. A generic algorithm for solving inclusions. *SIAM Journal on Optimization*, 15(2):430–455, ??? 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lewis:1996:CAH**
- [Lew96] A. S. Lewis. Convex analysis on the Hermitian matrices. *SIAM Journal on Optimization*, 6(1):164–177, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lewis:2002:ASN**
- [Lew02] A. S. Lewis. Active sets, nonsmoothness, and sensitivity. *SIAM Journal on Optimization*, 13(3):702–725, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38762>.
- Li:2001:GCB**
- [LF01] Dong-Hui Li and Masao Fukushima. On the global convergence of the BFGS method for non-convex unconstrained optimization problems. *SIAM Journal on Optimization*, 11(4):1054–1064, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35424>.
- Lu:2011:KSC**
- [LFJ⁺11] Cheng Lu, Shu-Cherng Fang, Qingwei Jin, Zhenbo Wang, and Wenxun Xing. KKT solution and conic relaxation for solving quadratically constrained quadratic programming problems. *SIAM Jour-*

- nal on Optimization*, 21(4): 1475–1490, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1475_s1. [LFP17]
- Laine:2023:CAG**
- [LFKCT23] Forrest Laine, David Fridovich-Keil, Chih-Yuan Chiu, and Claire Tomlin. The computation of approximate generalized feedback Nash equilibria. *SIAM Journal on Optimization*, 33(1):294–318, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M142530X>. [LFW98]
- Li:2009:STF**
- [LFLL09] Chong Li, Donghui Fang, Genaro López, and Marco A. López. Stable and total Fenchel duality for convex optimization problems in locally convex spaces. *SIAM Journal on Optimization*, 20(2):1032–1051, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LH02]
- Lu:2018:RSC**
- [LFN18] Haihao Lu, Robert M. Freund, and Yurii Nesterov. Relatively smooth convex optimization by first-order methods, and applications. *SIAM Journal on Optimization*, 28(1):333–354, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LH04]
- Liang:2017:AIL**
- Jingwei Liang, Jalal Fadili, and Gabriel Peyré. Activity identification and local linear convergence of forward–backward-type methods. *SIAM Journal on Optimization*, 27(1):408–437, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Lin:1998:UCP]
- Lin:1998:UCP**
- Chih-Jen Lin, Shu-Cherng Fang, and Soon-Yi Wu. An unconstrained convex programming approach to linear semi-infinite programming. *SIAM Journal on Optimization*, 8(2):443–456, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27621>. [Lin:2002:DBT]
- Lin:2002:DBT**
- Anhua Lin and Shih-Ping Han. On the distance between two ellipsoids. *SIAM Journal on Optimization*, 13(1):298–308, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39651>. [Lin:2004:CMP]
- Lin:2004:CMP**
- Anhua Lin and Shih-Ping Han. A class of methods for projection on the intersection of several ellipsoids. *SIAM Journal on Optimization*, 15(1):129–138, 2004. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/42229>. [Li10]
- Li:1993:RCM**
- [Li93a] Wu Li. Remarks on convergence of the matrix splitting algorithm for the symmetric linear complementarity problem. *SIAM Journal on Optimization*, 3(1): 155–163, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Lie20]
- Li:1993:GCM**
- [Li93b] Yuying Li. A globally convergent method for l_p problems. *SIAM Journal on Optimization*, 3(3):609–629, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:1996:DPQ**
- [Li96] Wu Li. Differentiable piecewise quadratic exact penalty functions for quadratic programs with simple bound constraints. *SIAM Journal on Optimization*, 6(2):299–315, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Lim11]
- Li:1997:ACQ**
- [Li97] Wu Li. Abadie’s constraint qualification, metric regularity, and error bounds for differentiable convex inequalities. *SIAM Journal on Optimization*, 7(4): 966–978, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28792>.
- Li:2010:AWB**
- Guoyin Li. On the asymptotically well behaved functions and global error bound for convex polynomials. *SIAM Journal on Optimization*, 20(4):1923–1943, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lieder:2020:SLS**
- Felix Lieder. Solving large-scale cubic regularization by a generalized eigenvalue problem. *SIAM Journal on Optimization*, 30(4):3345–3358, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lim:2011:MVS**
- Yongdo Lim. Maximum-volume symmetric gauge ball problem on the convex cone of positive definite matrices and convexity of optimal sets. *SIAM Journal on Optimization*, 21(4): 1275–1288, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1275_s1.
- Lim:2023:MMC**
- [Lim23] Tongseok Lim. Maximal monotonicity and cyclic involutivity of multiconjugate convex functions. *SIAM Journal on Optimization*, 33(4):2489–2511, ??? 2023. CODEN SJOPE8. ISSN 1052-6234

(print), 1095-7189 (electronic).
URL <https://epubs.siam.org/doi/10.1137/23M1549201>.

Lin:2008:HOP

- [Lin08] Anhua Lin. A high-order path-following method for locating the least 2-norm solution of monotone LCPs. *SIAM Journal on Optimization*, 18(4):1414–1435, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ling:2022:IPG

- [Lin22] Shuyang Ling. Improved performance guarantees for orthogonal group synchronization via generalized power method. *SIAM Journal on Optimization*, 32(2):1018–1048, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1389571>.

Liu:2020:FSA

- [Liu20] Rui Peng Liu. On feasibility of sample average approximation solutions. *SIAM Journal on Optimization*, 30(3):2026–2052, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2002:NCB

- [LJ02] Chong Li and Xiao-Qing Jin. Nonlinearly constrained best approximation in Hilbert spaces: The strong CHIP and the basic constraint qualification. *SIAM Journal on Optimization*, 13(1):228–239, May/

August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38560>.

Lu:2016:CAA

- [LJ16] Jie Lu and Mikael Johansson. Convergence analysis of approximate primal solutions in dual first-order methods. *SIAM Journal on Optimization*, 26(4):2430–2467, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lei:2020:ASG

- [LJ20] Lihua Lei and Michael I. Jordan. On the adaptivity of stochastic gradient-based optimization. *SIAM Journal on Optimization*, 30(2):1473–1500, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Luo:1994:EHE

- [LL94] Xiao-Dong Luo and Zhi-Quan Luo. Extension of Hoffman’s error bound to polynomial systems. *SIAM Journal on Optimization*, 4(2):383–392, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lengauer:2000:PGG

- [LL00] T. Lengauer and M. Lügering. Provably good global routing of integrated circuits. *SIAM Journal on Optimization*, 11(1):1–30, July/August 2000. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33178>.
- Liuzzi:2009:DFA**
- [LL09] G. Liuzzi and S. Lucidi. A derivative-free algorithm for inequality constrained nonlinear programming via smoothing of an ℓ_∞ penalty function. *SIAM Journal on Optimization*, 20(1):1–29, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2020:RES**
- [LL20] Huan Li and Zhouchen Lin. Revisiting EXTRA for smooth distributed optimization. *SIAM Journal on Optimization*, 30(3):1795–1821, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lam:2022:GFB**
- [LL22] Henry Lam and Fengpei Li. General feasibility bounds for sample average approximation via Vapnik–Chervonenkis dimension. *SIAM Journal on Optimization*, 32(2):1471–1497, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M140211X>.
- Li:2023:NCI**
- [LL23] Xinrong Li and Ziyang Luo. Normal cones intersection rule and optimality analysis for low-rank matrix optimization with affine manifolds. *SIAM Journal on Optimization*, 33(3):1333–1360, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M147863X>.
- Lewis:2022:LLC**
- [LLAN22] Adrian S. Lewis, Genaro Lopez-Acedo, and Adriana Nicolae. Local linear convergence of alternating projections in metric spaces with bounded curvature. *SIAM Journal on Optimization*, 32(2):1094–1119, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1431576>.
- Lewis:2024:BCA**
- [LLAN24] Adrian S. Lewis, Genaro López-Acedo, and Adriana Nicolae. Basic convex analysis in metric spaces with bounded curvature. *SIAM Journal on Optimization*, 34(1):366–388, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- Liu:2022:LCN**
- [LLC22] Wei Liu, Xin Liu, and Xiaojun Chen. Linearly constrained non-smooth optimization for training autoencoders. *SIAM Journal on Optimization*, 32(3):1931–1957, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1408713>.

- [LLCN06] **Leyffer:2006:IMM**
Sven Leyffer, Gabriel López-Calva, and Jorge Nocedal. Interior methods for mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 17(1):52–77, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LLD⁺02] **Li:2002:RFS**
Lingjie Li, Zhi-Quan Luo, Timothy N. Davidson, K. Max Wong, and Eloi Bossé. Robust filtering via semidefinite programming with applications to target tracking. *SIAM Journal on Optimization*, 12(3):740–755, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35858>.
- [LLLP24] **Lin:2024:GPC**
Ying Lin, Scott B. Lindstrom, Bruno F. Lourenço, and Ting Kei Pong. Generalized power cones: Optimal error bounds and automorphisms. *SIAM Journal on Optimization*, 34(2):1316–1340, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [LLR16] **Liuzzi:2016:DFA**
G. Liuzzi, S. Lucidi, and F. Rinaldi. A derivative-free approach to constrained multiobjective nonsmooth optimization. *SIAM Journal on Optimization*, 26(4):2744–2774, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LLRV19] **Liuzzi:2019:TRM**
Giampaolo Liuzzi, Stefano Lucidi, Francesco Rinaldi, and Luis Nunes Vicente. Trust-region methods for the derivative-free optimization of nonsmooth black-box functions. *SIAM Journal on Optimization*, 29(4):3012–3035, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LLS05] **Lagoa:2005:PCL**
Constantino M. Lagoa, Xiang Li, and Mario Sznaier. Probabilistically constrained linear programs and risk-adjusted controller design. *SIAM Journal on Optimization*, 15(3):938–951, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43009>.
- [LLS06] **Liuzzi:2006:DFA**
G. Liuzzi, S. Lucidi, and M. Sciandrone. A derivative-free algorithm for linearly constrained finite minimax problems. *SIAM Journal on Optimization*, 16(4):1054–1075, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LLS10] **Liuzzi:2010:SPD**
Giampaolo Liuzzi, Stefano Lucidi, and Marco Sciandrone.

- Sequential penalty derivative-free methods for nonlinear constrained optimization. *SIAM Journal on Optimization*, 20(5): 2614–2635, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LLZ23]
- Lan:2023:BPM**
- Guanghai Lan, Yan Li, and Tuo Zhao. Block policy mirror descent. *SIAM Journal on Optimization*, 33(3):2341–2378, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1480409>.
- Liu:2024:BSG**
- Tianyi Liu, Yifan Lin, and Enlu Zhou. Bayesian stochastic gradient descent for stochastic optimization with streaming input data. *SIAM Journal on Optimization*, 34(1):389–418, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- Lu:2019:TNE**
- Cheng Lu, Ya-Feng Liu, Wei-Qiang Zhang, and Shuzhong Zhang. Tightness of a new and enhanced semidefinite relaxation for MIMO detection. *SIAM Journal on Optimization*, 29(1):719–742, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lin:1999:NML**
- Chih-Jen Lin and Jorge J. Moré. Newton’s method for large bound-constrained optimization problems. *SIAM Journal on Optimization*, 9(4):1100–1127, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34507>.
- [LLST19] Meixia Lin, Yong-Jin Liu, Defeng Sun, and Kim-Chuan Toh. Efficient sparse semismooth Newton methods for the clustered lasso problem. *SIAM Journal on Optimization*, 29(3): 2026–2052, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lin:2019:ESS**
- [LLZ24] Meixia Lin, Yong-Jin Liu, Defeng Sun, and Kim-Chuan Toh. Efficient sparse semismooth Newton methods for the clustered lasso problem. *SIAM Journal on Optimization*, 29(3): 2026–2052, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lewis:2022:PSC**
- [LLT22] A. S. Lewis, Jingwei Liang, and Tonghua Tian. Partial smoothness and constant rank. *SIAM Journal on Optimization*, 32(1): 276–291, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1237909>.
- Lin:2015:ARP**
- [LLX15] Qihang Lin, Zhaosong Lu, and Lin Xiao. An accelerated randomized proximal coordinate gradient method and its application to regularized empirical risk minimization. *SIAM Journal on Optimization*, 25(4):2244–2273, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LM99]

Dedicated to John E. Dennis, Jr., on his 60th birthday.

Leibfritz:2002:IPC

- [LM02] F. Leibfritz and E. M. E. Mostafa. An interior point constrained trust region method for a special class of nonlinear semidefinite programming problems. *SIAM Journal on Optimization*, 12(4):1048–1074, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37586>. [LM12]

Lu:2004:EBL

- [LM04] Zhaosong Lu and Renato D. C. Monteiro. Error bounds and limiting behavior of weighted paths associated with the SDP map $X^{1/2}SX^{1/2}$. *SIAM Journal on Optimization*, 15(2):348–374, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43082>. [LM16]

Lu:2005:NLC

- [LM05] Zhaosong Lu and Renato D. C. Monteiro. A note on the local convergence of a predictor-corrector interior-point algorithm for the semidefinite linear complementarity problem based on the Alizadeh–Haeberly–Overton search direction. *SIAM Journal on Optimization*, 15(4):1147–1154, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LM19]

URL <http://epubs.siam.org/sam-bin/dbq/article/60531>.

Li:2012:HMS

Guoyin Li and Boris S. Mordukhovich. Hölder metric subregularity with applications to proximal point method. *SIAM Journal on Optimization*, 22(4):1655–1684, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Liers:2016:SIP

Frauke Liers and Maximilian Merkert. Structural investigation of piecewise linearized network flow problems. *SIAM Journal on Optimization*, 26(4):2863–2886, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2018:ODF

Jean-Bernard Lasserre and Victor Magron. Optimal data fitting: a moment approach. *SIAM Journal on Optimization*, 28(4):3127–3144, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2019:SRI

Jean-Bernard Lasserre and Victor Magron. In SDP relaxations, inaccurate solvers do robust optimization. *SIAM Journal on Optimization*, 29(3):2128–2145, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2020:CAA

[LM20a] Jun Li and Giandomenico Mastroeni. Convex analysis in Z^n and applications to integer linear programming. *SIAM Journal on Optimization*, 30(4):2809–2840, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lu:2020:RGB

[LM20b] Haihao Lu and Rahul Mazumder. Randomized gradient boosting machine. *SIAM Journal on Optimization*, 30(4):2780–2808, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Luke:2020:CAR

[LM20c] D. Russell Luke and Anna-Lena Martins. Convergence analysis of the relaxed Douglas–Rachford algorithm. *SIAM Journal on Optimization*, 30(1):542–584, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Liang:2021:ACA

[LM21a] Jiaming Liang and Renato D. C. Monteiro. An average curvature accelerated composite gradient method for nonconvex smooth composite optimization problems. *SIAM Journal on Optimization*, 31(1):217–243, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Liang:2021:PBV

[LM21b] Jiaming Liang and Renato D. C. Monteiro. A proximal bundle variant with optimal iteration-complexity for a large range of prox stepsizes. *SIAM Journal on Optimization*, 31(4):2955–2986, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lu:2023:AFO

[LM23] Zhaosong Lu and Sanyou Mei. Accelerated first-order methods for convex optimization with locally Lipschitz continuous gradient. *SIAM Journal on Optimization*, 33(3):2275–2310, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1500496>.

Lu:2024:FOP

[LM24] Zhaosong Lu and Sanyou Mei. First-order penalty methods for bilevel optimization. *SIAM Journal on Optimization*, 34(2):1937–1969, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1566753>.

Lin:2019:IVM

[LMH19] Hongzhou Lin, Julien Mairal, and Zaid Harchaoui. An inexact variable metric proximal point algorithm for generic quasi-Newton acceleration. *SIAM Journal on Optimization*, 29(2):

1408–1443, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2021:MRF

- [LMMZ21] Jean Bernard Lasserre, Victor Magron, Swann Marx, and Olivier Zahm. Minimizing rational functions: a hierarchy of approximations via pushforward measures. *SIAM Journal on Optimization*, 31(3):2285–2306, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lu:2006:ISB

- [LMO06] Zhaosong Lu, Renato D. C. Monteiro, and Jerome W. O’Neal. An iterative solver-based infeasible primal-dual path-following algorithm for convex quadratic programming. *SIAM Journal on Optimization*, 17(1):287–310, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2018:WSM

- [LMP⁺18] Chong Li, Li Meng, Lihui Peng, Yaohua Hu, and Jen-Chih Yao. Weak sharp minima for convex infinite optimization problems in normed linear spaces. *SIAM Journal on Optimization*, 28(3):1999–2021, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2023:CRR

- [LMQ23] Xiao Li, Andre Milzarek, and Junwen Qiu. Conver-

gence of random reshuffling under the Kurdyka–Lojasiewicz inequality. *SIAM Journal on Optimization*, 33(2):1092–1120, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1468048>.

Lustig:1992:IMP

- [LMS92] Irvin J. Lustig, Roy E. Marsten, and David F. Shanno. On implementing Mehrotra’s predictor-corrector interior-point method for linear programming. *SIAM Journal on Optimization*, 2(3):435–449, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lan:2009:PPC

- [LMT09] Guanghui Lan, Renato D. C. Monteiro, and Takashi Tsuchiya. A polynomial predictor-corrector trust-region algorithm for linear programming. *SIAM Journal on Optimization*, 19(4):1918–1946, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lourenco:2018:FRP

- [LMT18] Bruno F. Lourenço, Masakazu Muramatsu, and Takashi Tsuchiya. Facial reduction and partial polyhedrality. *SIAM Journal on Optimization*, 28(3):2304–2326, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Liu:2023:SNM**
- [LMV23] Leon Liu, Walaa M. Moursi, and Jon Vanderwerff. Strongly nonexpansive mappings revisited: Uniform monotonicity and operator splitting. *SIAM Journal on Optimization*, 33(4): 2570–2597, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1501696>.
- Larson:2016:MSN**
- [LMW16] Jeffrey Larson, Matt Menickelly, and Stefan M. Wild. Manifold sampling for ℓ_1 nonconvex optimization. *SIAM Journal on Optimization*, 26(4):2540–2563, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2011:WSM**
- [LMWY11] Chong Li, Boris S. Morukhovich, Jinhua Wang, and Jen-Chih Yao. Weak sharp minima on Riemannian manifolds. *SIAM Journal on Optimization*, 21(4):1523–1560, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1523_s1.
- Liu:2017:DRR**
- [LMX17] Yongchao Liu, Rudabeh Meskarian, and Huifu Xu. Distributionally robust reward-risk ratio optimization with moment constraints. *SIAM Journal on Optimization*, 27(2):957–985, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lin:2015:GLC**
- [LMZ15] Tianyi Lin, Shiqian Ma, and Shuzhong Zhang. On the global linear convergence of the ADMM with MultiBlock variables. *SIAM Journal on Optimization*, 25(3):1478–1497, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Larson:2021:MSO**
- [LMZ21a] Jeffrey Larson, Matt Menickelly, and Baoyu Zhou. Manifold sampling for optimizing nonsmooth nonconvex compositions. *SIAM Journal on Optimization*, 31(4): 2638–2664, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Liu:2021:GPR**
- [LMZ21b] Zhenhai Liu, Dumitru Motreanu, and Shengda Zeng. Generalized penalty and regularization method for differential variational-hemivariational inequalities. *SIAM Journal on Optimization*, 31(2):1158–1183, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lalee:1993:ACS**
- [LN93] Marucha Lalee and Jorge Nocedal. Automatic column scaling strategies for quasi-Newton methods. *SIAM Journal on*

- Optimization*, 3(3):637–653, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LN05b]
- Li:2002:BAN**
- [LN02] Chong Li and K. F. Ng. On best approximation by nonconvex sets and perturbation of nonconvex inequality systems in Hilbert spaces. *SIAM Journal on Optimization*, 13(3):726–744, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40137>. [LN07]
- Li:2003:CQS**
- [LN03] Chong Li and K. F. Ng. Constraint qualification, the strong CHIP, and best approximation with convex constraints in Banach spaces. *SIAM Journal on Optimization*, 14(2):584–607, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LN09]
- Li:2005:CQI**
- [LN05a] Chong Li and K. F. Ng. On constraint qualification for an infinite system of convex inequalities in a Banach space. *SIAM Journal on Optimization*, 15(2):488–512, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43469>. [LN11a]
- Li:2005:SCI**
- Chong Li and K. F. Ng. Strong CHIP for infinite system of closed convex sets in normed linear spaces. *SIAM Journal on Optimization*, 16(2):311–340, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61323>.
- Li:2007:MFC**
- Chong Li and K. F. Ng. Majorizing functions and convergence of the Gauss–Newton method for convex composite optimization. *SIAM Journal on Optimization*, 18(2):613–642, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2009:EBG**
- [LN09] Guoyin Li and Kung Fu Ng. Error bounds of generalized D-gap functions for nonsmooth and nonmonotone variational inequality problems. *SIAM Journal on Optimization*, 20(2):667–690, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2011:SCR**
- [LN11a] Chong Li and K. F. Ng. Subdifferential calculus rules for supremum functions in convex analysis. *SIAM Journal on Optimization*, 21(3):782–797, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61323>.

- siam.org/siopt/resource/1/sjope8/v21/i3/p782_s1.
- [LN11b] C. G. Liu and K. F. Ng. Ekeland's variational principle for set-valued functions. *SIAM Journal on Optimization*, 21(1):41–56, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p41_s1.
- [LN14a] Chong Li and K. F. Ng. Approximate solutions for abstract inequality systems. *SIAM Journal on Optimization*, 23(2):1237–1256, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LN14b] Chong Li and K. F. Ng. The dual normal CHIP and linear regularity for infinite systems of convex sets in Banach spaces. *SIAM Journal on Optimization*, 24(3):1075–1101, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LN18] Chong Li and K. F. Ng. Quantitative analysis for perturbed abstract inequality systems in Banach spaces. *SIAM Journal on Optimization*, 28(4):2872–2901, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LNP98] Marucha Lalee, Jorge Nocedal, and Todd Plantenga. On the implementation of an algorithm for large-scale equality constrained optimization. *SIAM Journal on Optimization*, 8(3):682–706, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26299>.
- [LNP07] Chong Li, K. F. Ng, and T. K. Pong. The SECQ, linear regularity, and the strong CHIP for an infinite system of closed convex sets in normed linear spaces. *SIAM Journal on Optimization*, 18(2):643–665, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LNP08] Chong Li, K. F. Ng, and T. K. Pong. Constraint qualifications for convex inequality systems with applications in constrained optimization. *SIAM Journal on Optimization*, 19(1):163–187, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LNQY10] Chen Ling, Jiawang Nie, Liquan Qi, and Yinyu Ye. Biquadratic optimization over unit spheres and semidefinite programming relaxations. *SIAM Journal on Optimization*, 20(3):1286–1310,

Lalee:1998:IAL**Liu:2011:EVP****Li:2014:ASA****Li:2014:DNC****Li:2018:QAP****Li:2007:SLR****Li:2008:CQC****Ling:2010:BOU**

???? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2000:CQS

[LNS00] Wu Li, Chandal Nahak, and Ivan Singer. Constraint qualifications for semi-infinite systems of convex inequalities. *SIAM Journal on Optimization*, 11(1): 31–52, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35524>.

Lin:2018:LSM

[LNS18] Qihang Lin, Selvaprabu Nadarajah, and Negar Soheili. A level-set method for convex optimization with a feasible solution path. *SIAM Journal on Optimization*, 28(4):3290–3311, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2021:FBQ

[LNYZ21] Chong Li, Kung Fu Ng, Jen-Chih Yao, and Xiaopeng Zhao. The FM and BCQ qualifications for inequality systems of convex functions in normed linear spaces. *SIAM Journal on Optimization*, 31(2):1410–1432, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Locatelli:2015:CES

[Loc15] Marco Locatelli. Convex envelopes of some quadratic functions over the n -dimensional

unit simplex. *SIAM Journal on Optimization*, 25(1):589–621, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lovison:2011:SCG

[Lov11] Alberto Lovison. Singular continuation: Generating piecewise linear approximations to Pareto sets via global analysis. *SIAM Journal on Optimization*, 21(2):463–490, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p463_s1.

Lan:2023:GTI

[LOZ23] Guanghai Lan, Yuyuan Ouyang, and Yi Zhou. Graph topology invariant gradient and sampling complexity for decentralized and stochastic optimization. *SIAM Journal on Optimization*, 33(3): 1647–1675, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M138956X>.

Lundberg:1993:NCS

[LP93] Bruce N. Lundberg and Aubrey B. Poore. Numerical continuation and singularity detection methods for parametric nonlinear programming. *SIAM Journal on Optimization*, 3(1): 134–154, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Linh:2006:OCQ

- [LP06a] Nguyen Thi Hong Linh and Jean-Paul Penot. Optimality conditions for quasiconvex programs. *SIAM Journal on Optimization*, 17(2):500–510, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Liu:2006:CPM

- [LP06b] Xing Liu and Florian A. Potra. Corrector-predictor methods for sufficient linear complementarity problems in a wide neighborhood of the central path. *SIAM Journal on Optimization*, 17(3):871–890, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lewis:2008:VAP

- [LP08] Adrian S. Lewis and C. H. Jeffrey Pang. Variational analysis of pseudospectra. *SIAM Journal on Optimization*, 19(3):1048–1072, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lasserre:2010:POS

- [LP10] Jean B. Lasserre and Mihai Putinar. Positivity and optimization for semi-algebraic functions. *SIAM Journal on Optimization*, 20(6):3364–3383, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3364_s1.

Laurent:2015:CAQ

- [LP15a] Monique Laurent and Teresa Piovesan. Conic approach to quantum graph parameters using linear optimization over the completely positive semidefinite cone. *SIAM Journal on Optimization*, 25(4):2461–2493, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Li:2015:GCS

- [LP15b] Guoyin Li and Ting Kei Pong. Global convergence of splitting methods for nonconvex composite optimization. *SIAM Journal on Optimization*, 25(4):2434–2460, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Liu:2015:EDS

- [LP15c] Minghui Liu and Gábor Pataki. Exact duality in semidefinite programming based on elementary reformulations. *SIAM Journal on Optimization*, 25(3):1441–1454, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Lee:2017:GPS

- [LP17] Gue Myung Lee and Tien Son Phạm. Generic properties for semialgebraic programs. *SIAM Journal on Optimization*, 27(3):2061–2084, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Lee:2022:OHM**
- [LP22] Jae Hyoung Lee and Tien-Son Pham. Openness, Hölder metric regularity, and Hölder continuity properties of semialgebraic set-valued maps. *SIAM Journal on Optimization*, 32(1):56–74, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1331901>.
- Lucidi:1998:SPQ**
- [LPR98] Stefano Lucidi, Laura Palagi, and Massimo Roma. On some properties of quadratic programs with a convex quadratic constraint. *SIAM Journal on Optimization*, 8(1):105–122, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27804>.
- Levy:2000:SLO**
- [LPR00] A. B. Levy, R. A. Poliquin, and R. T. Rockafellar. Stability of locally optimal solutions. *SIAM Journal on Optimization*, 10(2):580–604, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34827>.
- Lucidi:2005:AMM**
- [LPS05] S. Lucidi, V. Piccialli, and M. Sciandrone. An algorithm model for mixed variable programming. *SIAM Journal on Optimization*, 15(4):1057–1084, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42957>.
- Lajara:2007:SNM**
- [LPT07] S. Lajara, A. J. Pallarés, and S. Troyanski. Some nonlinear maps and renormings of Banach spaces. *SIAM Journal on Optimization*, 18(3):1027–1045, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Luc:2005:SFG**
- [LPV05] Dinh The Luc, Thai Quynh Phong, and Michel Volle. Scalarizing functions for generating the weakly efficient solution set in convex multiobjective problems. *SIAM Journal on Optimization*, 15(4):987–1001, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60309>.
- Lagarias:2012:CRN**
- [LPW12] Jeffrey C. Lagarias, Bjorn Poonen, and Margaret H. Wright. Convergence of the restricted Nelder–Mead algorithm in two dimensions. *SIAM Journal on Optimization*, 22(2):501–532, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [LPW23] **Lamperski:2023:MMM** Jourdain Lamperski, Oleg A. Prokopyev, and Luca G. Wrabetz. Min-max-min optimization with smooth and strongly convex objectives. *SIAM Journal on Optimization*, 33(3):2435–2456, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1489940>.
- [LR22] **Liu:2022:MNC** Yang Liu and Fred Roosta. MINRES: From negative curvature detection to monotonicity properties. *SIAM Journal on Optimization*, 32(4):2636–2661, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M143666X>.
- [LR10] **Lesaja:2010:UAK** G. Lesaja and C. Roos. Unified analysis of kernel-based interior-point methods for $P_*(\kappa)$ -linear complementarity problems. *SIAM Journal on Optimization*, 20(6):3014–3039, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LRO05] **Lachand-Robert:2005:MWC** Thomas Lachand-Robert and Édouard Oudet. Minimizing within convex bodies using a convex hull method. *SIAM Journal on Optimization*, 16(2):368–379, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60803>.
- [LR21a] **Liu:2021:CNM** Yang Liu and Fred Roosta. Convergence of Newton-MR under inexact Hessian information. *SIAM Journal on Optimization*, 31(1):59–90, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LRP16] **Lessard:2016:ADO** Laurent Lessard, Benjamin Recht, and Andrew Packard. Analysis and design of optimization algorithms via integral quadratic constraints. *SIAM Journal on Optimization*, 26(1):57–95, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LR21b] **Liu:2021:ADR** Zihan Liu and Kannan Ramchandran. Adaptive Douglas-Rachford splitting algorithm from a Yosida approximation standpoint. *SIAM Journal on Optimization*, 31(3):1971–1998, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LRR98] **Lucidi:1998:CST** Stefano Lucidi, Francesco Rochetich, and Massimo Roma. Curvilinear stabilization techniques for truncated Newton methods in large scale unconstrained optimization. *SIAM*

- Journal on Optimization*, 8(4): 916–939, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29525>. [LRZ21]
- Lan:2021:CGM**
- Guanghui Lan, Edwin Romeijn, and Zhiqiang Zhou. Conditional gradient methods for convex optimization with general affine and nonlinear constraints. *SIAM Journal on Optimization*, 31(3): 2307–2339, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lourenco:2022:ACP**
- [LRS22] Bruno F. Lourenço, Vera Roshchina, and James Saunderson. Amenable cones are particularly nice. *SIAM Journal on Optimization*, 32(3): 2347–2375, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M138466X>. [LS91]
- Lagarias:1998:CPN**
- [LRWW98] Jeffrey C. Lagarias, James A. Reeds, Margaret H. Wright, and Paul E. Wright. Convergence properties of the Nelder–Mead simplex method in low dimensions. *SIAM Journal on Optimization*, 9(1):112–147, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30347>. [LS93]
- Li:1993:NMC**
- Wu Li and John Swetits. A Newton method for convex regression, data smoothing, and quadratic programming with bounded constraints. *SIAM Journal on Optimization*, 3(3): 466–488, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Lemarechal:1997:PAM**
- [LRX14] Yongchao Liu, Werner Römisch, and Huifu Xu. Quantitative stability analysis of stochastic generalized equations. *SIAM Journal on Optimization*, 24(1): 467–497, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LS97a]
- Claude Lemaréchal and Claudia Sagastizábal. Practical aspects of the Moreau–Yosida regularization: Theoretical preliminaries. *SIAM Journal on Optimization*, 7(2):367–385, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26712>.

- [LS97b] **Li:1997:NAS** Wu Li and John Swetits. A new algorithm for solving strictly convex quadratic programs. *SIAM Journal on Optimization*, 7(3):595–619, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/24604>.
- [LS98a] **Li:1998:LEH** W. Li and J. J. Swetits. The linear l_1 estimator and the Huber M -estimator. *SIAM Journal on Optimization*, 8(2):457–475, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29316>.
- [LS98b] **Luo:1998:ACB** Zhi-Quan Luo and Jie Sun. An analytic center based column generation algorithm for convex quadratic feasibility problems. *SIAM Journal on Optimization*, 9(1):217–235, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29494>.
- [LS02] **Lucidi:2002:GCD** Stefano Lucidi and Marco Scandrone. On the global convergence of derivative-free methods for unconstrained optimization. *SIAM Journal on Optimization*, 13(1):97–116, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33039>.
- [LS04] **Liu:2004:RPD** Xinwei Liu and Jie Sun. A robust primal-dual interior-point algorithm for nonlinear programs. *SIAM Journal on Optimization*, 14(4):1163–1186, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40064>.
- [LS13] **Lera:2013:AUG** Daniela Lera and Yaroslav D. Sergeyev. Acceleration of univariate global optimization algorithms working with Lipschitz functions and Lipschitz first derivatives. *SIAM Journal on Optimization*, 23(1):508–529, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LS20] **Liu:2020:ARS** Junyi Liu and Suvrajeet Sen. Asymptotic results of stochastic decomposition for two-stage stochastic quadratic programming. *SIAM Journal on Optimization*, 30(1):823–852, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [LS21] **Lopez:2021:HMG** Rubén López and Miguel Sama. Horizon maps and graphical convergence revisited. *SIAM Journal on Optimization*, 31(2):1330–1351, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LS22] **Lei:2022:DVS** Jinlong Lei and Uday V. Shanbhag. Distributed variable sample-size gradient-response and best-response schemes for stochastic Nash equilibrium problems. *SIAM Journal on Optimization*, 32(2):573–603, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1340071>.
- [LSdZ18] **Luc:2018:SDM** Dinh The Luc, Majid Soleimani-damaneh, and Moslem Zamani. Semi-differentiability of the marginal mapping in vector optimization. *SIAM Journal on Optimization*, 28(2):1255–1281, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LSF⁺23] **Luna:2023:REP** Juan Pablo Luna, Claudia Sagastizábal, Julia Filiberti, Steven A. Gabriel, and Mikhail V. Solodov. Regularized equilibrium problems with equilibrium constraints with application to energy markets. *SIAM Journal on Optimization*, 33(3):1767–1796, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1353538>.
- [LSL08] **Luo:2008:CAL** H. Z. Luo, X. L. Sun, and D. Li. On the convergence of augmented Lagrangian methods for constrained global optimization. *SIAM Journal on Optimization*, 18(4):1209–1230, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LSS14] **Lee:2014:PNT** Jason D. Lee, Yuekai Sun, and Michael A. Saunders. Proximal Newton-type methods for minimizing composite functions. *SIAM Journal on Optimization*, 24(3):1420–1443, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LSS19] **Lampariello:2019:SPB** Lorenzo Lampariello, Simone Sagratella, and Oliver Stein. The standard pessimistic bilevel problem. *SIAM Journal on Optimization*, 29(2):1634–1656, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LSS22] **Liang:2022:RLA** Shiyu Liang, Ruoyu Sun, and R. Srikant. Revisiting landscape analysis in deep neural

- networks: Eliminating decreasing paths to infinity. *SIAM Journal on Optimization*, 32(4): 2797–2827, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1299074>. **Li:2020:ASC**
- [LST16] Min Li, Defeng Sun, and Kim-Chuan Toh. A majorized ADMM with indefinite proximal terms for linearly constrained convex composite optimization. *SIAM Journal on Optimization*, 26(2):922–950, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2016:MAI**
- [LST18a] Xudong Li, Defeng Sun, and Kim-Chuan Toh. A highly efficient semismooth Newton augmented Lagrangian method for solving lasso problems. *SIAM Journal on Optimization*, 28(1): 433–458, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2018:HES**
- [LST18b] Xudong Li, Defeng Sun, and Kim-Chuan Toh. On efficiently solving the subproblems of a level-set method for fused lasso problems. *SIAM Journal on Optimization*, 28(2):1842–1866, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2018:ESS**
- [LST20] Xudong Li, Defeng Sun, and Kim-Chuan Toh. An asymptotically superlinearly convergent semismooth Newton augmented Lagrangian method for linear programming. *SIAM Journal on Optimization*, 30(3):2410–2440, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2020:ASC**
- [LST21] Ling Liang, Defeng Sun, and Kim-Chuan Toh. An inexact augmented Lagrangian method for second-order cone programming with applications. *SIAM Journal on Optimization*, 31(3): 1748–1773, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Liang:2021:IAL**
- [LSTZ07] Zhi-Quan Luo, Nicholas D. Sidiropoulos, Paul Tseng, and Shuzhong Zhang. Approximation bounds for quadratic optimization with homogeneous quadratic constraints. *SIAM Journal on Optimization*, 18(1):1–28, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luo:2007:ABQ**
- [LSW06] D. Li, X. L. Sun, and F. L. Wang. Convergent Lagrangian and contour cut method for nonlinear integer programming with a quadratic objective function. *SIAM Journal on Op-*

- timization*, 17(2):372–400, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LSZ98]
- [LSW20] Daniel Luft, Volker H. Schulz, and Kathrin Welker. Efficient techniques for shape optimization with variational inequalities using adjoints. *SIAM Journal on Optimization*, 30(3):1922–1953, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luft:2020:ETS**
- [LSxY24] Bowen Li, Bin Shi, and Ya xiang Yuan. Linear convergence of forward-backward accelerated algorithms without knowledge of the modulus of strong convexity. *SIAM Journal on Optimization*, 34(2):2150–2168, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M158111X>. [LSZ04]
- [LSY24] Qian Li, Defeng Sun, and Yancheng Yuan. An efficient sieving-based secant method for sparse optimization problems with least-squares constraints. *SIAM Journal on Optimization*, 34(2):2038–2066, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1594443>. **Li:2024:LCF**
- [LT92] Zhi-Quan Luo and Paul Tseng. Error bound and convergence analysis of matrix splitting algorithms for the affine variational inequality problem. *SIAM Journal on Optimization*, 2(1):43–54, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2024:ESB**
- [LT93] Zhi-Quan Luo and Paul Tseng. Error bound and reduced-gradient projection algorithms for convex minimization over a **Luo:1992:EBC**
- [Luo:1998:SCS] Zhi-Quan Luo, Jos F. Sturm, and Shuzhong Zhang. Super-linear convergence of a symmetric primal-dual path following algorithm for semidefinite programming. *SIAM Journal on Optimization*, 8(1):59–81, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29918>. **Luo:2004:MNQ**
- [Luo:2004:MNQ] Zhi-Quan Luo, Jos F. Sturm, and Shuzhong Zhang. Multivariate nonnegative quadratic mappings. *SIAM Journal on Optimization*, 14(4):1140–1162, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42149>.

- polyhedral set. *SIAM Journal on Optimization*, 3(1):43–59, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LT01]
- Liao:1996:SLP**
- [LT96] Aiping Liao and Michael J. Todd. Solving LP problems via weighted centers. *SIAM Journal on Optimization*, 6(4):933–960, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25427>. [LT02]
- Lewis:1999:PSA**
- [LT99] Robert Michael Lewis and Virginia Torczon. Pattern search algorithms for bound constrained minimization. *SIAM Journal on Optimization*, 9(4):1082–1099, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30050>. Dedicated to John E. Dennis, Jr., on his 60th birthday. [LT10a]
- Lewis:2000:PSM**
- [LT00] Robert Michael Lewis and Virginia Torczon. Pattern search methods for linearly constrained minimization. *SIAM Journal on Optimization*, 10(3):917–941, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33137>.
- Lawrence:2001:CEF**
- Craig T. Lawrence and André L. Tits. A computationally efficient feasible sequential quadratic programming algorithm. *SIAM Journal on Optimization*, 11(4):1092–1118, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34456>.
- Lewis:2002:GCA**
- Robert Michael Lewis and Virginia Torczon. A globally convergent augmented Lagrangian pattern search algorithm for optimization with general constraints and simple bounds. *SIAM Journal on Optimization*, 12(4):1075–1089, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33972>.
- Lewis:2010:ASI**
- [LT10a] Robert Michael Lewis and Virginia Torczon. Active set identification for linearly constrained minimization without explicit derivatives. *SIAM Journal on Optimization*, 20(3):1378–1405, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Li:2010:NCL**
- [LT10b] Yang Li and Tamás Terlaky. A new class of large

- neighborhood path-following interior point algorithms for semidefinite optimization with $O(\sqrt{n} \log \frac{\text{Tr}(X^0 S^0)}{\epsilon})$ iteration complexity. *SIAM Journal on Optimization*, 20(6):2853–2875, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [LTP23]
- [LT20] Bruno F. Lourenço and Akiko Takeda. Generalized subdifferentials of spectral functions over Euclidean Jordan algebras. *SIAM Journal on Optimization*, 30(4):3387–3414, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Lourenco:2020:GSS]
- [LT21] Adrian S. Lewis and Tonghua Tian. The structure of conservative gradient fields. *SIAM Journal on Optimization*, 31(3):2080–2083, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Lewis:2021:SCG]
- [LTAP22] Puya Latafat, Andreas Themelis, Masoud Ahookhosh, and Panagiotis Patrinos. Bregman Finito/MISO for nonconvex regularized finite sum minimization without Lipschitz gradient continuity. *SIAM Journal on Optimization*, 32(3):2230–2262, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Latafat:2022:BFM]
- URL <https://epubs.siam.org/doi/10.1137/21M140376X>. [Laude:2023:DNE]
- Emanuel Laude, Andreas Themelis, and Panagiotis Patrinos. Dualities for non-Euclidean smoothness and strong convexity under the light of generalized conjugacy. *SIAM Journal on Optimization*, 33(4):2721–2749, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1465913>. [Lee:2012:SLQ]
- [LTY12] G. M. Lee, N. N. Tam, and N. D. Yen. Stability of linear-quadratic minimization over Euclidean balls. *SIAM Journal on Optimization*, 22(3):936–952, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Liu:1997:IIO]
- [LU97] Ming-Hong Liu and Vasant A. Ubhaya. Integer isotone optimization. *SIAM Journal on Optimization*, 7(4):1152–1159, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27230>. [Lu:2009:SOA]
- [Lu09] Zhaosong Lu. Smooth optimization approach for sparse covariance selection. *SIAM Journal on Optimization*, 19(4):1807–1827,

- ???? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luc:2002:MRM**
- [Lu14] Shu Lu. Symmetric confidence regions and confidence intervals for normal map formulations of stochastic variational inequalities. *SIAM Journal on Optimization*, 24(3):1458–1484, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Lu:2014:SCR**
- [Lu17] Zhaosong Lu. Randomized block proximal damped Newton method for composite self-concordant minimization. *SIAM Journal on Optimization*, 27(3):1910–1942, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Lu:2017:RBP**
- [Luc92] Stefano Lucidi. New results on a continuously differentiable exact penalty function. *SIAM Journal on Optimization*, 2(4):558–574, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Lucidi:1992:NRC**
- [Luc95] Dinh The Luc. Taylor’s formula for $C^{k,1}$ functions. *SIAM Journal on Optimization*, 5(3):659–669, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luc:1995:TFF**
- [Luc02] Dinh The Luc. A multiplier rule for multiobjective programming problems with continuous data. *SIAM Journal on Optimization*, 13(1):168–178, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37828>. **Lucet:2009:WSY**
- [Luc09] Yves Lucet. What shape is your conjugate? A survey of computational convex analysis and its applications. *SIAM Journal on Optimization*, 20(1):216–250, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luedtke:2008:NFO**
- [Luc08] James Luedtke. New formulations for optimization under stochastic dominance constraints. *SIAM Journal on Optimization*, 19(3):1433–1450, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luke:2008:FBA**
- [Luk08] D. Russell Luke. Finding best approximation pairs relative to a convex and prox-regular set in a Hilbert space. *SIAM Journal on Optimization*, 19(2):714–739, ??? 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Luo97] Zhi-Quan Luo. Analysis of a cutting plane method that uses weighted analytic center and multiple cuts. *SIAM Journal on Optimization*, 7(3): 697–716, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27652>. **Luo:1997:ACP**
- [LV19] Dinh The Luc and Michel Volle. Duality for optimization problems with infinite sums. *SIAM Journal on Optimization*, 29(3): 1819–1843, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luc:2019:DOP**
- [LUZ15] Zhening Li, André Uschmajew, and Shuzhong Zhang. On convergence of the maximum block improvement method. *SIAM Journal on Optimization*, 25(1): 210–233, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Li:2015:CMB**
- [LV07] Laura Levaggi and Silvia Villa. On the regularization of sliding modes. *SIAM Journal on Optimization*, 18(3):878–894, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Levaggi:2007:RSM**
- [LV08] Chuanhai Liu and Scott A. Vander Wiel. Statistical quasi-Newton: a new look at least change. *SIAM Journal on Optimization*, 18(4):1266–1285, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Liu:2008:SQN**
- [LV22] Monique Laurent and Luis Felipe Vargas. Finite convergence of sum-of-squares hierarchies for the stability number of a graph. *SIAM Journal on Optimization*, 32(2):491–518, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M140345X>. **Laurent:2022:FCS**
- [LV08] Dinh The Luc and Roger J.-B. Wets. Outer semicontinuity of positive hull mappings with application to semi-infinite and stochastic programming. *SIAM Journal on Optimization*, 19(2): 700–713, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Luc:2008:OSP**
- [LV11a] Ming-Jun Lai and Jingyue Wang. An unconstrained ℓ_q minimization with $0 < q \leq 1$ for sparse solution of underdetermined linear systems. *SIAM Journal on Optimization*, 21(1):82–101, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (elec- **Lai:2011:UMS**

- tronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p82_s1.
- [LW11b] A. S. Lewis and S. J. Wright. Identifying activity. *SIAM Journal on Optimization*, 21(2): 597–614, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p597_s1.
- [LW15] Ji Liu and Stephen J. Wright. Asynchronous stochastic coordinate descent: Parallelism and convergence properties. *SIAM Journal on Optimization*, 25(1): 351–376, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LWY24] Honglin Luo, Xianfu Wang, and Xinmin Yang. Various notions of nonexpansiveness coincide for proximal mappings of functions. *SIAM Journal on Optimization*, 34(1):642–653, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [LWZ15] Xin Liu, Zaiwen Wen, and Yin Zhang. An efficient Gauss–Newton algorithm for symmetric low-rank product matrix approximations. *SIAM Journal on Optimization*, 25(3):1571–1608, 2015. CODEN SJOPE8.
- [LX14] Yongchao Liu and Huifu Xu. Entropic approximation for mathematical programs with robust equilibrium constraints. *SIAM Journal on Optimization*, 24(3): 933–958, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LX23] Qihang Lin and Yangyang Xu. Reducing the complexity of two classes of optimization problems by inexact accelerated proximal gradient method. *SIAM Journal on Optimization*, 33(1):1–35, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1469584>.
- [LXB19] Shuyang Ling, Ruitu Xu, and Afonso S. Bandeira. On the landscape of synchronization networks: a perspective from nonconvex optimization. *SIAM Journal on Optimization*, 29(3): 1879–1907, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LXL11] Yongchao Liu, Huifu Xu, and Gui-Hua Lin. Stability analysis of two-stage stochastic mathematical programs with complementarity constraints via NLP

Lewis:2011:IA**Liu:2014:EAM****Liu:2015:ASC****Lin:2023:RCT****Luo:2024:VNN****Ling:2019:LSN****Liu:2015:EGN****Liu:2011:SAT**

- regularization. *SIAM Journal on Optimization*, 21(3): 669–705, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p669_s1.
- [LY98] Pierre L’Ecuyer and George Yin. Budget-dependent convergence rate of stochastic approximation. *SIAM Journal on Optimization*, 8(1):217–247, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27072>.
- [LY07] Ye Lu and Ya-Xiang Yuan. An interior-point trust-region algorithm for general symmetric cone programming. *SIAM Journal on Optimization*, 18(1):65–86, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LY11] Xinwei Liu and Yaxiang Yuan. A sequential quadratic programming method without a penalty function or a filter for nonlinear equality constrained optimization. *SIAM Journal on Optimization*, 21(2): 545–571, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p545_s1.
- [LY19] Guanghui Lan and Yu Yang. Accelerated stochastic algorithms for nonconvex finite-sum and multiblock optimization. *SIAM Journal on Optimization*, 29(4): 2753–2784, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LYP23] Benoît Legat, Chenyang Yuan, and Pablo Parrilo. Low-rank univariate sum of squares has no spurious local minima. *SIAM Journal on Optimization*, 33(3): 2041–2061, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1516208>.
- [LYSA20] Jinlong Lei, Peng Yi, Guodong Shi, and Brian D. O. Anderson. Distributed algorithms with finite data rates that solve linear equations. *SIAM Journal on*

LEcuyer:1998:BDC**Lu:2007:IPT****Liu:2011:SQP****Lan:2019:ASA****Legat:2023:LRU****Liu:2017:EPC****Lei:2020:DAF**

- Optimization*, 30(2):1191–1222, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LYYD24] Haoya Li, Hsiang-Fu Yu, Lexing Ying, and Inderjit S. Dhillon. Accelerating primal-dual methods for regularized Markov decision processes. *SIAM Journal on Optimization*, 34(1):764–789, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [LZ03] Xinwei Liu and Gongyun Zhao. A decomposition method based on SQP for a class of multistage stochastic nonlinear programs. *SIAM Journal on Optimization*, 14(1):200–222, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36144>.
- [LZ10] Zhi-Quan Luo and Shuzhong Zhang. A semidefinite relaxation scheme for multivariate quartic polynomial optimization with quadratic constraints. *SIAM Journal on Optimization*, 20(4):1716–1736, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZ13] A. S. Lewis and S. Zhang. Partial smoothness, tilt stability, and generalized Hessians. *SIAM Journal on Optimization*, 23(1):74–94, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZ14] Zhaosong Lu and Yong Zhang. Sparse approximation via penalty decomposition methods. *SIAM Journal on Optimization*, 23(4):2448–2478, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZ16] Guanghui Lan and Yi Zhou. Conditional gradient sliding for convex optimization. *SIAM Journal on Optimization*, 26(2):1379–1409, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZ18] Guanghui Lan and Yi Zhou. Random gradient extrapolation for distributed and stochastic optimization. *SIAM Journal on Optimization*, 28(4):2753–2782, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZ19] Zhaosong Lu and Zirui Zhou. Nonmonotone enhanced proximal DC algorithms for a class of structured nonsmooth DC programming. *SIAM Journal on Optimization*, 29(4):2725–2752, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [LZ23a] **Lan:2023:OMC**
Guanghui Lan and Zhe Zhang. Optimal methods for convex risk-averse distributed optimization. *SIAM Journal on Optimization*, 33(3):1518–1557, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1485309>.
- [LZ23b] **Lu:2023:ICF**
Zhaosong Lu and Zirui Zhou. Iteration-complexity of first-order augmented Lagrangian methods for convex conic programming. *SIAM Journal on Optimization*, 33(2):1159–1190, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1403837>.
- [LZ24] **Li:2024:NNR**
Yan Li and Liping Zhang. A novel nonconvex relaxation approach to low-rank matrix completion of inexact observed data. *SIAM Journal on Optimization*, 34(3):2378–2410, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1543653>.
- [LZCW23] **Li:2023:SCA**
Yongfeng Li, Mingming Zhao, Weijie Chen, and Zaiwen Wen. A stochastic composite augmented Lagrangian method for reinforcement learning. *SIAM Journal on Optimization*, 33(2):921–949, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1421726>.
- [LZH14] **Li:2014:QSF**
Chong Li, Xiaopeng Zhao, and Yaohua Hu. Quasi-Slater and Farkas–Minkowski qualifications for semi-infinite programming with applications. *SIAM Journal on Optimization*, 23(4):2208–2230, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [LZSV20] **Li:2020:NRL**
Xiao Li, Zihui Zhu, Anthony Man-Cho So, and René Vidal. Nonconvex robust low-rank matrix recovery. *SIAM Journal on Optimization*, 30(1):660–686, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MA00] **Moreau:2000:ODF**
Luc Moreau and Dirk Aeyels. Optimization of discontinuous functions: a generalized theory of differentiation. *SIAM Journal on Optimization*, 11(1):53–69, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35467>.

Mairal:2015:IMM

- [Mai15] Julien Mairal. Incremental majorization-minimization optimization with application to large-scale machine learning. *SIAM Journal on Optimization*, 25(2):829–855, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Malanowski:2007:SAN

- [Mal07] K. Malanowski. Stability analysis for nonlinear optimal control problems subject to state constraints. *SIAM Journal on Optimization*, 18(3):926–945, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Malitsky:2015:PRG

- [Mal15] Yu. Malitsky. Projected reflected gradient methods for monotone variational inequalities. *SIAM Journal on Optimization*, 25(1):502–520, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mangasarian:1991:CII

- [Man91] O. L. Mangasarian. Convergence of iterates of an inexact matrix splitting algorithm for the symmetric monotone linear complementarity problem. *SIAM Journal on Optimization*, 1(1):114–122, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mangasarian:1999:PBP

- [Man99] O. L. Mangasarian. Polyhedral boundary projection. *SIAM Journal on Optimization*, 9(4):1128–1134, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32924>. Dedicated to John E. Dennis, Jr., on his 60th birthday.

Mangasarian:2004:KBL

- [Man04] O. L. Mangasarian. Knowledge-based linear programming. *SIAM Journal on Optimization*, 15(2):375–382, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43283>.

Martinez:1994:LMQ

- [Mar94] José Mario Martínez. Local minimizers of quadratic functions on Euclidean balls and spheres. *SIAM Journal on Optimization*, 4(1):159–176, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Marshall:2005:EEO

- [Mar05] M. Marshall. Error estimates in the optimization of degree two polynomials on a discrete hypercube. *SIAM Journal on Optimization*, 16(1):297–309, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- URL <http://epubs.siam.org/sam-bin/dbq/article/60222>.
- [Mar17] **Martinez:2017:HOM** José Mario Martínez. On high-order model regularization for constrained optimization. *SIAM Journal on Optimization*, 27(4): 2447–2458, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MARS10] **Mosk-Aoyama:2010:FDA** Damon Mosk-Aoyama, Tim Roughgarden, and Devavrat Shah. Fully distributed algorithms for convex optimization problems. *SIAM Journal on Optimization*, 20(6):3260–3279, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Mas97] **Mascarenhas:1997:ASA** Walter F. Mascarenhas. The affine scaling algorithm fails for stepsize 0.999. *SIAM Journal on Optimization*, 7(1):34–46, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25840>.
- [Mas20] **Mastrolilli:2020:HDS** Monaldo Mastrolilli. High degree sum of squares proofs, Bienstock–Zuckerberg hierarchy, and Chvátal–Gomory cuts. *SIAM Journal on Optimization*, 30(1):798–822, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Mat05] **Matsumoto:2005:ACE** Toshihiro Matsumoto. An algebraic condition equivalent to strong stability of stationary solutions of nonlinear positive semidefinite programs. *SIAM Journal on Optimization*, 16(2): 452–470, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41679>.
- [MB14] **Moeller:2014:MMP** Michael Moeller and Martin Burger. Multiscale methods for polyhedral regularizations. *SIAM Journal on Optimization*, 23(3):1424–1456, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MB24] **McRae:2024:BLL** Andrew D. McRae and Nicolas Boumal. Benign landscapes of low-dimensional relaxations for orthogonal synchronization on general graphs. *SIAM Journal on Optimization*, 34(2): 1427–1454, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [MBG24] **Morin:2024:FSO** Martin Morin, Sebastian Banert, and Pontus Giselsson. Frugal splitting operators: Representation, minimal lifting, and convergence. *SIAM Journal on Optimization*, 34(2):1595–1621, April 2024. CODEN SJOPE8. ISSN 1095-7189.

- [MBW09] **Muhandiramge:2009:CNA**
Ranga Muhandiramge, Natasha Boland, and Song Wang. Convergent network approximation for the continuous Euclidean length constrained minimum cost path problem. *SIAM Journal on Optimization*, 20(1):54–77, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MC05] **Markot:2005:NVO**
Mihály Csaba Markót and Tibor Csendes. A new verified optimization technique for the “Packing Circles in a Unit Square” problems. *SIAM Journal on Optimization*, 16(1):193–219, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42561>.
- [McB98] **McBride:1998:PMS**
Richard D. McBride. Progress made in solving the multicommodity flow problem. *SIAM Journal on Optimization*, 8(4):947–955, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30454>.
- [MCB09] **Mitsos:2009:MBR**
Alexander Mitsos, Benoît Chachuat, and Paul I. Barton. McCormick-based relaxations of algorithms. *SIAM Journal on Optimization*, 20(2):573–601, 2009. CO-
- [McK98] **McKinnon:1998:CNM**
K. I. M. McKinnon. Convergence of the Nelder–Mead simplex method to a nonstationary point. *SIAM Journal on Optimization*, 9(1):148–158, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30348>.
- [MCL10] **Moazeni:2010:OPE**
Somayeh Moazeni, Thomas F. Coleman, and Yuying Li. Optimal portfolio execution strategies and sensitivity to price impact parameters. *SIAM Journal on Optimization*, 20(3):1620–1654, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [McS94] **McShane:1994:SCI**
Kevin McShane. Superlinearly convergent $O(\sqrt[n]{L})$ -iteration interior-point algorithms for linear programming and the monotone linear complementarity problem. *SIAM Journal on Optimization*, 4(2):247–261, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [McS96] **McShane:1996:SCI**
Kevin A. McShane. On the superlinear convergence of an $O(n^3L)$ interior-point algorithm for the monotone LCP. *SIAM*

- Journal on Optimization*, 6(4): 978–993, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27729>. [MER18]
- Mokhtari:2018:IIQ**
Aryan Mokhtari, Mark Eisen, and Alejandro Ribeiro. IQN: an incremental quasi-Newton method with local superlinear convergence rate. *SIAM Journal on Optimization*, 28(2): 1670–1698, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- MoranR:2012:SDC**
[MDV12] Diego A. Morán R., Santanu S. Dey, and Juan Pablo Vielma. A strong dual for conic mixed-integer programs. *SIAM Journal on Optimization*, 22(3):1136–1150, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Magron:2023:SSD**
[MEV23] Victor Magron, Mohab Safey El Din, and Trung-Hieu Vu. Sum of squares decompositions of polynomials over their gradient ideals with rational coefficients. *SIAM Journal on Optimization*, 33(1):63–88, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1436245>.
- Mehrotra:1992:IPD**
[Meh92] Sanjay Mehrotra. On the implementation of a primal-dual interior point method. *SIAM Journal on Optimization*, 2(4): 575–601, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Marteanu-Ferey:2024:SOC**
[MFBR24] Ulysse Marteanu-Ferey, Francis Bach, and Alessandro Rudi. Second order conditions to decompose smooth functions as sums of squares. *SIAM Journal on Optimization*, 34(1):616–641, February 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Melman:1996:LPB**
[Mel96] A. Melman. A linesearch procedure in barrier methods for some convex programming problems. *SIAM Journal on Optimization*, 6(2):283–298, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mokhtarian:1998:NAC**
[MG98] F. Sharifi Mokhtarian and J. L. Goffin. A nonlinear analytic center cutting plane method for a class of convex programming problems. *SIAM Journal on Optimization*, 8(4):1108–1131, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mengi:2017:SFB**
[Men17] Emre Mengi. A support function based algorithm for optimization with eigenvalue constraints. *SIAM Journal on Optimization*, 27(1):246–268, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

(print), 1095-7189 (electronic).
 URL <http://epubs.siam.org/sam-bin/dbq/article/31188>.

Mueller-Gritschneider:2009:SAC

- [MGG09] Daniel Mueller-Gritschneider, Helmut Graeb, and Ulf Schlichtmann. A successive approach to compute the bounded Pareto front of practical multiobjective optimization problems. *SIAM Journal on Optimization*, 20(2):915–934, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mokhtari:2018:SGD

- [MGR18] Aryan Mokhtari, Mert Gürbüzbalaban, and Alejandro Ribeiro. Surpassing gradient descent provably: a cyclic incremental method with linear convergence rate. *SIAM Journal on Optimization*, 28(2):1420–1447, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Magron:2015:SAP

- [MHL15] Victor Magron, Didier Henrion, and Jean-Bernard Lasserre. Semidefinite approximations of projections and polynomial images of SemiAlgebraic sets. *SIAM Journal on Optimization*, 25(4):2143–2164, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Miao:1996:TII

- [Mia96] Jianming Miao. Two infeasible interior-point predictor-corrector algorithms for linear

programming. *SIAM Journal on Optimization*, 6(3):587–599, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25771>.

Mishchenko:2020:DFD

- [MIM20] Konstantin Mishchenko, Franck Iutzeler, and Jérôme Malick. A distributed flexible delay-tolerant proximal gradient algorithm. *SIAM Journal on Optimization*, 30(1):933–959, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mishchenko:2023:RNM

- [Mis23] Konstantin Mishchenko. Regularized Newton method with global $O(1/k^2)$ convergence. *SIAM Journal on Optimization*, 33(3):1440–1462, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1488752>.

Mitchell:1994:IPC

- [Mit94] John E. Mitchell. An interior point column generation method for linear programming using shifted barriers. *SIAM Journal on Optimization*, 4(2):423–440, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mitchell:2000:CEI

- [Mit00] John E. Mitchell. Computational experience with an in-

- terior point cutting plane algorithm. *SIAM Journal on Optimization*, 10(4):1212–1227, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32424>.
- [MKT95] Shinji Mizuno, Masakazu Kojima, and Michael J. Todd. Infeasible-interior-point primal-dual potential-reduction algorithms for linear programming. *SIAM Journal on Optimization*, 5(1):52–67, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MKU21] Ramchandran Muthukumar, Drew P. Kouri, and Madeleine Udell. Randomized sketching algorithms for low-memory dynamic optimization. *SIAM Journal on Optimization*, 31(2):1242–1275, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ML05] Sanjay Mehrotra and Zhifeng Li. Convergence conditions and Krylov subspace-based corrections for primal-dual interior-point method. *SIAM Journal on Optimization*, 15(3):635–653, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43149>.
- [MLC22] Yu Mei, Jia Liu, and Zhiping Chen. Distributionally robust second-order stochastic dominance constrained optimization with Wasserstein ball. *SIAM Journal on Optimization*, 32(2):715–738, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1394412>.
- [MLLB08] Alexander Mitsos, Panayiotis Lemonidis, Cha Kun Lee, and Paul I. Barton. Relaxation-based bounds for semi-infinite programs. *SIAM Journal on Optimization*, 19(1):77–113, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MLRR93] J.-E. Martínez-Legaz and S. Romano Rodríguez. α -lower subdifferentiable functions. *SIAM Journal on Optimization*, 3(4):800–825, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MM05] Enrico Miglierina and Elena Molho. Convergence of minimal sets in convex vector optimization. *SIAM Journal on Optimization*, 15(2):513–526, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mei:2022:DRS**Mizuno:1995:IIP****Mitsos:2008:RBB****Muthukumar:2021:RSA****Martinez-Legaz:1993:LSF****Mehrotra:2005:CCK****Miglierina:2005:CMS**

URL <http://epubs.siam.org/sam-bin/dbq/article/60264>.

Mainge:2008:CNI

- [MM08] Paul-Emile Maingé and Abdelatif Moudafi. Convergence of new inertial proximal methods for DC programming. *SIAM Journal on Optimization*, 19(1):397–413, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Marinacci:2011:NSC

- [MM11] Massimo Marinacci and Luigi Montrucchio. Necessary and sufficient conditions for optima in reflexive spaces. *SIAM Journal on Optimization*, 21(1):174–192, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p174_s1.

Mohammadi:2021:VAN

- [MM21] Ashkan Mohammadi and Boris S. Mordukhovich. Variational analysis in normed spaces with applications to constrained optimization. *SIAM Journal on Optimization*, 31(1):569–603, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mishra:2014:LRO

- [MMBS14] B. Mishra, G. Meyer, F. Bach, and R. Sepulchre. Low-rank optimization with trace norm penalty. *SIAM Journal on Optimization*, 23(4):2124–2149,

2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Maass:2022:TRB

- [MMN+22] Alejandro I. Maass, Chris Manzie, Dragan Nesić, Jonathan H. Manton, and Iman Shames. Tracking and regret bounds for online zeroth-order Euclidean and Riemannian optimization. *SIAM Journal on Optimization*, 32(2):445–469, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1405551>.

McKenna:1995:DPQ

- [MMZ95] Mike P. McKenna, Jill P. Mesirov, and Stavros A. Zenios. Data parallel quadratic programming on box-constrained problems. *SIAM Journal on Optimization*, 5(3):570–589, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Madsen:1993:FSA

- [MN93] Kaj Madsen and Hans Bruun Nielsen. A finite smoothing algorithm for linear l_1 estimation. *SIAM Journal on Optimization*, 3(2):223–235, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mohan:1996:AGL

- [MN96] S. R. Mohan and S. K. Nedy. Algorithms for the generalized linear complementarity problem with a vertical

- block Z -matrix. *SIAM Journal on Optimization*, 6(4):994–1006, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27558>. [MN14]
- [MN00] José Luis Morales and Jorge Nocedal. Automatic preconditioning by limited memory quasi-Newton updating. *SIAM Journal on Optimization*, 10(4):1079–1096, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32785>. [MN16]
- [MN09] Gergely Mádi-Nagy. On multivariate discrete moment problems: Generalization of the bivariate min algorithm for higher dimensions. *SIAM Journal on Optimization*, 19(4):1781–1806, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [MNP96]
- [MN13] Boris S. Mordukhovich and T. T. A. Nghia. Subdifferentials of nonconvex supremum functions and their applications to semi-infinite and infinite programs with Lipschitzian data. *SIAM Journal on Optimization*, 23(1):406–431, ??? 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [MNP98]
- Mordukhovich:2014:FLH**
B. S. Mordukhovich and T. T. A. Nghia. Full Lipschitzian and Hölderian stability in optimization with applications to mathematical programming and optimal control. *SIAM Journal on Optimization*, 24(3):1344–1381, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mordukhovich:2016:LMF**
B. S. Mordukhovich and T. T. A. Nghia. Local monotonicity and full stability for parametric variational systems. *SIAM Journal on Optimization*, 26(2):1032–1059, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Madsen:1996:NFC**
Kaj Madsen, Hans Bruun Nielsen, and Mustafa Ç. Pinar. A new finite continuation algorithm for linear programming. *SIAM Journal on Optimization*, 6(3):600–616, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25855>.
- Madsen:1998:FCA**
Kaj Madsen, Hans Bruun Nielsen, and Mustafa Çelebi Pinar. A finite continuation algorithm for bound constrained quadratic programming. *SIAM Journal on Optimization*, 9(1):62–83, October/December 1998. CODEN

- SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29782>. [MO07b]
- Moustrou:2022:SRG**
- [MNR⁺22] Philippe Moustrou, Helen Naumann, Cordian Riener, Thorsten Theobald, and Hugues Verdure. Symmetry reduction in AM/GM-based optimization. *SIAM Journal on Optimization*, 32(2):765–785, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1405691>. [MÖ09]
- Mordukhovich:2001:SOS**
- [MO01] Boris S. Mordukhovich and Jiří V. Outrata. On second-order subdifferentials and their applications. *SIAM Journal on Optimization*, 12(1):139–169, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37715>. [MÖ10]
- Mehrotra:2007:DBI**
- [MÖ07a] Sanjay Mehrotra and M. Gökhan Özevin. Decomposition-based interior point methods for two-stage stochastic semidefinite programming. *SIAM Journal on Optimization*, 18(1):206–222, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Mon97]
- Mordukhovich:2007:CAQ**
- Boris S. Mordukhovich and Jiří V. Outrata. Coderivative analysis of quasi-variational inequalities with applications to stability and optimization. *SIAM Journal on Optimization*, 18(2):389–412, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mehrotra:2009:IIP**
- Sanjay Mehrotra and M. Gökhan Özevin. On the implementation of interior point decomposition algorithms for two-stage stochastic conic programs. *SIAM Journal on Optimization*, 19(4):1846–1880, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mehrotra:2010:CWB**
- Sanjay Mehrotra and M. Gökhan Özevin. Convergence of a weighted barrier decomposition algorithm for two-stage stochastic programming with discrete support. *SIAM Journal on Optimization*, 20(5):2474–2486, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Monteiro:1997:PDP**
- Renato D. C. Monteiro. Primal–Dual path-following algorithms for semidefinite programming. *SIAM Journal on Optimization*, 7(3):663–678, August 1997. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/29305>. [Mor07]
- Monteiro:1998:PCP**
- [Mon98] Renato D. C. Monteiro. Polynomial convergence of primal-dual algorithms for semidefinite programming based on the Monteiro and Zhang family of directions. *SIAM Journal on Optimization*, 8(3):797–812, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30861>. [MOR15]
- Monjezi:2023:BTR**
- [Mon23] Najmeh Hoseini Monjezi. A bundle trust region algorithm for minimizing locally Lipschitz functions. *SIAM Journal on Optimization*, 33(1):319–337, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1476125>. [MOS14]
- Mokhtari:2020:CRO**
- [MOP20] Aryan Mokhtari, Asuman E. Ozdaglar, and Sarath Pattathil. Convergence rate of $\mathcal{O}(\infty/\| \cdot \|)$ for optimistic gradient and extragradient methods in smooth convex-concave saddle point problems. *SIAM Journal on Optimization*, 30(4):3230–3251, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [MOT95]
- Mordukhovich:2007:VAE**
- Boris Mordukhovich. Variational analysis of evolution inclusions. *SIAM Journal on Optimization*, 18(3):752–777, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mordukhovich:2015:SOV**
- Boris S. Mordukhovich, Jirí V. Outrata, and Héctor Ramírez C. Second-order variational analysis in conic programming with applications to optimality and stability. *SIAM Journal on Optimization*, 25(1):76–101, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mordukhovich:2014:FSL**
- Boris S. Mordukhovich, Jirí V. Outrata, and M. Ebrahim Sarabi. Full stability of locally optimal solutions in second-order cone programs. *SIAM Journal on Optimization*, 24(4):1581–1613, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mahey:1995:PDG**
- Philippe Mahey, Said Oualibouch, and Pham Dinh Tao. Proximal decomposition on the graph of a maximal monotone operator. *SIAM Journal on Optimization*, 5(2):454–466, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [MOT04] Renato D. C. Monteiro, Jerome W. O’Neal, and Takashi Tsuchiya. Uniform boundedness of a preconditioned normal matrix used in interior-point methods. *SIAM Journal on Optimization*, 15(1):96–100, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42639>.
- [MP95] Walter Murray and Francisco J. Prieto. A sequential quadratic programming algorithm using an incomplete solution of the subproblem. *SIAM Journal on Optimization*, 5(3):590–640, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP97] Thomas L. Magnanti and Georgia Perakis. The orthogonality theorem and the strong- f -monotonicity condition for variational inequality algorithms. *SIAM Journal on Optimization*, 7(1):248–273, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25922>.
- [MP07] Radoslava Mirkov and Georg Ch. Pflug. Tree approximations of dynamic stochastic programs. *SIAM Journal on Optimization*, 18(3):1082–1105, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP10] Hans Mittelmann and Jiming Peng. Estimating bounds for quadratic assignment problems associated with Hamming and Manhattan distance matrices based on semidefinite programming. *SIAM Journal on Optimization*, 20(6):3408–3426, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3408_s1.
- [MP14a] Sanjay Mehrotra and Dávid Papp. A cutting surface algorithm for semi-infinite convex programming with an application to moment robust optimization. *SIAM Journal on Optimization*, 24(4):1670–1697, 2014. CODEN SJOPE8.
- [MP99] Renato D. C. Monteiro and Jong-Shi Pang. A potential reduction Newton method for constrained equations. *SIAM Journal on Optimization*, 9(3):729–754, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31898>.

- ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP14b] Sanjay Mehrotra and Dávid Papp. Generating moment matching scenarios using optimization techniques. *SIAM Journal on Optimization*, 23(2):963–999, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP14c] Michele Monaci and Ulrich Pfersch. On the robust knapsack problem. *SIAM Journal on Optimization*, 23(4):1956–1982, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP16] Francesca Maggioni and Georg Ch. Pflug. Bounds and approximations for multistage stochastic programs. *SIAM Journal on Optimization*, 26(1):831–855, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP18] Yura Malitsky and Thomas Pock. A first-order primal-dual algorithm with linesearch. *SIAM Journal on Optimization*, 28(1):411–432, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MP19] **Maggioni:2019:GBG** Francesca Maggioni and Georg Ch. Pflug. Guaranteed bounds for general nondiscrete multistage risk-averse stochastic optimization programs. *SIAM Journal on Optimization*, 29(1):454–483, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MPA21] **Mordukhovich:2021:GLR** Boris Mordukhovich and Pedro Pérez-Aros. Generalized Leibniz rules and Lipschitzian stability for expected-integral mappings. *SIAM Journal on Optimization*, 31(4):3212–3246, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MPB02] **Massaro:2002:CPA** Alessio Massaro, Marcello Pelillo, and Immanuel M. Bomze. A complementary pivoting approach to the maximum weight clique problem. *SIAM Journal on Optimization*, 12(4):928–948, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38141>.
- [MPP+17] **Mania:2017:PIA** Horia Mania, Xinghao Pan, Dimitris Papailiopoulos, Benjamin Recht, Kannan Ramchandran, and Michael I. Jordan. Perturbed iterate analysis for asynchronous stochastic optimization. *SIAM Journal on*

- Optimization*, 27(4):2202–2229, ????. 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mordukhovich:2010:AMR**
- [MPR10] Boris S. Mordukhovich, Javier F. Peña, and Vera Roshchina. Applying metric regularity to compute a condition measure of a smoothing algorithm for matrix games. *SIAM Journal on Optimization*, 20(6):3490–3511, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3490_s1.
- Malick:2009:RMS**
- [MPRW09] Jérôme Malick, Janez Povh, Franz Rendl, and Angelika Wiegele. Regularization methods for semidefinite programming. *SIAM Journal on Optimization*, 20(1):336–356, ????. 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mahjoub:2019:DTN**
- [MPSU19] A. Ridha Mahjoub, Michael Poss, Luidi Simonetti, and Eduardo Uchoa. Distance transformation for network design problems. *SIAM Journal on Optimization*, 29(2):1687–1713, ????. 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Maddison:2021:DSP**
- [MPTD21] Chris J. Maddison, Daniel Paulin, Yee Whye Teh, and Arnaud Doucet. Dual space preconditioning for gradient descent. *SIAM Journal on Optimization*, 31(1):991–1016, ????. 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Monteiro:1995:PAN**
- [MPW95] Renato D. C. Monteiro, Jong-Shi Pang, and Tao Wang. A positive algorithm for the non-linear complementarity problem. *SIAM Journal on Optimization*, 5(1):129–148, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mahajan:2010:CSD**
- [MR10] Ashutosh Mahajan and Ted Ralphs. On the complexity of selecting disjunctions in integer programming. *SIAM Journal on Optimization*, 20(5):2181–2198, ????. 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mordukhovich:2012:SOS**
- [MR12] B. S. Mordukhovich and R. T. Rockafellar. Second-order sub-differential calculus with applications to tilt stability in optimization. *SIAM Journal on Optimization*, 22(3):953–986, ????. 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [MRS14] **Mordukhovich:2014:CFS**
 B. S. Mordukhovich, R. T. Rockafellar, and M. E. Sarabi. Characterizations of full stability in constrained optimization. *SIAM Journal on Optimization*, 23(3):1810–1849, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MRS16] **Martin:2016:SCD** [MS00]
 Kipp Martin, Christopher Thomas Ryan, and Matt Stern. The Slater conundrum: Duality and pricing in infinite-dimensional optimization. *SIAM Journal on Optimization*, 26(1):111–138, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MRT15] **Mazon:2015:OMT** [MS02]
 J. M. Mazón, J. D. Rossi, and J. Toledo. Optimal mass transport on metric graphs. *SIAM Journal on Optimization*, 25(3):1609–1632, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS94a] **Mehrotra:1994:PCM** [MS03]
 Sanjay Mehrotra and Robert A. Stubbs. Predictor-corrector methods for a class of linear complementarity problems. *SIAM Journal on Optimization*, 4(2):441–453, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS94b] **Moussaoui:1994:SAO**
 Mohammed Moussaoui and Alberto Seeger. Sensitivity analysis of optimal value functions of convex parametric programs with possibly empty solution sets. *SIAM Journal on Optimization*, 4(3):659–675, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mifflin:2000:EFP**
 Robert Mifflin and Claudia Sagastizábal. On \square -theory for functions with primal-dual gradient structure. *SIAM Journal on Optimization*, 11(2):547–571, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35096>.
- Muller:2002:TPU**
 Rudolf Müller and Andreas S. Schulz. Transitive packing: a unifying concept in combinatorial optimization. *SIAM Journal on Optimization*, 13(2):335–367, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36325>.
- Mifflin:2003:PDG**
 Robert Mifflin and Claudia Sagastizábal. Primal-dual gradient structured functions: Second-order results; links to epi-derivatives and partly smooth functions. *SIAM Journal on Optimization*, 13(4):1174–1194, 2003. CODEN

SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41244>.

Morgan:2006:DWP

[MS06a]

Jacqueline Morgan and Vincenzo Scalzo. Discontinuous but well-posed optimization problems. *SIAM Journal on Optimization*, 17(3):861–870, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Muller:2006:SOR

[MS06b]

Alfred Müller and Marco Scarsini. Stochastic order relations and lattices of probability measures. *SIAM Journal on Optimization*, 16(4):1024–1043, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Monteiro:2010:CHP

[MS10]

Renato D. C. Monteiro and B. F. Svaiter. On the complexity of the hybrid proximal extragradient method for the iterates and the ergodic mean. *SIAM Journal on Optimization*, 20(6):2755–2787, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Markot:2011:CAS

[MS11a]

Mihály Csaba Markót and Hermann Schichl. Comparison and automated selection of local optimization solvers for interval global optimization methods. *SIAM Journal on Optimization*,

21(4):1371–1391, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1371_s1.

Minchenko:2011:PNP

[MS11b]

Leonid Minchenko and Sergey Stakhovski. Parametric nonlinear programming problems under the relaxed constant rank condition. *SIAM Journal on Optimization*, 21(1):314–332, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p314_s1.

Monteiro:2011:CVT

[MS11c]

Renato D. C. Monteiro and B. F. Svaiter. Complexity of variants of Tseng’s modified F - B splitting and Korpelevich’s methods for hemivariational inequalities with applications to saddle-point and convex optimization problems. *SIAM Journal on Optimization*, 21(4):1688–1720, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1688_s1.

Monteiro:2012:ICN

[MS12]

Renato D. C. Monteiro and Benar F. Svaiter. Iteration-complexity of a Newton proximal extragradient method for

- monotone variational inequalities and inclusion problems. *SIAM Journal on Optimization*, 22(3):914–935, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS13] Renato D. C. Monteiro and Benar F. Svaiter. Iteration-complexity of block-decomposition algorithms and the alternating direction method of multipliers. *SIAM Journal on Optimization*, 23(1):475–507, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS14] Renato D. C. Monteiro and B. F. Svaiter. An accelerated hybrid proximal extragradient method for convex optimization and its implications to second-order methods. *SIAM Journal on Optimization*, 23(2):1092–1125, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS16] Bamdev Mishra and Rodolphe Sepulchre. Riemannian preconditioning. *SIAM Journal on Optimization*, 26(1):635–660, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS18] Panayotis Mertikopoulos and Mathias Staudigl. On the convergence of gradient-like flows with noisy gradient input. *SIAM Journal on Optimization*, 28(1):163–197, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS19] Renato D. C. Monteiro and Boris Mordukhovich. Criticality of Lagrange multipliers in variational systems. *SIAM Journal on Optimization*, 29(2):1524–1557, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS20] Ashkan Mohammadi and M. Ebrahim Sarabi. Twice epi-differentiability of extended-real-valued functions with applications in composite optimization. *SIAM Journal on Optimization*, 30(3):2379–2409, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS21] Boris S. Mordukhovich and M. Ebrahim Sarabi. Generalized Newton algorithms for tilt-stable minimizers in nonsmooth optimization. *SIAM Journal on Optimization*, 31(2):1184–1214, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MS23] Roey Merchav and Shoham Sabach. Convex bi-level optimization problems with nonsmooth outer objective function.

- SIAM Journal on Optimization*, 33(4):3114–3142, November 2023. CODEN SJOPE8. ISSN 1095-7189.
- [MSFL17] **Madani:2017:FLR** Ramtin Madani, Somayeh Sojoudi, Ghazal Fazelnia, and Javad Lavaei. Finding low-rank solutions of sparse linear matrix inequalities using convex optimization. *SIAM Journal on Optimization*, 27(2):725–758, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MSG20] **Muller:2020:UTD** Benjamin Müller, Felipe Serrano, and Ambros Gleixner. Using two-dimensional projections for stronger separation and propagation of bilinear terms. *SIAM Journal on Optimization*, 30(2):1339–1365, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MSQ98] **Mifflin:1998:QNB** Robert Mifflin, Defeng Sun, and Liqun Qi. Quasi-Newton bundle-type methods for nondifferentiable convex optimization. *SIAM Journal on Optimization*, 8(2):583–603, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30332>.
- [MSS15] **Monteiro:2015:HPE** Renato D. C. Monteiro, Mauricio R. Siqueira, and B. F. Svaiter. A hybrid proximal extragradient self-concordant primal barrier method for monotone variational inequalities. *SIAM Journal on Optimization*, 25(4):1965–1996, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MST11] **Moriguchi:2011:CFM** Satoko Moriguchi, Akiyoshi Shioura, and Nobuyuki Tsuchimura. M -convex function minimization by continuous relaxation approach: Proximity theorem and algorithm. *SIAM Journal on Optimization*, 21(3):633–668, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p633_s1.
- [MSU24] **Milzarek:2024:SNS** Andre Milzarek, Fabian Schaipp, and Michael Ulbrich. A semismooth Newton stochastic proximal point algorithm with variance reduction. *SIAM Journal on Optimization*, 34(1):1157–1185, March 2024. CODEN SJOPE8. ISSN 1095-7189.
- [MT91] **More:1991:SLQ** Jorge J. Moré and Gerardo Toraldo. On the solution of large quadratic programming problems with bound constraints. *SIAM Journal on Optimization*, 1(1):93–113, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [MT98] Renato D. C. Monteiro and Takashi Tsuchiya. Global convergence of the affine scaling algorithm for convex quadratic programming. *SIAM Journal on Optimization*, 8(1):26–58, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28385>.
- [MT99] Renato D. C. Monteiro and Takashi Tsuchiya. Polynomial convergence of a new family of primal-dual algorithms for semidefinite programming. *SIAM Journal on Optimization*, 9(3):551–577, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31283>.
- [MT03] Renato D. C. Monteiro and Takashi Tsuchiya. A variant of the Vavasis–Ye layered-step interior-point algorithm for linear programming. *SIAM Journal on Optimization*, 13(4):1054–1079, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38892>.
- [MT04] Renato D. C. Monteiro and Takashi Tsuchiya. A new iteration-complexity bound for the MTY predictor-corrector algorithm. *SIAM Journal on Optimization*, 15(2):319–347, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41680>.
- [MT20] Yura Malitsky and Matthew K. Tam. A forward-backward splitting method for monotone inclusions without cocoercivity. *SIAM Journal on Optimization*, 30(2):1451–1472, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MT24] Naoki Marumo and Akiko Takeda. Parameter-free accelerated gradient descent for non-convex minimization. *SIAM Journal on Optimization*, 34(2):2093–2120, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1540934>.
- [MTB23] Céline Mouter, Adrien Taylor, and Francis Bach. A systematic approach to Lyapunov analyses of continuous-time models in convex optimization. *SIAM Journal on Optimization*, 33(3):1558–1586, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <https://epubs.siam.org/doi/10.1137/22M1498486>.

Mizuno:1994:MPD

- [MTT94] Shinji Mizuno, Michael J. Todd, and Levent Tunçel. Monotonicity of primal and dual objective values in primal-dual interior-point algorithms. *SIAM Journal on Optimization*, 4(3):613–625, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mordukhovich:2003:EEP

- [MTZ03] Boris S. Mordukhovich, Jay S. Treiman, and Qiji J. Zhu. An extended extremal principle with applications to multi-objective optimization. *SIAM Journal on Optimization*, 14(2):359–379, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41470>.

Milzarek:2014:SNM

- [MU14] Andre Milzarek and Michael Ulbrich. A semismooth Newton method with multidimensional filter globalization for l_1 -optimization. *SIAM Journal on Optimization*, 24(1):298–333, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Mafusalov:2018:BPE

- [MU18] Alexander Mafusalov and Stan Uryasev. Buffered probability of exceedance: Mathematical properties and optimization. *SIAM*

Journal on Optimization, 28(2):1077–1103, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Milz:2020:ASD

- [MU20] Johannes Milz and Michael Ulbrich. An approximation scheme for distributionally robust nonlinear optimization. *SIAM Journal on Optimization*, 30(3):1996–2025, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Milz:2024:SSE

- [MU24] Johannes Milz and Michael Ulbrich. Sample size estimates for risk-neutral semilinear PDE-constrained optimization. *SIAM Journal on Optimization*, 34(1):844–869, February 2024. CODEN SJOPE8. ISSN 1095-7189.

Marcucci:2024:SPG

- [MUPT24] Tobia Marcucci, Jack Umenberger, Pablo Parrilo, and Russ Tedrake. Shortest paths in graphs of convex sets. *SIAM Journal on Optimization*, 34(1):507–532, February 2024. CODEN SJOPE8. ISSN 1095-7189.

Murota:2003:SDA

- [Mur03] Kazuo Murota. On steepest descent algorithms for discrete convex functions. *SIAM Journal on Optimization*, 14(3):699–707, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41900>.

- [Mut01] **Mutzel:2001:AMC** Petra Mutzel. An alternative method to crossing minimization on hierarchical graphs. *SIAM Journal on Optimization*, 11(4):1065–1080, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33401>.
- [Mut06] **Mutzel:2006:BMP** Petra Mutzel and René Weiskircher. Bend minimization in planar orthogonal drawings using integer programming. *SIAM Journal on Optimization*, 17(3):665–687, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MW94] **Murray:1994:LSP** Walter Murray and Margaret H. Wright. Line search procedures for the logarithmic barrier function. *SIAM Journal on Optimization*, 4(2):229–246, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MW09] **More:2009:BDF** Jorge J. Moré and Stefan M. Wild. Benchmarking derivative-free optimization algorithms. *SIAM Journal on Optimization*, 20(1):172–191, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MW96] **Monteiro:1996:SII** R. D. C. Monteiro and S. J. Wright. A superlinear infeasible-interior-point affine scaling algorithm for LCP. *SIAM Journal on Optimization*, 6(1):1–18, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MWDS18] **Maggiar:2018:DFT** Alvaro Maggiar, Andreas Wächter, Irina S. Dolinskaya, and Jeremy Staum. A derivative-free trust-region algorithm for the optimization of functions smoothed via Gaussian convolution using adaptive multiple importance sampling. *SIAM Journal on Optimization*, 28(2):1478–1507, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [MW97] **More:1997:GCD** Jorge J. Moré and Zhijun Wu. Global continuation for distance geometry problems. *SIAM Journal on Optimization*, 7(3):814–836, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28302>.
- [MX06] **Meng:2006:RSA** Fanwen Meng and Huifu Xu. A regularized sample average approximation method for stochastic mathematical programs with nonsmooth equality constraints. *SIAM Journal on Optimization*, 17(3):891–919, January 2006. CODEN SJOPE8. ISSN 1052-

6234 (print), 1095-7189 (electronic).

Milzarek:2019:SSN

[MXC⁺19] Andre Milzarek, Xiantao Xiao, Shicong Cen, Zaiwen Wen, and Michael Ulbrich. A stochastic semismooth Newton method for nonsmooth nonconvex optimization. *SIAM Journal on Optimization*, 29(4):2916–2948, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Marechal:2009:OCN

[MY09] Pierre Maréchal and Jane J. Ye. Optimizing condition numbers. *SIAM Journal on Optimization*, 20(2):935–947, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Meng:2010:OCE

[MY10] K. W. Meng and X. Q. Yang. Optimality conditions via exact penalty functions. *SIAM Journal on Optimization*, 20(6):3208–3231, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Marcotte:1998:WSS

[MZ98] Patrice Marcotte and Daoli Zhu. Weak sharp solutions of variational inequalities. *SIAM Journal on Optimization*, 9(1):179–189, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/>

[sam-bin/dbq/article/30986](http://epubs.siam.org/sam-bin/dbq/article/30986). See erratum [MZ00].

Meyer:1999:MMS

[MZ99] R. R. Meyer and G. Zakeri. Multicoordination methods for solving convex block-angular programs. *SIAM Journal on Optimization*, 10(1):121–131, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31363>.

Marcotte:2000:EWS

[MZ00] Patrice Marcotte and Daoli Zhu. Erratum: “Weak sharp solutions of variational inequalities” [SIAM J. Optim. 9 (1999), no. 1, 179–189, MR 99k:90176]. *SIAM Journal on Optimization*, 10(3):942, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36061>. See [MZ98].

Meng:2008:LDF

[MZGS08] Fanwen Meng, Gongyun Zhao, Mark Goh, and Robert De Souza. Lagrangian-dual functions and Moreau–Yosida regularization. *SIAM Journal on Optimization*, 19(1):39–61, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ma:2020:NNC

[MZH20] Xiao-Xiao Ma, Meng-Meng Zheng, and Zheng-Hai Huang.

- A note on the nonemptiness and compactness of solution sets of weakly homogeneous variational inequalities. *SIAM Journal on Optimization*, 30(1):132–148, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Naz91] **Nazareth:1991:HPA**
J. L. Nazareth. The homotopy principle and algorithms for linear programming. *SIAM Journal on Optimization*, 1(3):316–332, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NA20] **Na:2020:EDS**
Sen Na and Mihai Anitescu. Exponential decay in the sensitivity analysis of nonlinear dynamic programming. *SIAM Journal on Optimization*, 30(2):1527–1554, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NB01] **Nedic:2001:ISM**
Angelia Nedić and Dimitri P. Bertsekas. Incremental subgradient methods for nondifferentiable optimization. *SIAM Journal on Optimization*, 12(1):109–138, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36211>.
- [NARS14] **Nam:2014:NAN**
Nguyen Mau Nam, Nguyen Thai An, R. Blake Rector, and Jie Sun. Nonsmooth algorithms and Nesterov’s smoothing technique for generalized Fermat–Torricelli problems. *SIAM Journal on Optimization*, 24(4):1815–1839, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NC16] **Necoara:2016:PRC**
Ion Necoara and Dragos Clipici. Parallel random coordinate descent method for composite minimization: Convergence analysis and error bounds. *SIAM Journal on Optimization*, 26(1):197–226, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Nau02] **Naumann:2002:CJS**
Uwe Naumann. Cheaper Jacobians by simulated annealing. *SIAM Journal on Optimization*, 13(3):660–674, November/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36839>.
- [ND09] **Nie:2009:SSR**
Jiawang Nie and James Demmel. Sparse SOS relaxations for minimizing functions that are summations of small polynomials. *SIAM Journal on Optimization*, 19(4):1534–1558, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [ND10] **Neto:2010:ISC**
 Elias Salomão Helou Neto and Álvaro Rodolfo De Pierro. Incremental subgradients for constrained convex optimization: a unified framework and new methods. *SIAM Journal on Optimization*, 20(3):1547–1572, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NE19] **Niebling:2019:BBB**
 Julia Niebling and Gabriele Eichfelder. A Branch-and-Bound-Based algorithm for non-convex multiobjective optimization. *SIAM Journal on Optimization*, 29(1):794–821, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Nem04] **Nemirovski:2004:PMR**
 Arkadi Nemirovski. Prox-method with rate of convergence $O(1/t)$ for variational inequalities with Lipschitz continuous monotone operators and smooth convex-concave saddle point problems. *SIAM Journal on Optimization*, 15(1):229–251, ??? 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42562>.
- [Nes05] **Nesterov:2005:EGT**
 Yu. Nesterov. Excessive gap technique in nonsmooth convex minimization. *SIAM Journal on Optimization*, 16(1):235–249, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42228>.
- [Nes12] **Nesterov:2012:ECD**
 Yu. Nesterov. Efficiency of coordinate descent methods on huge-scale optimization problems. *SIAM Journal on Optimization*, 22(2):341–362, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Nes21] **Nesterov:2021:IHO**
 Yurii Nesterov. Inexact high-order proximal-point methods with auxiliary search procedure. *SIAM Journal on Optimization*, 31(4):2807–2828, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NEYL24] **Nguyen:2024:FGA**
 Lien T. Nguyen, Andrew Eberhard, Xinghuo Yu, and Chaojie Li. Fast gradient algorithm with dry-like friction and nonmonotone line search for nonconvex optimization problems. *SIAM Journal on Optimization*, 34(3):2557–2587, ??? 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1532354>.
- [NF01] **Nunez:2001:CMB**
 Manuel A. Nunez and Robert M. Freund. Condition-measure

- bounds on the behavior of the central trajectory of a semidefinite program. *SIAM Journal on Optimization*, 11(3):818–836, November/February 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36063>.
- [Nga15] Huynh Van Ngai. Global error bounds for systems of convex polynomials over polyhedral constraints. *SIAM Journal on Optimization*, 25(1):521–539, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ni05] Qin Ni. Optimality conditions for trust-region subproblems involving a conic model. *SIAM Journal on Optimization*, 15(3):826–837, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41899>.
- [Nie14] Jiawang Nie. Polynomial optimization with real varieties. *SIAM Journal on Optimization*, 23(3):1634–1646, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NJS21] Hideaki Nakao, Ruiwei Jiang, and Siqian Shen. Distributionally robust partially observable Markov decision process with moment-based ambiguity. *SIAM Journal on Optimization*, 31(1):461–488, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NKS10] Vladimir I. Norkin and Michiel A. Keyzer. On convergence of kernel learning estimators. *SIAM Journal on Optimization*, 20(3):1205–1223, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NKT10] Huynh Van Ngai, Alexander Kruger, and Michel Théra. Stability of error bounds for semi-infinite convex constraint systems. *SIAM Journal on Optimization*, 20(4):2080–2096, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NLS09] A. Nemirovski, A. Juditsky, G. Lan, and A. Shapiro. Robust stochastic approximation approach to stochastic programming. *SIAM Journal on Optimization*, 19(4):1574–1609, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Nemirovski:2009:RSA] A. Nemirovski, A. Juditsky, G. Lan, and A. Shapiro. Robust stochastic approximation approach to stochastic programming. *SIAM Journal on Optimization*, 19(4):1574–1609, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Nedici:2014:SSM] Angelia Nedić and Soomin Lee. On stochastic subgradient mirror-descent algorithm.

with weighted averaging. *SIAM Journal on Optimization*, 24(1):84–107, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ni:2006:TPN

[NLQT06] Qin Ni, Chen Ling, Liqun Qi, and Kok Lay Teo. A truncated projected Newton-type algorithm for large-scale semi-infinite programming. *SIAM Journal on Optimization*, 16(4):1137–1154, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ng:2010:GDM

[NLZ10] Chi-Kong Ng, Duan Li, and Lian-Sheng Zhang. Global descent method for global optimization. *SIAM Journal on Optimization*, 20(6):3161–3184, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Norton:2018:CUA

[NMU18] Matthew Norton, Alexander Mafusalov, and Stan Uryasev. Cardinality of upper average and its application to network optimization. *SIAM Journal on Optimization*, 28(2):1726–1750, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nash:1991:NSL

[NN91a] Stephen G. Nash and Jorge Nocedal. A numerical study of the limited memory BFGS

method and the truncated-Newton method for large scale optimization. *SIAM Journal on Optimization*, 1(3):358–372, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nesterov:1991:APP

[NN91b] Yu. Nesterov and A. Nemirovsky. Acceleration and parallelization of the path-following interior point method for a linearly constrained convex quadratic problem. *SIAM Journal on Optimization*, 1(4):548–564, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

n:2024:CTC

[nnSnPm24] Minh Tùng Nguyễn and Tiến-Sơn Phạm. Clarke’s tangent cones, subgradients, optimality conditions, and the Lipschitzness at infinity. *SIAM Journal on Optimization*, 34(2):1732–1754, May 2024. CODEN SJOPE8. ISSN 1095-7189.

Nedic:2009:APS

[NO09] Angelia Nedić and Asuman Ozdaglar. Approximate primal solutions and rate analysis for dual subgradient methods. *SIAM Journal on Optimization*, 19(4):1757–1780, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Noll:1998:RND

[Nol98] Dominikus Noll. Reconstruction with noisy data: An ap-

- proach via eigenvalue optimization. *SIAM Journal on Optimization*, 8(1):82–104, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29856>.
- [NR09] **Nedic:2017:AGC**
 Angelia Nedić, Alex Olshevsky, and Wei Shi. Achieving geometric convergence for distributed optimization over time-varying graphs. *SIAM Journal on Optimization*, 27(4):2597–2633, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NOS17] **Ngai:2023:SRF**
 Van Huynh Ngai and Jean-Paul Penot. The semiconvex regularization of functions. *SIAM Journal on Optimization*, 33(3):2457–2483, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1496426>.
- [NP23] **Netzer:2010:EFS**
 Tim Netzer, Daniel Plaumann, and Markus Schweighofer. Exposed faces of semidefinitely representable sets. *SIAM Journal on Optimization*, 20(4):1944–1955, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NRS21] **Nie:2009:ADP**
 Jiawang Nie and Kristian Ranestad. Algebraic degree of polynomial optimization. *SIAM Journal on Optimization*, 20(1):485–502, ??? 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NR20] **Nouiehed:2020:TRM**
 Maher Nouiehed and Meisam Razaviyayn. A trust region method for finding second-order stationarity in linearly constrained nonconvex optimization. *SIAM Journal on Optimization*, 30(3):2501–2529, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NRP19] **Necoara:2019:RPM**
 Ion Necoara, Peter Richtárik, and Andrei Patrascu. Randomized projection methods for convex feasibility: Conditioning and convergence rates. *SIAM Journal on Optimization*, 29(4):2814–2852, ??? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NRS21] **Nohra:2021:SRB**
 Carlos J. Nohra, Arvind U. Raghunathan, and Nikolaos Sahinidis. Spectral relaxations and branching strategies for global optimization of mixed-integer quadratic programs. *SIAM Journal on Optimization*, 31(1):142–171, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nash:1991:GPP

- [NS91] Stephen G. Nash and Ariela Sofer. A general-purpose parallel algorithm for unconstrained optimization. *SIAM Journal on Optimization*, 1(4):530–547, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nash:1998:CPI

- [NS98] Stephen G. Nash and Ariela Sofer. On the complexity of a practical interior-point method. *SIAM Journal on Optimization*, 8(3):833–849, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30662>.

Nemirovski:2007:CAC

- [NS07] Arkadi Nemirovski and Alexander Shapiro. Convex approximations of chance constrained programs. *SIAM Journal on Optimization*, 17(4):969–996, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nesterov:2014:PDS

- [NS14] Yu. Nesterov and S. Shpirko. Primal-dual subgradient method for huge-scale linear conic problems. *SIAM Journal on Optimization*, 24(3):1444–1457, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nesterov:2017:EAC

- [NS17] Yurii Nesterov and Sebastian U. Stich. Efficiency of the accelerated coordinate descent method on structured optimization problems. *SIAM Journal on Optimization*, 27(1):110–123, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Nohadani:2018:OUD

- [NS18] Omid Nohadani and Kartikey Sharma. Optimization under decision-dependent uncertainty. *SIAM Journal on Optimization*, 28(2):1773–1795, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Neumann:2021:GFP

- [NS21] Christoph Neumann and Oliver Stein. Generating feasible points for mixed-integer convex optimization problems by inner parallel cuts. *SIAM Journal on Optimization*, 31(3):2396–2428, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Natarajan:2018:BRB

- [NST18] Karthik Natarajan, Dongjian Shi, and Kim-Chuan Toh. Bounds for random binary quadratic programs. *SIAM Journal on Optimization*, 28(1):671–692, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [NT98] **Nesterov:1998:PDI**
 Yu. E. Nesterov and M. J. Todd. Primal-dual interior-point methods for self-scaled cones. *SIAM Journal on Optimization*, 8(2):324–364, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29020>.
- [NT02] **Ngai:2002:FNO**
 Huynh Van Ngai and Michel Théra. A fuzzy necessary optimality condition for non-Lipschitz optimization in Asplund spaces. *SIAM Journal on Optimization*, 12(3):656–668, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36665>.
- [NT06] **Nadezhkina:2006:SCT**
 Natalia Nadezhkina and Wataru Takahashi. Strong convergence theorem by a hybrid method for nonexpansive mappings and Lipschitz-continuous monotone mappings. *SIAM Journal on Optimization*, 16(4):1230–1241, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NT08] **Ngai:2008:EBM**
 Huynh Van Ngai and Michel Théra. Error bounds in metric spaces and application to the perturbation stability of metric regularity. *SIAM Journal on Optimization*, 19(1):1–20, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NT16] **Nesterov:2016:LSC**
 Yu. Nesterov and L. Tunçel. Local superlinear convergence of polynomial-time interior-point methods for hyperbolicity cone optimization problems. *SIAM Journal on Optimization*, 26(1):139–170, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NT19] **Nikolova:2019:ASA**
 Mila Nikolova and Pauline Tan. Alternating structure-adapted proximal gradient descent for nonconvex nonsmooth block-regularized problems. *SIAM Journal on Optimization*, 29(3):2053–2078, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NTA04] **Noll:2004:PAL**
 Dominikus Noll, Mounir Torki, and Pierre Apkarian. Partially augmented Lagrangian method for matrix inequality constraints. *SIAM Journal on Optimization*, 15(1):161–184, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41396>.
- [NTP24] **Niu:2024:DSD**
 Yi-Shuai Niu, Hoai An Le Thi, and Dinh Tao Pham. On

- Difference-of-SOS and Difference-of-Convex-SOS decompositions for polynomials. *SIAM Journal on Optimization*, 34(2):1852–1878, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- [NTZ23] Jiawang Nie, Xindong Tang, and Suhan Zhong. Rational generalized Nash equilibrium problems. *SIAM Journal on Optimization*, 33(3):1587–1620, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1456285>.
- [NV99] Yu. Nesterov and J.-Ph. Vial. Homogeneous analytic center cutting plane methods for convex problems and variational inequalities. *SIAM Journal on Optimization*, 9(3):707–728, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32481>.
- [NW12] Jiawang Nie and Li Wang. Regularization methods for SDP relaxations in large-scale polynomial optimization. *SIAM Journal on Optimization*, 22(2):408–428, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NWW09] Jorge Nocedal, Andreas Wächter, and Richard A. Waltz. Adaptive barrier update strategies for nonlinear interior methods. *SIAM Journal on Optimization*, 19(4):1674–1693, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NWX17] Jiawang Nie, Li Wang, and Jane J. Ye. Bilevel polynomial programs and semidefinite relaxation methods. *SIAM Journal on Optimization*, 27(3):1728–1757, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NWX21] Jiawang Nie, Li Wang, Jane J. Ye, and Suhan Zhong. A Lagrange multiplier expression method for bilevel polynomial optimization. *SIAM Journal on Optimization*, 31(3):2368–2395, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [NY02] Kung Fu Ng and Wei Hong Yang. Error bounds for abstract linear inequality systems. *SIAM Journal on Optimization*, 13(1):24–43, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38891>.

- Ng:2005:EBS**
- [NY05] Kung Fu Ng and Wei Hong Yang. Error bounds for some convex functions and distance composite functions. *SIAM Journal on Optimization*, 15(4): 1042–1056, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60334>.
- Narushima:2011:TTC**
- [NYF11] Yasushi Narushima, Hiroshi Yabe, and John A. Ford. A three-term conjugate gradient method with sufficient descent property for unconstrained optimization. *SIAM Journal on Optimization*, 21(1): 212–230, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p212_s1.
- Nie:2018:CSA**
- [NYZ18] Jiawang Nie, Zi Yang, and Xinzhen Zhang. A complete semidefinite algorithm for detecting copositive matrices and tensors. *SIAM Journal on Optimization*, 28(4):2902–2921, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ng:2001:EBL**
- [NZ01] Kung Fu Ng and Xi Yin Zheng. Error bounds for lower semicontinuous functions in normed spaces. *SIAM Journal on Optimization*, 12(1):1–17, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35888>.
- Nie:2016:PMS**
- [NZ16] Jiawang Nie and Xinzhen Zhang. Positive maps and separable matrices. *SIAM Journal on Optimization*, 26(2): 1236–1256, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Oztoprak:2023:COP**
- [OBN23] Figen Oztoprak, Richard Byrd, and Jorge Nocedal. Constrained optimization in the presence of noise. *SIAM Journal on Optimization*, 33(3): 2118–2136, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1450999>.
- OReilly:2023:SR**
- [OC23] Eliza O’Reilly and Venkat Chandrasekaran. Spectrahedral regression. *SIAM Journal on Optimization*, 33(2): 553–588, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1455899>.
- Ochs:2019:UAI**
- [Och19] Peter Ochs. Unifying abstract inexact convergence theorems

- and block coordinate variable metric iPiano. *SIAM Journal on Optimization*, 29(1):541–570, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [OHF12]
- [O'D21] Brendan O'Donoghue. Operator splitting for a homogeneous embedding of the linear complementarity problem. *SIAM Journal on Optimization*, 31(3):1999–2023, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [O'L95]
- [OF03] Fernando Ordóñez and Robert M. Freund. Computational experience and the explanatory value of condition measures for linear optimization. *SIAM Journal on Optimization*, 14(2):307–333, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40180>. [OLM24]
- [OG03] Mohammad R. Oskoorouchi and Jean-Louis Goffin. The analytic center cutting plane method with semidefinite cuts. *SIAM Journal on Optimization*, 13(4):1029–1053, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37414>. [OLR21]
- [Okuno:2012:REE] Takayuki Okuno, Shunsuke Hayashi, and Masao Fukushima. A regularized explicit exchange method for semi-infinite programs with an infinite number of conic constraints. *SIAM Journal on Optimization*, 22(3):1009–1028, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [OLeary:1995:WBN] Dianne P. O'Leary. Why Broyden's nonsymmetric method terminates on linear equations. *SIAM Journal on Optimization*, 5(2):231–235, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ouyang:2024:DPA] Wenqing Ouyang, Yang Liu, and Andre Milzarek. Descent properties of an Anderson accelerated gradient method with restarting. *SIAM Journal on Optimization*, 34(1):336–365, January 2024. CODEN SJOPE8. ISSN 1095-7189.
- [Ostrovskii:2021:ESF] Dmitrii M. Ostrovskii, Andrew Lowy, and Meisam Razaviyayn. Efficient search of first-order Nash equilibria in nonconvex-concave smooth min-max problems. *SIAM Journal on Optimization*, 31(4):2508–2538, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Onn94] Shmuel Onn. Approximating oracle machines for combinatorial optimization. *SIAM Journal on Optimization*, 4(1):142–145, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Opazo:2017:EAP] Felipe Opazo, Jirí V. Outrata, and Héctor Ramírez C. Erratum: On The Aubin Property of Critical Points to Perturbed Second-Order Cone Programs. *SIAM Journal on Optimization*, 27(3):2143–2151, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See [OR11].
- [Obara:2022:SQO] Mitsuaki Obara, Takayuki Okuno, and Akiko Takeda. Sequential quadratic optimization for nonlinear optimization problems on Riemannian manifolds. *SIAM Journal on Optimization*, 32(2):822–853, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1370173>.
- [Ochs:2019:AFN] Peter Ochs and Thomas Pock. Adaptive FISTA for nonconvex optimization. *SIAM Journal on Optimization*, 29(4):2482–2503, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ogryczak:2002:DSD] Włodzimierz Ogryczak and Andrzej Ruszczyński. Dual stochastic dominance and related mean-risk models. *SIAM Journal on Optimization*, 13(1):60–78, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37507>.
- [Ortrata:2011:APC] Jirí V. Outrata and Héctor Ramírez C. On the Aubin property of critical points to perturbed second-order cone programs. *SIAM Journal on Optimization*, 21(3):798–823, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p798_s1. See erratum [OOR17].
- [Oppezzi:2016:ECO] Pirro Oppezzi and Anna Rossi. Existence and convergence of optimal points with respect to improvement sets. *SIAM Journal on Optimization*, 26(2):1293–1311, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ortega:1991:OCG] James M. Ortega. Orderings for conjugate gradient preconditionings. *SIAM Journal on Optimization*, 1(4):565–582, November 1991. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Overton:1999:D

- [OS99] Michael L. Overton and Robert B. Schnabel. Dedication. *SIAM Journal on Optimization*, 9(4): vii–viii, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/94709>. [Ous99]

Oymak:2017:FRP

- [OS17] Samet Oymak and Mahdi Soltanolkotabi. Fast and reliable parameter estimation from nonlinear observations. *SIAM Journal on Optimization*, 27(4): 2276–2300, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Out94]

Ouyang:2023:UCG

- [OS23] Yuyuan Ouyang and Trevor Squires. Universal conditional gradient sliding for convex optimization. *SIAM Journal on Optimization*, 33(4):2962–2987, November 2023. CODEN SJOPE8. ISSN 1095-7189. [Ove92]

Oliveira:2011:IBM

- [OSS11] Wellington Oliveira, Claudia Sagastizábal, and Susana Scheimberg. Inexact bundle methods for two-stage stochastic programming. *SIAM Journal on Optimization*, 21(2): 517–544, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p517_s1. [Ous99]

[siam.org/siopt/resource/1/sjope8/v21/i2/p517_s1](http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p517_s1).

Oustry:1999:LME

François Oustry. The U -Lagrangian of the maximum eigenvalue function. *SIAM Journal on Optimization*, 9(2): 526–549, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31177>.

Outrata:1994:OPV

Jiří V. Outrata. On optimization problems with variational inequality constraints. *SIAM Journal on Optimization*, 4(2):340–357, May 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Overton:1992:LSO

Michael L. Overton. Large-scale optimization of eigenvalues. *SIAM Journal on Optimization*, 2(1):88–120, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Oberlin:2006:ASI

Christina Oberlin and Stephen J. Wright. Active set identification in nonlinear programming. *SIAM Journal on Optimization*, 17(2):577–605, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [OW06]

Papp:2014:SCS

- [PA14] Dávid Papp and Farid Alizadeh. Semidefinite characterization of sum-of-squares cones in algebras. *SIAM Journal on Optimization*, 23(3):1398–1423, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Perez-Aros:2019:SFS

- [PA19] Pedro Pérez-Aros. Subdifferential formulae for the supremum of an arbitrary family of functions. *SIAM Journal on Optimization*, 29(2):1714–1743, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pang:1994:SPC

- [Pan94] Jong-Shi Pang. Serial and parallel computation of Karush–Kuhn–Tucker points via nonsmooth equations. *SIAM Journal on Optimization*, 4(4):872–893, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pan:2005:RDP

- [Pan05] Ping-Qi Pan. A revised dual projective pivot algorithm for linear programming. *SIAM Journal on Optimization*, 16(1):49–68, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60225>.

Pang:2016:SHQ

- [Pan16] C. H. Jeffrey Pang. The supporting halfspace-quadratic programming strategy for the dual of the best approximation problem. *SIAM Journal on Optimization*, 26(4):2591–2619, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pang:2019:DDA

- [Pan19] C. H. Jeffrey Pang. Distributed deterministic asynchronous algorithms in time-varying graphs through Dykstra splitting. *SIAM Journal on Optimization*, 29(1):484–510, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Papp:2016:CLS

- [Pap16] Dávid Papp. On the complexity of local search in unconstrained quadratic binary optimization. *SIAM Journal on Optimization*, 26(2):1257–1261, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Papp:2017:SIP

- [Pap17] Dávid Papp. Semi-infinite programming using high-degree polynomial interpolants and semidefinite programming. *SIAM Journal on Optimization*, 27(3):1858–1879, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Padmanabhan:2022:EPB

- [PARN22] Divya Padmanabhan, Selin Damla Ahipasaoglu, Arjun Ramachandra, and Karthik Natarajan. Extremal probability bounds in combinatorial optimization. *SIAM Journal on Optimization*, 32(4):2828–2858, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1442504>.

Patriksson:1998:CAU

- [Pat98] Michael Patriksson. Cost approximation: a unified framework of descent algorithms for nonlinear programs. *SIAM Journal on Optimization*, 8(2):561–582, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27577>.

Patel:2016:KBS

- [Pat16] Vivak Patel. Kalman-based stochastic gradient method with stop condition and insensitivity to conditioning. *SIAM Journal on Optimization*, 26(4):2620–2648, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pataki:2017:BSP

- [Pat17] Gábor Pataki. Bad semidefinite programs: They all look the same. *SIAM Journal on Optimization*, 27(1):146–172, 2017. CODEN SJOPE8.

ISSN 1052-6234 (print), 1095-7189 (electronic).

Perez-Aros:2021:MES

- [PAV21] Pedro Pérez-Aros and Emilio Vilches. Moreau envelope of supremum functions with applications to infinite and stochastic programming. *SIAM Journal on Optimization*, 31(3):1635–1657, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Phade:2017:DBD

- [PB17] Soham R. Phade and Vivek S. Borkar. A distributed Boyle–Dijkstra–Han scheme. *SIAM Journal on Optimization*, 27(3):1880–1897, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Price:2003:FGU

- [PC03] C. J. Price and I. D. Coope. Frames and grids in unconstrained and linearly constrained optimization: a nonsmooth approach. *SIAM Journal on Optimization*, 14(2):415–438, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pan:2008:CIP

- [PC08] Shaohua Pan and Jein-Shan Chen. A class of interior proximal-like algorithms for convex second-order cone programming. *SIAM Journal on Optimization*, 19(2):883–910, 2008. CODEN SJOPE8. ISSN

- 1052-6234 (print), 1095-7189 (electronic).
- [PCA19] **Petra:2019:SQN** Cosmin G. Petra, Naiyuan Chiang, and Mihai Anitescu. A structured quasi-Newton algorithm for optimizing with incomplete Hessian information. *SIAM Journal on Optimization*, 29(2):1048–1075, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Pen19] **Penot:2019:EBM** Jean-Paul Penot. Error bounds and multipliers in constrained optimization problems with tolerance. *SIAM Journal on Optimization*, 29(1):522–540, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Peñ00a] **Pena:2000:UGI** Javier Peña. Understanding the geometry of infeasible perturbations of a conic linear system. *SIAM Journal on Optimization*, 10(2):534–550, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32367>.
- [Peñ23] **Pena:2023:AIC** Javier F. Peña. Affine invariant convergence rates of the conditional gradient method. *SIAM Journal on Optimization*, 33(4):2654–2674, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1465263>.
- [Pen00b] **Pennanen:2000:DGE** Teemu Pennanen. Dualization of generalized equations of maximal monotone type. *SIAM Journal on Optimization*, 10(3):809–835, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34044>.
- [Per23] **Permenter:2023:GIP** Frank Permenter. A geodesic interior-point method for linear optimization over symmetric cones. *SIAM Journal on Optimization*, 33(2):1006–1034, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1385019>.
- [Pen17] **Penot:2017:HOO** Jean-Paul Penot. Higher-order optimality conditions and higher-order tangent sets. *SIAM Journal on Optimization*, 27(4):2508–2527, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PFA17] **Permenter:2017:SCO** Frank Permenter, Henrik A. Friberg, and Erling D. Andersen. Solving conic optimization problems via self-dual embedding and facial reduction: a uni-

- fied approach. *SIAM Journal on Optimization*, 27(3):1257–1282, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Pfe08] Marc E. Pfetsch. Branch-and-cut for the maximum feasible subsystem problem. *SIAM Journal on Optimization*, 19(1):21–38, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Pf10] G. Ch. Pflug. Version-independence and nested distributions in multistage stochastic optimization. *SIAM Journal on Optimization*, 20(3):1406–1420, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PGGH18] Raghu Pasupathy, Peter Glynn, Soumyadip Ghosh, and Fatemeh S. Hashemi. On sampling rates in simulation-based recursions. *SIAM Journal on Optimization*, 28(1):45–73, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PH18] Madhushini Narayana Prasad and Grani A. Hanasusanto. Improved conic reformulations for K -means clustering. *SIAM Journal on Optimization*, 28(4):3105–3126, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PH23] Jong-Shi Pang and Shaoning Han. Some strongly polynomially solvable convex quadratic programs with bounded variables. *SIAM Journal on Optimization*, 33(2):899–920, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1463793>.
- [Pha20] Tien-Son Pham. Local minimizers of semi-algebraic functions from the viewpoint of tangencies. *SIAM Journal on Optimization*, 30(3):1777–1794, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PHR91] Jong-Shi Pang, Shih-Ping Han, and Narayan Rangaraj. Minimization of locally Lipschitzian functions. *SIAM Journal on Optimization*, 1(1):57–82, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Phu10] Hoang Xuan Phu. Minimizing convex functions with bounded perturbations. *SIAM Journal on Optimization*, 20(5):2709–2729, 2010. CODEN SJOPE8.

Pfetsch:2008:BCM**Pflug:2010:VIN****Pasupathy:2018:SRS****Prasad:2018:ICR****Pang:2023:SSP****Pham:2020:LMS****Pang:1991:MLL****Phu:2010:MCF**

ISSN 1052-6234 (print), 1095-7189 (electronic).

Pichler:2013:ERM

[Pic13]

Alois Pichler. Evaluations of risk measures for different probability measures. *SIAM Journal on Optimization*, 23(1):530–551, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Parente:2008:CIV

[PLS08]

L. A. Parente, P. A. Lotito, and M. V. Solodov. A class of inexact variable metric proximal point algorithms. *SIAM Journal on Optimization*, 19(1):240–260, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Puleo:2015:CCC

[PM15]

Gregory J. Puleo and Olga Milenkovic. Correlation clustering with constrained cluster sizes and extended weights bounds. *SIAM Journal on Optimization*, 25(3):1857–1872, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pinar:2010:OSV

[PMDL10]

Ali Pinar, Juan Meza, Vaibhav Donde, and Bernard Lesieur. Optimization strategies for the vulnerability analysis of the electric power grid. *SIAM Journal on Optimization*, 20(4):1786–1810, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Paternain:2019:NBM

[PMR19]

Santiago Paternain, Aryan Mokhtari, and Alejandro Ribeiro. A Newton-based method for nonconvex optimization with fast evasion of saddle points. *SIAM Journal on Optimization*, 29(1):343–368, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pironio:2010:CRP

[PNA10]

S. Pironio, M. Navascués, and A. Acín. Convergent relaxations of polynomial optimization problems with noncommuting variables. *SIAM Journal on Optimization*, 20(5):2157–2180, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pena-Ordieres:2020:SCC

[POLW20]

Alejandra Peña-Ordieres, James R. Luedtke, and Andreas Wächter. Solving chance-constrained problems via a smooth sample-based nonlinear approximation. *SIAM Journal on Optimization*, 30(3):2221–2250, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Porumbel:2020:PCP

[Por20]

Daniel Porumbel. Projective cutting-planes. *SIAM Journal on Optimization*, 30(1):1007–1032, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Pot96] Florian A. Potra. An infeasible-interior-point predictor-corrector algorithm for linear programming. *SIAM Journal on Optimization*, 6(1):19–32, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Potra:1996:IIP**
- [Pot08] Florian A. Potra. Primal-dual affine scaling interior point methods for linear complementarity problems. *SIAM Journal on Optimization*, 19(1):114–143, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Potra:2008:PDA**
- [Pot12] Florian A. Potra. Weighted complementarity problems — a new paradigm for computing equilibria. *SIAM Journal on Optimization*, 22(4):1634–1654, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Potra:2012:WCP**
- [Pot14] Florian A. Potra. Interior point methods for sufficient horizontal LCP in a wide neighborhood of the central path with best known iteration complexity. *SIAM Journal on Optimization*, 24(1):1–28, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Potra:2014:IPM**
- [Pow95] M. J. D. Powell. Some convergence properties of the modified log barrier method for linear programming. *SIAM Journal on Optimization*, 5(4):695–739, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Powell:1995:SCP**
- [PP12] Georg Ch. Pflug and Alois Pichler. A distance for multistage stochastic optimization models. *SIAM Journal on Optimization*, 22(1):1–23, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p1_s1. **Pflug:2012:DMS**
- [PP16] Georg Ch. Pflug and Alois Pichler. From empirical observations to tree models for stochastic optimization: Convergence properties. *SIAM Journal on Optimization*, 26(3):1715–1740, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Pflug:2016:EOT**
- [PP18] L. R. Lucambio Pérez and L. F. Prudente. Nonlinear conjugate gradient methods for vector optimization. *SIAM Journal on Optimization*, 28(3):2690–2720, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Perez:2018:NCG**

- [PQ93] **Pang:1993:NEM** Jong-Shi Pang and Li Qun Qi. Nonsmooth equations: motivation and algorithms. *SIAM Journal on Optimization*, 3(3): 443–465, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PQ93] **Polak:2001:SOA** Elijah Polak, Liqun Qi, and Defeng Sun. Second-order algorithms for generalized finite and semi-infinite min-max problems. *SIAM Journal on Optimization*, 11(4):937–961, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35895>.
- [PR93] **Poore:1993:LRA** Aubrey B. Poore and Nenad Rijavec. A Lagrangian relaxation algorithm for multidimensional assignment problems arising from multitarget tracking. *SIAM Journal on Optimization*, 3(3):544–563, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PR95] **Poljak:1995:NRG** Svatopluk Poljak and Franz Rendl. Nonpolyhedral relaxations of graph-bisection problems. *SIAM Journal on Optimization*, 5(3):467–487, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PR96] **Poliquin:1996:GHP** R. A. Poliquin and R. T. Rockafellar. Generalized Hessian properties of regularized nonsmooth functions. *SIAM Journal on Optimization*, 6(4):1121–1137, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27931>.
- [PR98] **Poliquin:1998:TSL** R. A. Poliquin and R. T. Rockafellar. Tilt stability of a local minimum. *SIAM Journal on Optimization*, 8(2):287–299, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30929>.
- [PR07a] **Pesenti:2007:ICP** Raffaele Pesenti and Franca Rinaldi. The image containment problem and some classes of polynomial instances. *SIAM Journal on Optimization*, 17(4): 1189–1204, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PR07b] **Povh:2007:CPA** Janez Povh and Franz Rendl. A copositive programming approach to graph partitioning. *SIAM Journal on Optimization*, 18(1):223–241, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [PR20] **Pena:2020:DID**
 Javier Peña and Vera Roshchina. A data-independent distance to infeasibility for linear conic systems. *SIAM Journal on Optimization*, 30(2):1049–1066, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PRRL97] **Pardalos:1997:IVR**
 P. M. Pardalos, K. G. Ramakrishnan, M. G. C. Resende, and Y. Li. Implementation of a variance reduction-based lower bound in a branch-and-bound algorithm for the quadratic assignment problem. *SIAM Journal on Optimization*, 7(1):280–294, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27339>.
- [PRS16] **Penna:2016:NFW**
 Javier Peña, Daniel Rodríguez, and Negar Soheili. On the von Neumann and Frank–Wolfe algorithms with away steps. *SIAM Journal on Optimization*, 26(1):499–512, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PRT02] **Peng:2002:PDI**
 Jiming Peng, Cornelis Roos, and Tamás Terlaky. Primal-dual interior-point methods for second-order conic optimization based on self-regular proximities. *SIAM Journal on Optimization*, 13(1):179–203, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38323>.
- [PS97] **Potra:1997:LSI**
 Florian A. Potra and Rongqin Sheng. A large-step infeasible-interior-point method for the P_* -matrix LCP. *SIAM Journal on Optimization*, 7(2):318–335, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27935>.
- [PS98] **Potra:1998:SCP**
 Florian A. Potra and Rongqin Sheng. A superlinearly convergent primal-dual infeasible-interior-point algorithm for semidefinite programming. *SIAM Journal on Optimization*, 8(4):1007–1028, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29495>.
- [PS10a] **Padakandla:2010:SCO**
 Arun Padakandla and Rajesh Sundaresan. Separable convex optimization problems with linear ascending constraints. *SIAM Journal on Optimization*, 20(3):1185–1204, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [PS10b] **Potra:2010:CSC** Florian A. Potra and Josef Stoer. On a class of superlinearly convergent polynomial time interior point methods for sufficient LCP. *SIAM Journal on Optimization*, 20(3):1333–1363, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PS21b] **Pichler:2021:MFD** Alois Pichler and Alexander Shapiro. Mathematical foundations of distributionally robust multistage optimization. *SIAM Journal on Optimization*, 31(4):3044–3067, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PS11] **Pang:2011:NGS** Jong-Shi Pang and Gesualdo Scutari. Nonconvex games with side constraints. *SIAM Journal on Optimization*, 21(4):1491–1522, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1491_s1.
- [PT18] **Pang:2018:DMC** Jong-Shi Pang and Min Tao. Decomposition methods for computing directional stationary solutions of a class of nonsmooth nonconvex optimization problems. *SIAM Journal on Optimization*, 28(2):1640–1669, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PS20] **Paquette:2020:SLS** Courtney Paquette and Katya Scheinberg. A stochastic line search method with expected complexity analysis. *SIAM Journal on Optimization*, 30(1):349–376, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PT24] **Pataki:2024:HDE** Gábor Pataki and Aleksandr Touzov. How do exponential size solutions arise in semidefinite programming? *SIAM Journal on Optimization*, 34(1):977–1005, March 2024. CODEN SJOPE8. ISSN 1095-7189.
- [PS21a] **Pasupathy:2021:ASS** Raghu Pasupathy and Yongjia Song. Adaptive sequential sample average approximation for solving two-stage stochastic linear programs. *SIAM Journal on Optimization*, 31(1):1017–1048, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PTJY10] **Pong:2010:TNR** Ting Kei Pong, Paul Tseng, Shuiwang Ji, and Jieping Ye. Trace norm regularization: Reformulations, algorithms, and multi-task learning. *SIAM Journal on Optimization*, 20(6):3465–3489, ??? 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3465_s1.

siam.org/siopt/resource/1/sjope8/v20/i6/p3465_s1.

Peng:2005:PCA

- [PTZ05] Jiming Peng, Tamás Terlaky, and Yunbin Zhao. A predictor-corrector algorithm for linear optimization based on a specific self-regular proximity function. *SIAM Journal on Optimization*, 15(4):1105–1127, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60399>.

Pullan:1997:SGD

- [Pul97] Malcolm C. Pullan. A study of general dynamic network programs with arc time-delays. *SIAM Journal on Optimization*, 7(4):889–912, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28818>.

Pullan:2000:CGC

- [Pul00] Malcolm C. Pullan. Convergence of a general class of algorithms for separated continuous linear programs. *SIAM Journal on Optimization*, 10(3):722–731, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27882>.

Pauwels:2023:DSK

- [PV23] Edouard Pauwels and Samuel Vaiter. The derivatives of Sinkhorn–Knopp converge. *SIAM Journal on Optimization*, 33(3):1494–1517, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1512703>.

Pena:2007:CSN

- [PVZ07a] Javier Peña, Juan Vera, and Luis F. Zuluaga. Computing the stability number of a graph via linear and semidefinite programming. *SIAM Journal on Optimization*, 18(1):87–105, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pendavingh:2007:NKZ

- [PvZ07b] R. A. Pendavingh and S. H. M. van Zwam. New Korkin–Zolotarev inequalities. *SIAM Journal on Optimization*, 18(1):364–378, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Pochet:1998:SKP

- [PW98] Y. Pochet and R. Weismantel. The sequential knapsack polytope. *SIAM Journal on Optimization*, 8(1):248–264, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28521>.

- [PW05] **Pflug:2005:PGE**
Georg Ch. Pflug and Heinz Weisshaupt. Probability gradient estimation by set-valued calculus and applications in network design. *SIAM Journal on Optimization*, 15(3): 898–914, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43163>.
- [PW06] **Polak:2006:PCG**
Elijah Polak and Michael Wether. Precision control for generalized pattern search algorithms with adaptive precision function evaluations. *SIAM Journal on Optimization*, 16(3): 650–669, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PW07] **Peng:2007:AMT**
Jiming Peng and Yu Wei. Approximating K -means-type clustering via semidefinite programming. *SIAM Journal on Optimization*, 18(1):186–205, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PW16] **Planiden:2016:SCF**
C. Planiden and X. Wang. Strongly convex functions, Moreau envelopes, and the generic nature of convex functions with strong minimizers. *SIAM Journal on Optimization*, 26(2): 1341–1364, 2016. CO-
- [PW17] **Pilanci:2017:NSN**
Mert Pilanci and Martin J. Wainwright. Newton sketch: a near linear-time optimization algorithm with linear-quadratic convergence. *SIAM Journal on Optimization*, 27(1):205–245, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PW19] **Prusa:2019:SLR**
Daniel Prusa and Tomas Werner. Solving LP relaxations of some NP-hard problems is as hard as solving any linear program. *SIAM Journal on Optimization*, 29(3):1745–1771, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PY93] **Potra:1993:QCP**
Florian Potra and Yinyu Ye. A quadratically convergent polynomial algorithm for solving entropy optimization problems. *SIAM Journal on Optimization*, 3(4):843–860, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PY97] **Peng:1997:OCM**
Ji-Ming Peng and Ya-Xiang Yuan. Optimality conditions for the minimization of a quadratic with two quadratic constraints. *SIAM Journal on Optimization*,

- 7(3):579–594, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26152>.
- [PY19] **Papp:2019:SSO**
 Dávid Papp and Sercan Yildiz. Sum-of-squares optimization without semidefinite programming. *SIAM Journal on Optimization*, 29(1):822–851, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Pyt98] **Pytlak:1998:EAL**
 R. Pytlak. An efficient algorithm for large-scale nonlinear programming problems with simple bounds on the variables. *SIAM Journal on Optimization*, 8(2):532–560, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27651>.
- [PZ94] **Pinar:1994:SEP**
 Mustafa Ç. Pinar and Stavros A. Zenios. On smoothing exact penalty functions for convex constrained optimization. *SIAM Journal on Optimization*, 4(3):486–511, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [PZ98] **Pales:1998:OPC**
 Zsolt Páles and Vera Zeidan. Optimum problems with certain lower semicontinuous set-valued constraints. *SIAM Journal on Optimization*, 8(3):707–727, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30725>.
- [PZ00] **Pales:2000:OPM**
 Zsolt Páles and Vera Zeidan. Optimum problems with measurable set-valued constraints. *SIAM Journal on Optimization*, 11(2):426–443, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35094>.
- [PZ03] **Pales:2003:OCP**
 Zsolt Páles and Vera Zeidan. Optimal control problems with set-valued control and state constraints. *SIAM Journal on Optimization*, 14(2):334–358, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38977>.
- [QCLP19] **Qi:2019:EID**
 Zhengling Qi, Ying Cui, Yufeng Liu, and Jong-Shi Pang. Estimation of individualized decision rules based on an optimized covariate-dependent equivalent of random outcomes. *SIAM Journal on Optimization*, 29(3):2337–2362, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [QGD18] **Quirynen:2018:INT** Rien Quirynen, Sébastien Gros, and Moritz Diehl. Inexact Newton-type optimization with iterated sensitivities. *SIAM Journal on Optimization*, 28(1):74–95, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Qiu08] **Qiu:2008:DCS** Jing-Hui Qiu. Dual characterization and scalarization for Benson proper efficiency. *SIAM Journal on Optimization*, 19(1):144–162, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Qi95] **Qi:1995:TRA** Li Qun Qi. Trust region algorithms for solving nonsmooth equations. *SIAM Journal on Optimization*, 5(1):219–230, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [QLSZ18] **Qian:2018:CGC** Xun Qian, Li-Zhi Liao, Jie Sun, and Hong Zhu. The convergent generalized central paths for linearly constrained convex programming. *SIAM Journal on Optimization*, 28(2):1183–1204, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Qi99] **Qi:1999:RSN** Hou-Duo Qi. A regularized smoothing Newton method for box constrained variational inequality problems with P_0 -functions. *SIAM Journal on Optimization*, 10(2):315–330, December/February 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32404>.
- [QP23] **Qian:2023:CCN** Yitian Qian and Shaohua Pan. Convergence of a class of non-monotone descent methods for Kurdyka–Lojasiewicz optimization problems. *SIAM Journal on Optimization*, 33(2):638–651, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1469663>.
- [Qi16] **Qi:2016:CMO** Hou-Duo Qi. A convex matrix optimization for the additive constant problem in multidimensional scaling with application to locally linear embedding. *SIAM Journal on Optimization*, 26(4):2564–2590, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [QQ00] **Qi:2000:NQF** Hou-Duo Qi and Liqun Qi. A new QP-free, globally convergent, locally superlinearly convergent algorithm for inequality constrained optimization. *SIAM Journal on Optimization*, 11(1):113–132, July/August 2000. CODEN SJOPE8.

- ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35393>.
- [QQS03] Houduo Qi, Liqun Qi, and Defeng Sun. Solving Karush–Kuhn–Tucker systems via the trust region and the conjugate gradient methods. *SIAM Journal on Optimization*, 14(2): 439–463, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Qi:2003:SKK**
- [QT24] Zheng Qu and Xindong Tang. A correlatively sparse Lagrange multiplier expression relaxation for polynomial optimization. *SIAM Journal on Optimization*, 34(1):127–162, January 2024. CODEN SJOPE8. ISSN 1095-7189. **Qu:2024:CSL**
- [QW00] Liqun Qi and Zengxin Wei. On the constant positive linear dependence condition and its application to SQP methods. *SIAM Journal on Optimization*, 10(4):963–981, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32662>. See corrigendum [QW01]. **Qi:2000:CPL**
- [QW01] Liqun Qi and Zengxin Wei. Corrigendum: “On the Constant Positive Linear Dependence Condition and Its Application to SQP Methods” [SIAM J. Optim. 10 (2000), no. 4, 963–981; MR 2001e:90100]. *SIAM Journal on Optimization*, 11(4):1145–1146, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38332>. See [QW00]. **Qui:2020:SMF**
- [QW20] Nguyen Thanh Qui and Daniel Wachsmuth. Subgradients of marginal functions in parametric control problems of partial differential equations. *SIAM Journal on Optimization*, 30(2): 1724–1755, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Qui:2020:SMF**
- [QWY04] Liqun Qi, Zhong Wan, and Yu-Fei Yang. Global minimization of normal quartic polynomials based on global descent directions. *SIAM Journal on Optimization*, 15(1): 275–302, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42085>. **Qi:2004:GMN**
- [QY14] Nguyen Thanh Qui and Nguyen Dong Yen. A class of linear generalized equations. *SIAM Journal on Optimization*, 24(1):210–231, 2014. CODEN SJOPE8. **Qui:2014:CLG**

ISSN 1052-6234 (print), 1095-7189 (electronic).

Qi:2000:SNM

[QZ00]

Liqun Qi and Guanglu Zhou. A smoothing Newton method for minimizing a sum of Euclidean norms. *SIAM Journal on Optimization*, 11(2): 389–410, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34895>.

Quincampoix:2008:PMP

[QZ08]

Marc Quincampoix and Nadia Zlateva. Parameterized minimax problem: On Lipschitz-like dependence of the solution with respect to the parameter. *SIAM Journal on Optimization*, 19(3): 1250–1269, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Romeijn:2005:CGA

[RADK05]

H. Edwin Romeijn, Ravindra K. Ahuja, James F. Dempsey, and Arvind Kumar. A column generation approach to radiation therapy treatment planning using aperture modulation. *SIAM Journal on Optimization*, 15(3): 838–862, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60661>.

Raghunathan:2013:GON

[Rag13]

Arvind U. Raghunathan. Global optimization of nonlinear network design. *SIAM Journal on Optimization*, 23(1):268–295, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ralph:1996:PMU

[Ral96]

Daniel Ralph. A parallel method for unconstrained discrete-time optimal control problems. *SIAM Journal on Optimization*, 6(2): 488–512, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ramponi:2018:CSA

[Ram18]

Federico Alessandro Ramponi. Consistency of the scenario approach. *SIAM Journal on Optimization*, 28(1):135–162, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rangarajan:2006:PCI

[Ran06]

Bharath Kumar Rangarajan. Polynomial convergence of infeasible interior-point methods over symmetric cones. *SIAM Journal on Optimization*, 16(4): 1211–1229, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Raydan:1997:BBG

[Ray97]

Marcos Raydan. The Barzilai and Borwein gradient method for the large scale unconstrained minimization problem. *SIAM*

- Journal on Optimization*, 7(1): 26–33, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26636>. [RC22]
- [RB05] **Raghunathan:2005:IPM**
Arvind U. Raghunathan and Lorenz T. Biegler. An interior point method for mathematical programs with complementarity constraints (MPCCs). *SIAM Journal on Optimization*, 15(3):720–750, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42908>. [RCGR18]
- [RB18] **Raghunathan:2018:DIP**
Arvind U. Raghunathan and Lorenz T. Biegler. LDL^T direction interior point method for semidefinite programming. *SIAM Journal on Optimization*, 28(1):693–734, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [RD95]
- [RBDM22] **Rahimian:2022:ESM**
Hamed Rahimian, Güzin Bayrak- san, and Tito Homem De-Mello. Effective scenarios in multi-stage distributionally robust optimization with a focus on total variation distance. *SIAM Journal on Optimization*, 32(3): 1698–1727, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1446484>. [Rd20]
- Rebegoldi:2022:SIA**
Simone Rebegoldi and Luca Calatroni. Scaled, inexact, and adaptive generalized FISTA for strongly convex optimization. *SIAM Journal on Optimization*, 32(3):2428–2459, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1391699>.
- Rahmaniani:2018:ABD**
Ragheb Rahmaniani, Teodor Gabriel Crainic, Michel Gendreau, and Walter Rei. Accelerating the Benders decomposition method: Application to stochastic network design problems. *SIAM Journal on Optimization*, 28(1): 875–903, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Rogers:1995:PTM**
Jack W. Rogers, Jr. and Robert A. Donnelly. Potential transformation methods for large-scale global optimization. *SIAM Journal on Optimization*, 5(4):871–891, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Roulet:2020:SRA**
Vincent Roulet and Alexandre d’Aspremont. Sharpness, restart, and acceleration. *SIAM Journal on Optimization*, 30(1): 262–289, ??? 2020. CO-

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Renegar:1995:ICM

- [Ren95] James Renegar. Incorporating condition measures into the complexity theory of linear programming. *SIAM Journal on Optimization*, 5(3):506–524, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Renegar:1996:CNB

- [Ren96] James Renegar. Condition numbers, the barrier method, and the conjugate-gradient method. *SIAM Journal on Optimization*, 6(4):879–912, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27532>.

Renegar:2016:ESM

- [Ren16] James Renegar. “efficient” sub-gradient methods for general convex optimization. *SIAM Journal on Optimization*, 26(4):2649–2676, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Revalski:1997:HSW

- [Rev97] Julian P. Revalski. Hadamard and strong well-posedness for convex programs. *SIAM Journal on Optimization*, 7(2):519–526, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28677>.

[//epubs.siam.org/sam-bin/dbq/article/28677](http://epubs.siam.org/sam-bin/dbq/article/28677).

Rostalski:2011:NAG

- [RFB⁺11] Philipp Rostalski, Ioannis A. Fotiou, Daniel J. Bates, A. Giovanni Beccuti, and Manfred Morari. Numerical algebraic geometry for optimal control applications. *SIAM Journal on Optimization*, 21(2):417–437, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p417_s1.

Robinson:2014:SAM

- [RFNP14] Daniel P. Robinson, Liming Feng, Jorge M. Nocedal, and Jong-Shi Pang. Subspace accelerated matrix splitting algorithms for asymmetric and symmetric linear complementarity problems. *SIAM Journal on Optimization*, 23(3):1371–1397, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ravindran:2000:RFB

- [RG00] G. Ravindran and M. Seetharama Gowda. Regularization of P_0 -functions in box variational inequality problems. *SIAM Journal on Optimization*, 11(3):748–760, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32956>.

- [RG22] **Ramani:2022:RMD**
Sivaramakrishnan Ramani and Archis Ghaté. Robust Markov decision processes with data-driven, distance-based ambiguity sets. *SIAM Journal on Optimization*, 32(2):989–1017, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1423841>.
- [RG24] **Ramani:2024:FBR**
Sivaramakrishnan Ramani and Archis Ghaté. A family of s -rectangular robust MDPs: Relative conservativeness, asymptotic analyses, and finite-sample properties. *SIAM Journal on Optimization*, 34(2):1540–1568, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [RGY99] **Rubinov:1999:DFA**
A. M. Rubinov, B. M. Glover, and X. Q. Yang. Decreasing functions with applications to penalization. *SIAM Journal on Optimization*, 10(1):289–313, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32609>.
- [RHL14] **Razaviyayn:2014:UCA**
Meisam Razaviyayn, Mingyi Hong, and Zhi-Quan Luo. A unified convergence analysis of block successive minimization methods for nonsmooth optimization. *SIAM Journal on Optimization*, 23(2):1126–1153, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RHW93] **Rakowska:1993:MOC**
Joanna Rakowska, Raphael T. Haftka, and Layne T. Watson. Multi-objective control-structure optimization via homotopy methods. *SIAM Journal on Optimization*, 3(3):654–667, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ric11] **Richtarik:2011:IAC**
Peter Richtárik. Improved algorithms for convex minimization in relative scale. *SIAM Journal on Optimization*, 21(3):1141–1167, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p1141_s1.
- [Ris94] **Rispoli:1994:MDP**
Fred J. Rispoli. The monotonic diameter of the perfect 2-matching polytope. *SIAM Journal on Optimization*, 4(3):455–460, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RK19] **Rehfeldt:2019:CNH**
Daniel Rehfeldt and Thorsten Koch. Combining NP-hard reduction techniques and strong heuristics in an exact algorithm

for the maximum-weight connected subgraph problem. *SIAM Journal on Optimization*, 29(1):369–398, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rodomanov:2020:RCD

[RK20]

Anton Rodomanov and Dmitry Kropotov. A randomized coordinate descent method with volume sampling. *SIAM Journal on Optimization*, 30(3):1878–1904, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ribeiro:2008:GCF

[RKG08]

Ademir A. Ribeiro, Elizabeth W. Karas, and Clóvis C. Gonzaga. Global convergence of filter methods for nonlinear programming. *SIAM Journal on Optimization*, 19(3):1231–1249, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Romero:2008:PBN

[RM08]

Louis A. Romero and Jeff Mason. Pitchfork bifurcations in nonlinear least squares problems — applications to TOA geolocation. *SIAM Journal on Optimization*, 19(2):740–755, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rustem:1998:AIC

[RN98]

Berc Rustem and Quoc Nguyen. An algorithm for the inequality-constrained discrete Min–Max

problem. *SIAM Journal on Optimization*, 8(1):265–283, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26038>.

Rodomanov:2021:GQN

[RN21]

Anton Rodomanov and Yurii Nesterov. Greedy quasi-Newton methods with explicit superlinear convergence. *SIAM Journal on Optimization*, 31(1):785–811, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ram:2009:ISS

[RNV09]

S. Sundhar Ram, A. Nedić, and V. V. Veeravalli. Incremental stochastic subgradient algorithms for convex optimization. *SIAM Journal on Optimization*, 20(2):691–717, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rahman:2018:EDM

[RO18]

Adam Rahman and R. Wayne Oldford. Euclidean distance matrix completion and point configurations from the minimal spanning tree. *SIAM Journal on Optimization*, 28(1):528–550, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Robinson:2007:SCM

[Rob07]

Stephen M. Robinson. Solution continuity in monotone affine variational inequalities. *SIAM*

- Journal on Optimization*, 18(3): 1046–1060, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Rot09]
- [Roo06] C. Roos. A full-Newton step $O(n)$ infeasible interior-point algorithm for linear optimization. *SIAM Journal on Optimization*, 16(4):1110–1136, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Roo06]
- [Roo15] C. Roos. An improved and simplified full-Newton step $O(n)$ infeasible interior-point method for linear optimization. *SIAM Journal on Optimization*, 25(1): 102–114, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Roo15]
- [Ros14] Vera Roshchina. Facially exposed cones are not always nice. *SIAM Journal on Optimization*, 24(1):257–268, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Ros14]
- [Rot92] Uriel G. Rothblum. Linear inequality scaling problems. *SIAM Journal on Optimization*, 2(4): 635–648, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Rot92]
- [Rot09] Uriel G. Rothblum. Efficient solution of a stochastic scheduling problem on an out-forest — revisited. *SIAM Journal on Optimization*, 20(2):903–914, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Rot09]
- [Roy20] Johannes O. Royset. Stability and error analysis for optimization and generalized equations. *SIAM Journal on Optimization*, 30(1):752–780, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Roy20]
- [Ryzhov:2012:ICL] Ilya O. Ryzhov and Warren B. Powell. Information collection for linear programs with uncertain objective coefficients. *SIAM Journal on Optimization*, 22(4): 1344–1368, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Ryzhov:2012:ICL]
- [Rahimian:2023:DDA] Hamed Rahimian and Bernardo Pagnoncelli. Data-driven approximation of contextual chance-constrained stochastic programs. *SIAM Journal on Optimization*, 33(3):2248–2274, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1528045>. [Rahimian:2023:DDA]

- [RPK03] **Royset:2003:AAE**
 J. O. Royset, E. Polak, and A. Der Kiureghian. Adaptive approximations and exact penalization for the solution of generalized semi-infinite min-max problems. *SIAM Journal on Optimization*, 14(1):1–34, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/40677>.
- [RR23] **Rodrigues:2012:QKP**
 C. D. Rodrigues, D. Quadri, P. Michelon, and S. Gueye. 0-1 quadratic knapsack problems: an exact approach based on a t -linearization. *SIAM Journal on Optimization*, 22(4):1449–1468, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RR08] **Rudolf:2008:OPS**
 Gábor Rudolf and Andrzej Ruszczyński. Optimization problems with second order stochastic dominance constraints: Duality, compact formulations, and cut generation methods. *SIAM Journal on Optimization*, 19(3):1326–1343, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RR15] **Rockafellar:2015:MRR**
 R. Tyrrell Rockafellar and Johannes O. Royset. Measures of residual risk with connections to regression, risk tracking, surrogate models, and ambiguity. *SIAM Journal on Optimization*, 25(2):1179–1208, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RR23] **Roberts:2023:DSB**
 Lindon Roberts and Clément W. Royer. Direct search based on probabilistic descent in reduced spaces. *SIAM Journal on Optimization*, 33(4):3057–3082, November 2023. CODEN SJOPE8. ISSN 1095-7189.
- [RS94] **Ritter:1994:SMC**
 Klaus Ritter and Stefan Schäffler. A stochastic method for constrained global optimization. *SIAM Journal on Optimization*, 4(4):894–904, November 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RS96] **Romisch:1996:LSS**
 Werner Römisch and Rüdiger Schultz. Lipschitz stability for stochastic programs with complete recourse. *SIAM Journal on Optimization*, 6(2):531–547, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RS97] **Rautert:1997:CDO**
 T. Rautert and E. W. Sachs. Computational design of optimal output feedback controllers. *SIAM Journal on Optimization*, 7(3):837–852, August 1997. CODEN SJOPE8. ISSN 1052-6234

(print), 1095-7189 (electronic).
URL <http://epubs.siam.org/sam-bin/dbq/article/29044>.

Ravat:2011:CSS

- [RS11] Uma Ravat and Uday V. Shanbhag. On the characterization of solution sets of smooth and nonsmooth convex stochastic Nash games. *SIAM Journal on Optimization*, 21(3):1168–1199, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p1168_s1.

Ralph:2015:RTE

- [RS15] Daniel Ralph and Yves Smeers. Risk trading and endogenous probabilities in investment equilibria. *SIAM Journal on Optimization*, 25(4):2589–2611, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ryan:2018:SMU

- [RSE18] Christopher Thomas Ryan, Robert L. Smith, and Marina A. Epelman. A simplex method for uncapacitated pure-supply infinite network flow problems. *SIAM Journal on Optimization*, 28(3):2022–2048, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rujeerapaiboon:2019:SMC

- [RSKW19] Napat Rujeerapaiboon, Kilian Schindler, Daniel Kuhn, and

Wolfram Wiesemann. Size matters: Cardinality-constrained clustering and outlier detection via conic optimization. *SIAM Journal on Optimization*, 29(2):1211–1239, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Roig-Solvas:2019:POM

- [RSMB19] Biel Roig-Solvas, Lee Makowski, and Dana H. Brooks. A proximal operator for multispectral phase retrieval problems. *SIAM Journal on Optimization*, 29(4):2594–2607, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Rojas:2000:NMF

- [RSS00] Marielba Rojas, Sandra A. Santos, and Danny C. Sorensen. A new matrix-free algorithm for the large-scale trust-region subproblem. *SIAM Journal on Optimization*, 11(3):611–646, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28887>.

Ramirez:2014:CPV

- [RSS14] Hector Ramírez, Alberto Seeger, and David Sossa. Commutation principle for variational problems on Euclidean Jordan algebras. *SIAM Journal on Optimization*, 23(2):687–694, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Romeijnders:2016:CAT

- [RSvdVH16] Ward Romeijnders, Rüdiger Schultz, Maarten H. van der Vlerk, and Willem K. Klein Haneveld. A convex approximation for two-stage mixed-integer recourse models with a uniform error bound. *SIAM Journal on Optimization*, 26(1):426–447, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Reinelt:2005:TFG

- [RT05] Gerhard Reinelt and Dirk Oliver Theis. Transformation of facets of the general routing problem polytope. *SIAM Journal on Optimization*, 16(1):220–234, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60730>.

Rosch:2006:SSO

- [RT06] A. Rösch and F. Tröltzsch. Sufficient second-order optimality conditions for an elliptic optimal control problem with pointwise control-state constraints. *SIAM Journal on Optimization*, 17(3):776–794, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Roshchina:2019:FDC

- [RT19] Vera Roshchina and Levent Tunçel. Facially dual complete (nice) cones and lexicographic tangents. *SIAM Journal on Optimization*, 29(3):2363–2387,

???? 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Ryu:2020:OSP

- [RTBG20] Ernest K. Ryu, Adrien B. Taylor, Carolina Bergeling, and Pontus Giselsson. Operator splitting performance estimation: Tight contraction factors and optimal parameter selection. *SIAM Journal on Optimization*, 30(3):2251–2271, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Reisizadeh:2023:DDM

- [RTM23] Hadi Reisizadeh, Behrouz Touri, and Soheil Mohajer. DIMIX: Diminishing mixing for sloppy agents. *SIAM Journal on Optimization*, 33(2):978–1005, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M143546X>.

Ramana:1997:SDS

- [RTW97] Motakuri V. Ramana, Levent Tunçel, and Henry Wolkowicz. Strong duality for semidefinite programming. *SIAM Journal on Optimization*, 7(3):641–662, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28835>.

Rutkowski:2017:CFE

- [Rut17] Krzysztof E. Rutkowski. Closed-form expressions for projectors

- onto polyhedral sets in Hilbert spaces. *SIAM Journal on Optimization*, 27(3):1758–1771, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [RVZ24]
- [RV93] Mauricio G. C. Resende and Geraldo Veiga. An implementation of the dual affine scaling algorithm for minimum-cost flow on bipartite uncapacitated networks. *SIAM Journal on Optimization*, 3(3):516–537, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [RW07]
- [RV06] Tae Roh and Lieven Vandenberghe. Discrete transforms, semidefinite programming, and sum-of-squares representations of nonnegative polynomials. *SIAM Journal on Optimization*, 16(4):939–964, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [RW12]
- [RvdVH15] W. Romeijnders, M. H. van der Vlerk, and W. K. Klein Hanveld. Convex approximations for totally unimodular integer recourse models: a uniform error bound. *SIAM Journal on Optimization*, 25(1):130–158, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [RW16]
- Rinaldi:2024:STR**
F. Rinaldi, L. N. Vicente, and D. Zeffiro. Stochastic trust-region and direct-search methods: a weak tail bound condition and reduced sample sizing. *SIAM Journal on Optimization*, 34(2):2067–2092, ??? 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1543446>.
- Romisch:2007:SAS**
W. Römisch and R. J.-B. Wets. Stability of ε -approximate solutions to convex stochastic programs. *SIAM Journal on Optimization*, 18(3):961–979, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ring:2012:OMR**
Wolfgang Ring and Benedikt Wirth. Optimization methods on Riemannian manifolds and their application to shape space. *SIAM Journal on Optimization*, 22(2):596–627, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Rieger:2016:LSR**
Janosch Rieger and Tobias Weth. Localized solvability of relaxed one-sided Lipschitz inclusions in Hilbert spaces. *SIAM Journal on Optimization*, 26(1):227–246, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [RW17] **Royset:2017:VTO** Johannes O. Royset and Roger J.-B. Wets. Variational theory for optimization under stochastic ambiguity. *SIAM Journal on Optimization*, 27(2):1118–1149, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RW18] **Royer:2018:CAS** Clément W. Royer and Stephen J. Wright. Complexity analysis of second-order line-search algorithms for smooth nonconvex optimization. *SIAM Journal on Optimization*, 28(2):1448–1477, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RW21] **Repetti:2021:VMF** Audrey Repetti and Yves Wiaux. Variable metric forward-backward algorithm for composite minimization problems. *SIAM Journal on Optimization*, 31(2):1215–1241, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [RZ01] **Reich:2001:SDD** Simeon Reich and Alexander J. Zaslavski. The set of divergent descent methods in a Banach space is σ -porous. *SIAM Journal on Optimization*, 11(4):1003–1018, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37035>.
- [SA04] **Shapiro:2004:CMS** Alexander Shapiro and Shabbir Ahmed. On a class of minimax stochastic programs. *SIAM Journal on Optimization*, 14(4):1237–1249, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43401>.
- [Sab11] **Sabach:2011:PFM** Shoham Sabach. Products of finitely many resolvents of maximal monotone mappings in reflexive Banach spaces. *SIAM Journal on Optimization*, 21(4):1289–1308, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1289_s1.
- [Sag16] **Sagratella:2016:CAS** Simone Sagratella. Computing all solutions of Nash equilibrium problems with discrete strategy sets. *SIAM Journal on Optimization*, 26(4):2190–2218, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SAH⁺24] **Si:2024:RPN** Wutao Si, P.-A. Absil, Wen Huang, Rujun Jiang, and Simon Vary. A Riemannian proximal Newton method. *SIAM Journal on Optimization*, 34(1):654–

- 681, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [Sal17] Saverio Salzo. The variable metric forward-backward splitting algorithm under mild differentiability assumptions. *SIAM Journal on Optimization*, 27(4):2153–2181, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Salzo:2017:VMF** [SAV14]
- [Sar95] A. Sartenaer. A class of trust region methods for nonlinear network optimization problems. *SIAM Journal on Optimization*, 5(2):379–407, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Sartenaer:1995:CTR** [SAW99]
- [Sat22] Hiroyuki Sato. Riemannian conjugate gradient methods: General framework and specific algorithms with convergence analyses. *SIAM Journal on Optimization*, 32(4):2690–2717, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1464178>. **Sato:2022:RCG** [SAZ22]
- [Sau20] James Saunderson. Limitations on the expressive power of convex cones without long chains of faces. *SIAM Journal on Optimization*, 30(1):1033–1047, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Saunderson:2020:LEP** [SB18]
- Sun:2014:DCO**
- Yifan Sun, Martin S. Andersen, and Lieven Vandenbergh. Decomposition in conic optimization with partially separable structure. *SIAM Journal on Optimization*, 24(2):873–897, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Sosonkina:1999:PAG**
- Maria Sosonkina, Donald C. S. Allison, and Layne T. Watson. Parallel adaptive GMRES implementations for homotopy methods. *SIAM Journal on Optimization*, 9(4):1149–1158, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32967>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- Shin:2022:EDS**
- [SAZ22] Sungho Shin, Mihai Anitescu, and Victor M. Zavala. Exponential decay of sensitivity in graph-structured nonlinear programs. *SIAM Journal on Optimization*, 32(2):1156–1183, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1391079>.
- Shah:2018:DSA**
- [SB18] Suhail Mohamad Shah and Vivek S. Borkar. Distributed

- stochastic approximation with local projections. *SIAM Journal on Optimization*, 28(4): 3375–3401, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [SC91]
- [SBD⁺11] Sebastian Sager, Carola M. Barth, Holger Diedam, Michael Engelhart, and Joachim Funke. Optimization as an analysis tool for human complex problem solving. *SIAM Journal on Optimization*, 21(3): 936–959, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p936_s1. [Sager:2011:OAT]
- [SBFA17] Emmanuel Soubies, Laure Blanc-Féraud, and Gilles Aubert. A unified view of exact continuous penalties for ℓ_2 - ℓ_0 minimization. *SIAM Journal on Optimization*, 27(3):2034–2060, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Soubies:2017:UVE]
- [SBT16] Shimrit Shtern and Aharon Ben-Tal. Computational methods for solving nonconvex block-separable constrained quadratic problems. *SIAM Journal on Optimization*, 26(2):1174–1206, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Shtern:2016:CMS]
- [Schnabel:1991:TMU] Robert B. Schnabel and Ta-Tung Chow. Tensor methods for unconstrained optimization using second derivatives. *SIAM Journal on Optimization*, 1(3): 293–315, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Schäffler:1992:CCS] Stefan Schäffler. Classification of critical stationary points in unconstrained optimization. *SIAM Journal on Optimization*, 2(1):1–6, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Schultz:1996:RCS] Rüdiger Schultz. Rates of convergence in stochastic programs with complete integer recourse. *SIAM Journal on Optimization*, 6(4):1138–1152, November 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27165>.
- [Schweitzer:1998:IRV] Eithan Schweitzer. An interior random vector algorithm for multistage stochastic linear programs. *SIAM Journal on Optimization*, 8(4):956–972, November 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28456>. [Sch92]
- [Sch96]

- [Sch01] **Scholtes:2001:CPR** Stefan Scholtes. Convergence properties of a regularization scheme for mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 11(4):918–936, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36123>.
- [Sch05] **Schweighofer:2005:OPC** Markus Schweighofer. Optimization of polynomials on compact semialgebraic sets. *SIAM Journal on Optimization*, 15(3):805–825, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43177>.
- [Sch06] **Schweighofer:2006:GOP** Markus Schweighofer. Global optimization of polynomials using gradient tentacles and sums of squares. *SIAM Journal on Optimization*, 17(3):920–942, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sch08] **Schiela:2008:SAS** Anton Schiela. A simplified approach to semismooth Newton methods in function space. *SIAM Journal on Optimization*, 19(3):1417–1432, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sch09] **Schiela:2009:BMO** Anton Schiela. Barrier methods for optimal control problems with state constraints. *SIAM Journal on Optimization*, 20(2):1002–1031, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sch12] **Schopfer:2012:ERP** Frank Schöpfer. Exact regularization of polyhedral norms. *SIAM Journal on Optimization*, 22(4):1206–1223, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sch16] **Schopfer:2016:LCD** Frank Schöpfer. Linear convergence of descent methods for the unconstrained minimization of restricted strongly convex functions. *SIAM Journal on Optimization*, 26(3):1883–1911, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SCRS00] **Salman:2000:ASS** F. S. Salman, J. Cheriyan, R. Ravi, and S. Subramanian. Approximating the single-sink link-installation problem in network design. *SIAM Journal on Optimization*, 11(3):595–610, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32143>.

- [SD00] **Sargent:2000:NSA**
 R. W. H. Sargent and M. Ding. A new SQP algorithm for large-scale nonlinear programming. *SIAM Journal on Optimization*, 11(3):716–747, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29701>.
- [SD20a] **Santana:2020:CHQ**
 Asteroide Santana and Santanu S. Dey. The convex hull of a quadratic constraint over a polytope. *SIAM Journal on Optimization*, 30(4):2983–2997, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SD20b] **Shapiro:2020:PMS**
 Alexander Shapiro and Lingquan Ding. Periodical multistage stochastic programs. *SIAM Journal on Optimization*, 30(3):2083–2102, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SD23] **Song:2023:CCD**
 Chaobing Song and Jelena Dikakonikolas. Cyclic coordinate dual averaging with extrapolation. *SIAM Journal on Optimization*, 33(4):2935–2961, October 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SDGM99] **Sergeyev:1999:TMS**
 Ya. D. Sergeyev, P. Daponte, D. Grimaldi, and A. Molinaro. Two methods for solving optimization problems arising in electronic measurements and electrical engineering. *SIAM Journal on Optimization*, 10(1):1–21, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31239>.
- [SdM00] **Shapiro:2000:RCO**
 Alexander Shapiro and Tito Homem de Mello. On the rate of convergence of optimal solutions of Monte Carlo approximations of stochastic programs. *SIAM Journal on Optimization*, 11(1):70–86, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34954>.
- [SDR20] **Sebbouh:2020:CRD**
 O. Sebbouh, Ch. Dossal, and A. Rondepierre. Convergence rates of damped inertial dynamics under geometric conditions and perturbations. *SIAM Journal on Optimization*, 30(3):1850–1877, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SE99] **Schnabel:1999:RMC**
 Robert B. Schnabel and Elizabeth Eskow. A revised modified Cholesky factorization algorithm. *SIAM Journal on Optimization*, 9(4):1135–1148, September 1999. CODEN

- SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33266>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- [See92] Alberto Seeger. Second derivatives of a convex function and of its Legendre–Fenchel transformate. *SIAM Journal on Optimization*, 2(3):405–424, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [See97] Alberto Seeger. Convex analysis of spectrally defined matrix functions. *SIAM Journal on Optimization*, 7(3):679–696, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28886>.
- [See22] Alberto Seeger. Condition number minimization in Euclidean Jordan algebras. *SIAM Journal on Optimization*, 32(2):635–658, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1400705>.
- [Sen07] Hristo S. Sendov. Nonsmooth analysis of Lorentz invariant functions. *SIAM Journal on Optimization*, 18(3):1106–1127, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Ser95] Yaroslav D. Sergeyev. An information global optimization algorithm with local tuning. *SIAM Journal on Optimization*, 5(4):858–870, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SF95] Alexander Shapiro and Michael K. H. Fan. On eigenvalue optimization. *SIAM Journal on Optimization*, 5(3):552–569, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SFM14] Georg Schildbach, Lorenzo Fagiano, and Manfred Morari. Randomized solutions to convex programs with multiple chance constraints. *SIAM Journal on Optimization*, 23(4):2479–2501, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SFMF20] Antonio Silveti-Falls, Cesare Molinari, and Jalal Fadili. Generalized conditional gradient with augmented Lagrangian for composite minimization. *SIAM Journal on Optimization*, 30(4):2687–2725, ??? 2020. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SFP11] Warren Scott, Peter Frazier, and Warren Powell. The correlated knowledge gradient for simulation optimization of continuous parameters using Gaussian process regression. *SIAM Journal on Optimization*, 21(3):996–1026, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p996_s1.
- [SG94] Dong X. Shaw and Donald Goldfarb. A path-following projective interior point method for linear programming. *SIAM Journal on Optimization*, 4(1):65–85, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SGK21] Jérôme Stenger, Fabrice Gamboa, and Merlin Keller. Optimization of quasi-convex function over product measure sets. *SIAM Journal on Optimization*, 31(1):425–447, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SH15] Warren Scott, Peter Frazier, and Warren Powell. The correlated knowledge gradient for simulation optimization of continuous parameters using Gaussian process regression. *SIAM Journal on Optimization*, 21(3):996–1026, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p996_s1.
- [SH97] Defeng Sun and Jiye Han. Newton and quasi-Newton methods for a class of nonsmooth equations and related problems. *SIAM Journal on Optimization*, 7(2):463–480, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27497>.
- [Sha94] Alexander Shapiro. Existence and differentiability of metric projections in Hilbert spaces. *SIAM Journal on Optimization*, 4(1):130–141, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sha97] Alexander Shapiro. On uniqueness of Lagrange multipliers in optimization problems subject to cone constraints. *SIAM Journal on Optimization*, 7(2):508–518, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27978>.
- [Sha17] Alexander Shapiro. Distributionally robust stochastic programming. *SIAM Journal on*

Scott:2011:CKG**Sra:2015:CGO****Shaw:1994:PFP****Shapiro:1994:EDM****Stenger:2021:OQC****Shapiro:1997:ULM****Sun:1997:NQN****Shapiro:2017:DRS**

- Optimization*, 27(4):2258–2275, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [She14] Jinglai Shen. Robust non-zeroness of piecewise affine systems with applications to linear complementarity systems. *SIAM Journal on Optimization*, 24(4):2023–2056, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Shi17] Yaroslav Shitov. The complexity of positive semidefinite matrix factorization. *SIAM Journal on Optimization*, 27(3):1898–1909, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Shi18] Yaroslav Shitov. Matrices of bounded psd rank are easy to detect. *SIAM Journal on Optimization*, 28(3):2067–2072, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SHP18] Sara Shashaani, Fatemeh S. Hashemi, and Raghu Pasupathy. ASTRO-DF: a class of adaptive sampling trust-region algorithms for derivative-free stochastic optimization. *SIAM Journal on Optimization*, 28(4):3145–3176, 2018. CO-
- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sato:2013:ROA] Hiroyuki Sato and Toshihiro Iwai. A Riemannian optimization approach to the matrix singular value decomposition. *SIAM Journal on Optimization*, 23(1):188–212, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sim11] Chee-Khian Sim. Superlinear convergence of an infeasible predictor-corrector path-following interior point algorithm for a semidefinite linear complementarity problem using the Helmberg–Kojima–Monteiro direction. *SIAM Journal on Optimization*, 21(1):102–126, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p102_s1.
- [SJM21] Chaobing Song, Yong Jiang, and Yi Ma. Unified acceleration of high-order algorithms under general Hölder continuity. *SIAM Journal on Optimization*, 31(3):1797–1826, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SK98] J. Sun and H. Kuo. Applying a Newton method to

- strictly convex separable network quadratic programs. *SIAM Journal on Optimization*, 8(3): 728–745, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26535>. [SKC12]
- Sergeyev:2006:GSB**
- [SK06] Yaroslav D. Sergeyev and Dmitri E. Kvasov. Global search based on efficient diagonal partitions and a set of Lipschitz constants. *SIAM Journal on Optimization*, 16(3):910–937, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Seguin:2022:CMR**
- [SK22] Axel Séguin and Daniel Kressner. Continuation methods for Riemannian optimization. *SIAM Journal on Optimization*, 32(2):1069–1093, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1428650>.
- Stechlinski:2018:GSA**
- [SKB18] Peter Stechlinski, Kamil A. Khan, and Paul I. Barton. Generalized sensitivity analysis of nonlinear programs. *SIAM Journal on Optimization*, 28(1): 272–301, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Shahzad:2012:SEM**
- Amir Shahzad, Eric C. Kerrigan, and George A. Constantinides. A stable and efficient method for solving a convex quadratic program with application to optimal control. *SIAM Journal on Optimization*, 22(4):1369–1393, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Stingl:2009:FMO**
- [SKL09a] M. Stingl, M. Kočvara, and G. Leugering. Free material optimization with fundamental eigenfrequency constraints. *SIAM Journal on Optimization*, 20(1):524–547, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Stingl:2009:SCS**
- [SKL09b] M. Stingl, M. Kočvara, and G. Leugering. A sequential convex semidefinite programming algorithm with an application to multiple-load free material optimization. *SIAM Journal on Optimization*, 20(1):130–155, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Sato:2019:RSV**
- [SKM19] Hiroyuki Sato, Hiroyuki Kasai, and Bamdev Mishra. Riemannian stochastic variance reduced gradient algorithm with retraction and vector transport. *SIAM Journal on Optimization*, 29(2): 1444–1472, 2019. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SKR16] N. H. Son, B. T. Kien, and A. Rösch. Second-order optimality conditions for boundary control problems with mixed pointwise constraints. *SIAM Journal on Optimization*, 26(3):1912–1943, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SL14] Somayeh Sojoudi and Javad Lavaei. Exactness of semidefinite relaxations for nonlinear optimization problems with underlying graph structure. *SIAM Journal on Optimization*, 24(4):1746–1778, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SL15] Yongjia Song and James Luedtke. An adaptive partition-based approach for solving two-stage stochastic programs with fixed recourse. *SIAM Journal on Optimization*, 25(3):1344–1367, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SL21] Shambhavi Singh and Yves Lucet. Linear-time convexity test for low-order piecewise polynomials. *SIAM Journal on Optimization*, 31(1):972–990, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SLM05] X. L. Sun, D. Li, and K. I. M. McKinnon. On saddle points of augmented Lagrangians for constrained nonconvex optimization. *SIAM Journal on Optimization*, 15(4):1128–1146, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60277>.
- [Slo22] Lucas Slot. Sum-of-squares hierarchies for polynomial optimization and the Christoffel–Darboux kernel. *SIAM Journal on Optimization*, 32(4):2612–2635, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1458338>.
- [SLS24] Zilai Si, Yucong Liu, and Alexander Strang. Path-following methods for maximum a posteriori estimators in Bayesian hierarchical models: How estimates depend on hyperparameters. *SIAM Journal on Optimization*, 34(3):2201–2230, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M153330X>.

- [SLWX23] **Song:2023:LMN**
 Mengmeng Song, Hongying Liu, Jiulin Wang, and Yong Xia. On local minimizers of nonconvex homogeneous quadratically constrained quadratic optimization with at most two constraints. *SIAM Journal on Optimization*, 33(1):267–293, ??? 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1416746>.
- [SLWY15] Wei Shi, Qing Ling, Gang Wu, and Wotao Yin. EXTRA: an exact first-order algorithm for decentralized consensus optimization. *SIAM Journal on Optimization*, 25(2):944–966, ??? 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SM91] **Schultz:1991:IPM**
 Gary L. Schultz and Robert R. Meyer. An interior point method for block angular optimization. *SIAM Journal on Optimization*, 1(4):583–602, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SM93] **Saruwatari:1993:NBS**
 Yasufumi Saruwatari and Tomomi Matsui. A note on K -best solutions to the Chinese postman problem. *SIAM Journal on Optimization*, 3(4):726–733, November 1993. CO-
- [SM99] **Schreiber:1999:CSS**
 G. R. Schreiber and O. C. Martin. Cut size statistics of graph bisection heuristics. *SIAM Journal on Optimization*, 10(1):231–251, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32152>.
- [SM18] **Shen:2018:LSN**
 Jinglai Shen and Seyedahmad Mousavi. Least sparsity of p -norm based optimization problems with $p > 1$. *SIAM Journal on Optimization*, 28(3):2721–2751, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SMG14] **Stich:2014:OCF**
 S. U. Stich, C. L. Müller, and B. Gärtner. Optimization of convex functions with random pursuit. *SIAM Journal on Optimization*, 23(2):1284–1309, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SN07] **Schichl:2007:TTQ**
 Hermann Schichl and Arnold Neumaier. Transposition theorems and qualification-free optimality conditions. *SIAM Journal on Optimization*, 17(4):1035–1055, ??? 2007. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SNTI16] Shinsaku Sakaue, Yuji Nakatsukasa, Akiko Takeda, and Satoru Iwata. Solving generalized CDT problems via two-parameter eigenvalues. *SIAM Journal on Optimization*, 26(3):1669–1694, ??? 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SÖ17] Burhaneddin Sandikçi and Osman Y. Özaltın. A scalable bounding method for multistage stochastic programs. *SIAM Journal on Optimization*, 27(3):1772–1800, ??? 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SO21] Anton Schiela and Julian Ortiz. An SQP method for equality constrained optimization on Hilbert manifolds. *SIAM Journal on Optimization*, 31(3):2255–2284, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sol98] Michael V. Solodov. On the convergence of constrained parallel variable distribution algorithms. *SIAM Journal on Optimization*, 8(1):187–196, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29394>.
- [Sol07] Mikhail V. Solodov. A bundle method for a class of bilevel nonsmooth convex minimization problems. *SIAM Journal on Optimization*, 18(1):242–259, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Son06] Wen Song. Calmness and error bounds for convex constraint systems. *SIAM Journal on Optimization*, 17(2):353–371, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sor97] D. C. Sorensen. Minimization of a large-scale quadratic function subject to a spherical constraint. *SIAM Journal on Optimization*, 7(1):141–161, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27437>.
- [SOT09] Simon P. Schurr, Dianne P. O’Leary, and André L. Tits. A polynomial-time interior-point method for conic optimization, with inexact barrier evaluations. *SIAM Journal on Optimization*, 20(1):548–571, ??? 2009. CO-

- DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SP97] Rongqin Sheng and Florian A. Potra. A quadratically convergent infeasible-interior-point algorithm for LCP with polynomial complexity. *SIAM Journal on Optimization*, 7(2):304–317, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26782>.
- [SP12] Negar Soheili and Javier Peña. A smooth perceptron algorithm. *SIAM Journal on Optimization*, 22(2):728–737, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SP24] Konstantin Sonntag and Sebastian Peitz. Fast convergence of inertial multiobjective gradient-like systems with asymptotic vanishing damping. *SIAM Journal on Optimization*, 34(3):2259–2286, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1588512>.
- [Spa14] Pierre-Jean Spaenlehauer. On the complexity of computing critical points with Gröbner bases. *SIAM Journal on Optimization*, 24(3):1382–1401, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SPM18] Sean Skwerer, Scott Provan, and J. S. Marron. Relative optimality conditions and algorithms for treespace Fréchet means. *SIAM Journal on Optimization*, 28(2):959–988, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SPT08] M. Salahi, J. Peng, and T. Terlaky. On mehrotra-type predictor-corrector algorithms. *SIAM Journal on Optimization*, 18(4):1377–1397, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SPW15] J. Saunderson, P. A. Parrilo, and A. S. Willsky. Semidefinite descriptions of the convex hull of rotation matrices. *SIAM Journal on Optimization*, 25(3):1314–1343, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SS97] Evangelia M. Simantiraki and David F. Shanno. An infeasible-interior-point method for linear complementarity problems. *SIAM Journal on Optimization*, 7(3):620–640, August 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <http://epubs.siam.org/sam-bin/dbq/article/28288>.

Solodov:2000:TGC

- [SS00] M. V. Solodov and B. F. Svaiter. A truly globally convergent Newton-type method for the monotone nonlinear complementarity problem. *SIAM Journal on Optimization*, 10(2):605–625, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33754>. [SS22]

Sagastizabal:2005:IBM

- [SS05] Claudia Sagastizábal and Mikhail Solodov. An infeasible bundle method for nonsmooth convex constrained optimization without a penalty function or a filter. *SIAM Journal on Optimization*, 16(1):146–169, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60387>. [SS23]

Sinn:2015:GSS

- [SS15] Rainer Sinn and Bernd Sturmfels. Generic spectrahedral shadows. *SIAM Journal on Optimization*, 25(2):1209–1220, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [SS24]

Sabach:2017:FOM

- [SS17] Shoham Sabach and Shimrit Shtern. A first order method for solving convex bilevel optimization problems. *SIAM Journal*

on Optimization, 27(2):640–660, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Sinjorgo:2022:GNR

Lennart Sinjorgo and Renata Sotirov. On the generalized θ -number and related problems for highly symmetric graphs. *SIAM Journal on Optimization*, 32(2):1344–1378, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1414620>.

Salas:2023:ESD

David Salas and Anton Svensson. Existence of solutions for deterministic bilevel games under a general Bayesian approach. *SIAM Journal on Optimization*, 33(3):2311–2340, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1442164>.

Sun:2024:DDA

Kaizhao Sun and Xu Andy Sun. Dual descent augmented Lagrangian method and alternating direction method of multipliers. *SIAM Journal on Optimization*, 34(2):1679–1707, May 2024. CODEN SJOPE8. ISSN 1095-7189.

Sun:2022:DOB

Ying Sun, Gesualdo Scutari, and Amir Daneshmand. Distributed optimization based on

- gradient tracking revisited: Enhancing convergence rate via surrogation. *SIAM Journal on Optimization*, 32(2):354–385, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1259973>. **Sun:2004:SSN**
- [SSQ04] Jie Sun, Defeng Sun, and Liqun Qi. A squared smoothing Newton method for nonsmooth matrix equations and its applications in semidefinite optimization problems. *SIAM Journal on Optimization*, 14(3):783–806, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37962>. **Shalev-Shwartz:2010:TAS**
- [SSK98] Masayuki Shida, Susumu Shindoh, and Masakazu Kojima. Existence and uniqueness of search directions in interior-point algorithms for the SDP and the monotone SDLCP. *SIAM Journal on Optimization*, 8(2):387–396, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30061>. **Shida:1998:EUS**
- [SSSZ10] Shai Shalev-Shwartz, Nathan Srebro, and Tong Zhang. Trading accuracy for sparsity in optimization problems with sparsity constraints. *SIAM Journal on Optimization*, 20(6):2807–2832, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Schulz:2016:EPC**
- [SSN04] Geneviève Salmon, Jean-Jacques Strodiot, and Van Hien Nguyen. A bundle method for solving variational inequalities. *SIAM Journal on Optimization*, 14(3):869–893, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38409>. **Salmon:2004:BMS**
- [SSW16] Volker H. Schulz, Martin Siebenborn, and Kathrin Welker. Efficient PDE constrained shape optimization based on Steklov–Poincaré-type metrics. *SIAM Journal on Optimization*, 26(4):2800–2819, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Song:2024:PAD**
- [SSPY24] Zhuoqing Song, Lei Shi, Shi Pu, and Ming Yan. Provably accelerated decentralized gradient methods over unbalanced directed graphs. *SIAM Journal on Optimization*, 34(1):1131–1156, March 2024. CODEN SJOPE8. ISSN 1095-7189. **Sun:2024:DMG**
- [SSY24] Kaizhao Sun, Mou Sun, and Wotao Yin. Decomposition methods for global solution of

- mixed-integer linear programs. *SIAM Journal on Optimization*, 34(2):1206–1235, April 2024. CODEN SJOPE8. ISSN 1095-7189. [ST13]
- [ST03] Rüdiger Schultz and Stephan Tiedemann. Risk aversion via excess probabilities in stochastic programs with mixed-integer recourse. *SIAM Journal on Optimization*, 14(1):115–138, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41085>. [ST14]
- [ST09] Oliver Stein and Aysun Tezel. The semismooth approach for semi-infinite programming without strict complementarity. *SIAM Journal on Optimization*, 20(2):1052–1072, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ST22]
- [ST10] K. Scheinberg and Ph. L. Toint. Self-correcting geometry in model-based algorithms for derivative-free unconstrained optimization. *SIAM Journal on Optimization*, 20(6):3512–3532, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3512_s1. [Sta92]
- Saha:2013:NCC**
Ankan Saha and Ambuj Tewari. On the nonasymptotic convergence of cyclic coordinate descent methods. *SIAM Journal on Optimization*, 23(1):576–601, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Shefi:2014:RCA**
Ron Shefi and Marc Teboulle. Rate of convergence analysis of decomposition methods based on the proximal method of multipliers for convex minimization. *SIAM Journal on Optimization*, 24(1):269–297, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Sabach:2022:FLB**
Shoham Sabach and Marc Teboulle. Faster Lagrangian-based methods in convex optimization. *SIAM Journal on Optimization*, 32(1):204–227, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1375358>.
- Staib:1992:NOC**
Tilo Staib. Necessary optimality conditions for nonsmooth multicriterial optimization problems. *SIAM Journal on Optimization*, 2(1):153–171, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Sta99] **Stangl:1999:OSC** Christoph Stangl. Optimal sizing for a class of nonlinearly elastic materials. *SIAM Journal on Optimization*, 9(2): 414–443, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31921>.
- [Sta04] **Stadler:2004:SNA** Georg Stadler. Semismooth Newton and augmented Lagrangian methods for a simplified friction problem. *SIAM Journal on Optimization*, 15(1):39–62, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42083>.
- [STKI17] **Sakaue:2017:ESP** Shinsaku Sakaue, Akiko Takeda, Sunyoung Kim, and Naoki Ito. Exact semidefinite programming relaxations with truncated moment matrix for binary polynomial optimization problems. *SIAM Journal on Optimization*, 27(1):565–582, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Stu00] **Sturm:2000:EBL** Jos F. Sturm. Error bounds for linear matrix inequalities. *SIAM Journal on Optimization*, 10(4): 1228–1248, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [STY15] **Sun:2015:CBS** Defeng Sun, Kim-Chuan Toh, and Liuqin Yang. A convergent 3-block SemiProximal alternating direction method of multipliers for conic programming with 4-type constraints. *SIAM Journal on Optimization*, 25(2):882–915, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [STY16] **Sun:2016:EIA** Defeng Sun, Kim-Chuan Toh, and Liuqin Yang. An efficient inexact ABCD method for least squares semidefinite programming. *SIAM Journal on Optimization*, 26(2):1072–1100, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SU10] **Steffensen:2010:NRS** Sonja Steffensen and Michael Ulbrich. A new relaxation scheme for mathematical programs with equilibrium constraints. *SIAM Journal on Optimization*, 20(5): 2504–2539, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SU14] **Schiela:2014:OPC** Anton Schiela and Stefan Ulbrich. Operator preconditioning for a class of inequality constrained optimal control problems. *SIAM Journal on Optimization*, 24(1):435–466, URL <http://epubs.siam.org/sam-bin/dbq/article/33860>.

- ???? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SU15] Reinhold Schneider and André Uschmajew. Convergence results for projected line-search methods on varieties of low-rank matrices via Lojasiewicz inequality. *SIAM Journal on Optimization*, 25(1):622–646, ????. 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SV07] Kunibert G. Siebert and Andreas Veiser. A unilaterally constrained quadratic minimization with adaptive finite elements. *SIAM Journal on Optimization*, 18(1):260–289, ????. 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Sva02] Krister Svanberg. A class of globally convergent optimization methods based on conservative convex separable approximations. *SIAM Journal on Optimization*, 12(2):555–573, November/January 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36282>.
- [SVD12] Laurent Sorber, Marc Van Barel, and Lieven De Lathauwer. Unconstrained optimization of real functions in complex variables. *SIAM Journal on Optimization*, 22(3):879–898, ????. 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SVD14] Laurent Sorber, Marc Van Barel, and Lieven De Lathauwer. Optimization-based algorithms for tensor decompositions: Canonical polyadic decomposition, decomposition in rank- $(L_r, L_r, 1)$ terms, and a new generalization. *SIAM Journal on Optimization*, 23(2):695–720, ????. 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SW95] Ronald J. Stern and Henry Wolkowicz. Indefinite trust region subproblems and nonsymmetric eigenvalue perturbations. *SIAM Journal on Optimization*, 5(2):286–313, May 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SW99] Defeng Sun and Robert S. Womersley. A new unconstrained differentiable merit function for box constrained variational inequality problems and a damped Gauss–Newton method. *SIAM Journal on Optimization*, 9(2):388–413, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31417>.

- [SW07] **Sukumar:2007:DCM**
 N. Sukumar and R. J.-B. Wets. Deriving the continuity of maximum-entropy basis functions via variational analysis. *SIAM Journal on Optimization*, 18(3):914–925, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SW11] **Schiela:2011:BMO**
 A. Schiela and W. Wollner. Barrier methods for optimal control problems with convex nonlinear gradient state constraints. *SIAM Journal on Optimization*, 21(1):269–286, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p269_s1.
- [SW14] **Shindin:2014:SSD**
 Evgeny Shindin and Gideon Weiss. Symmetric strong duality for a class of continuous linear programs with constant coefficients. *SIAM Journal on Optimization*, 24(3):1102–1121, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SW15] **Shindin:2015:SSC**
 Evgeny Shindin and Gideon Weiss. Structure of solutions for continuous linear programs with constant coefficients. *SIAM Journal on Optimization*, 25(3):1276–1297, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SW24] **Sun:2024:HAF**
 Zhe Sun and Lei Wu. Hybrid algorithms for finding a D -stationary point of a class of structured nonsmooth DC minimization. *SIAM Journal on Optimization*, 34(1):485–506, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [SWW21] **Sremac:2021:EBS**
 Stefan Sremac, Hugo J. Wolderdeman, and Henry Wolkowicz. Error bounds and singularity degree in semidefinite programming. *SIAM Journal on Optimization*, 31(1):812–836, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SX24] **Song:2024:LPS**
 Mengmeng Song and Yong Xia. Linear programming on the Stiefel manifold. *SIAM Journal on Optimization*, 34(1):718–741, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- [SXBN22] **Shi:2022:NTQ**
 Hao-Jun M. Shi, Yuchen Xie, Richard Byrd, and Jorge Nocedal. A noise-tolerant quasi-Newton algorithm for unconstrained optimization. *SIAM Journal on Optimization*, 32(1):29–55, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1373190>.

- [SXMW13] **Sun:2013:EPL**
 Hailin Sun, Huifu Xu, Rud-
 abeh Meskarian, and Yong
 Wang. Exact penalization, level
 function method, and modi-
 fied cutting-plane method for
 stochastic programs with second
 order stochastic dominance con-
 straints. *SIAM Journal on Op-
 timization*, 23(1):602–631, 2013.
 CODEN SJOPE8. ISSN 1052-6234
 (print), 1095-7189 (electronic).
- [SY13] **Slavakis:2013:APS**
 Konstantinos Slavakis and Isao
 Yamada. The adaptive pro-
 jected subgradient method con-
 strained by families of quasi-
 nonexpansive mappings and its
 application to online learning.
SIAM Journal on Optimization,
 23(1):126–152, 2013. CO-
 DEN SJOPE8. ISSN 1052-6234
 (print), 1095-7189 (electronic).
- [SY18] **Sirb:2018:DCA**
 Benjamin Sirb and Xiaojing Ye.
 Decentralized consensus algo-
 rithm with delayed and stochas-
 tic gradients. *SIAM Journal on
 Optimization*, 28(2):1232–1254,
 2018. CODEN SJOPE8. ISSN
 1052-6234 (print), 1095-
 7189 (electronic).
- [SY19] **Song:2019:BLM**
 Liqiang Song and Wei Hong
 Yang. A block Lanczos method
 for the extended trust-region
 subproblem. *SIAM Journal
 on Optimization*, 29(1):571–594,
 2019. CODEN SJOPE8. ISSN
 1052-6234 (print), 1095-
 7189 (electronic).
- [SYZ19] **Shen:2019:CAC**
 Zongshan Shen, Jen-Chih Yao,
 and Xi Yin Zheng. Calmness and
 the Abadie CQ for multifunc-
 tions and linear regularity for a
 collection of closed sets. *SIAM
 Journal on Optimization*, 29(3):
 2291–2319, 2019. CO-
 DEN SJOPE8. ISSN 1052-6234
 (print), 1095-7189 (electronic).
- [SZ92] **Schramm:1992:VBI**
 Helga Schramm and Jochem
 Zowe. A version of the bundle
 idea for minimizing a nonsmooth
 function: conceptual idea, con-
 vergence analysis, numerical re-
 sults. *SIAM Journal on Opti-
 mization*, 2(1):121–152, Febru-
 ary 1992. CODEN SJOPE8.
 ISSN 1052-6234 (print), 1095-
 7189 (electronic).
- [SZ98] **Sun:1998:GLL**
 Jie Sun and Gongyun Zhao.
 Global linear and local quadratic
 convergence of a long-step
 adaptive-mode interior point
 method for some monotone
 variational inequality prob-
 lems. *SIAM Journal on Opti-
 mization*, 8(1):123–139, Febru-
 ary 1998. CODEN SJOPE8.
 ISSN 1052-6234 (print), 1095-
 7189 (electronic). URL [http://epubs.siam.org/sam-bin/
 dbq/article/30001](http://epubs.siam.org/sam-bin/dbq/article/30001).

- [SZ14] **Sen:2014:MSD**
Suvrajeet Sen and Zhihong Zhou. Multistage stochastic decomposition: a bridge between stochastic programming and approximate dynamic programming. *SIAM Journal on Optimization*, 24(1):127–153, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [SZL23] **Shapiro:2023:BDR**
Alexander Shapiro, Enlu Zhou, and Yifan Lin. Bayesian distributionally robust optimization. *SIAM Journal on Optimization*, 33(2):1279–1304, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1465548>.
- [SZY16] **Shen:2016:FAS**
Chungen Shen, Lei-Hong Zhang, and Wei Hong Yang. A filter active-set algorithm for ball/sphere constrained optimization problem. *SIAM Journal on Optimization*, 26(3):1429–1464, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TA98] **Tao:1998:DCO**
Pham Dinh Tao and Le Thi Hoai An. A D.C. optimization algorithm for solving the trust-region subproblem. *SIAM Journal on Optimization*, 8(2):476–505, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TAW06] **Tits:2006:CRL**
André L. Tits, P. A. Absil, and William P. Woessner. Constraint reduction for linear programs with many inequality constraints. *SIAM Journal on Optimization*, 17(1):119–146, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TBZ16] **Tao:2016:LLC**
Shaozhe Tao, Daniel Boley, and Shuzhong Zhang. Local linear convergence of ISTA and FISTA on the LASSO problem. *SIAM Journal on Optimization*, 26(1):313–336, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TDFC18] **Tran-Dinh:2018:SPD**
Quoc Tran-Dinh, Olivier Fercoq, and Volkan Cevher. A smooth primal-dual optimization framework for nonsmooth composite convex minimization. *SIAM Journal on Optimization*, 28(1):96–134, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TDKC14] **Tran-Dinh:2014:IPP**
Quoc Tran-Dinh, Anastasios Kyrillidis, and Volkan Cevher. An inexact proximal path-following algorithm for constrained convex minimization. *SIAM Journal on Optimization*,

- 24(4):1718–1745, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TDZ20] **Tran-Dinh:2020:NSF**
 Quoc Tran-Dinh and Yuzixuan Zhu. Non-stationary first-order primal-dual algorithms with faster convergence rates. *SIAM Journal on Optimization*, 30(4):2866–2896, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [TE19] **Thomann:2019:TRA**
 Jana Thomann and Gabriele Eichfelder. A trust-region algorithm for heterogeneous multiobjective optimization. *SIAM Journal on Optimization*, 29(2):1017–1047, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Teb97] **Teboulle:1997:CPL**
 Marc Teboulle. Convergence of proximal-like algorithms. *SIAM Journal on Optimization*, 7(4):1069–1083, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29213>.
- [TF96] **Taji:1996:NMF**
 Kouichi Taji and Masao Fukushima. A new merit function and a successive quadratic programming algorithm for variational inequality problems. *SIAM Journal on Optimization*, 6(3):704–713, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27119>.
- [Tha93] **Thakur:1993:UES**
 Lakshman S. Thakur. Uniformly extremal solutions in Sobolev function spaces for the quadratic case: characterization and applications. *SIAM Journal on Optimization*, 3(2):236–247, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Tha94] **Thach:1994:NDZ**
 Phan Thiên Thạc. A non-convex duality with zero gap and applications. *SIAM Journal on Optimization*, 4(1):44–64, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [THDL22] **Thi:2022:SDC**
 Hoai An Le Thi, Van Ngai Huynh, Tao Pham Dinh, and Hoang Phuc Hau Luu. Stochastic difference-of-convex-functions algorithms for non-convex programming. *SIAM Journal on Optimization*, 32(3):2263–2293, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1385706>.
- [THG17] **Taylor:2017:EWC**
 Adrien B. Taylor, Julien M. Hendrickx, and François Glineur.

- Exact worst-case performance of first-order methods for composite convex optimization. *SIAM Journal on Optimization*, 27(3): 1283–1313, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [TLT+18]
- Tsaknakis:2023:MPC**
- [THZ23] Ioannis Tsaknakis, Mingyi Hong, and Shuzhong Zhang. Minimax problems with coupled linear constraints: Computational complexity and duality. *SIAM Journal on Optimization*, 33(4):2675–2702, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1462428>. [TM95]
- Thach:1996:GCV**
- [TK96] Phan Thiên Thạch and Masakazu Kojima. A generalized convexity and variational inequality for quasi-convex minimization. *SIAM Journal on Optimization*, 6(1):212–226, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [TM15]
- Toh:2002:SSL**
- [TK02] Kim-Chuan Toh and Masakazu Kojima. Solving some large scale semidefinite programs via the conjugate residual method. *SIAM Journal on Optimization*, 12(3):669–691, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37637>. [Tabatabaei:2018:AMA]
- Tabatabaei:2018:AMA**
- Mohammad Tabatabaei, Alberto Lovison, Matthias Tan, Markus Hartikainen, and Kaisa Miettinen. ANOVA–MOP: ANOVA decomposition for multiobjective optimization. *SIAM Journal on Optimization*, 28(4): 3260–3289, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Tsuchiya:1995:GCL]
- Tsuchiya:1995:GCL**
- Takashi Tsuchiya and Masakazu Muramatsu. Global convergence of a long-step affine scaling algorithm for degenerate linear programming problems. *SIAM Journal on Optimization*, 5(3): 525–551, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Terazono:2015:COS]
- Terazono:2015:COS**
- Yasushi Terazono and Ayumu Matani. Continuity of optimal solution functions and their conditions on objective functions. *SIAM Journal on Optimization*, 25(4):2050–2060, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Tuy:2006:DMO]
- Tuy:2006:DMO**
- [TMHP06] Hoang Tuy, Michel Minoux, and N. T. Hoai-Phuong. Discrete monotonic optimization with application to a discrete location problem. *SIAM Journal on*

Optimization, 17(1):78–97, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Tatarenko:2021:SIP

- [TN21] Tatiana Tatarenko and Angelia Nedich. A smooth inexact penalty reformulation of convex problems with linear constraints. *SIAM Journal on Optimization*, 31(3):2141–2170, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Tor91]

Todd:1992:LCI

- [Tod92] Michael J. Todd. A low complexity interior-point algorithm for linear programming. *SIAM Journal on Optimization*, 2(2):198–209, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Tor97]

Toh:2000:SNS

- [Toh00] Kim-Chuan Toh. Some new search directions for primal-dual interior point methods in semidefinite programming. *SIAM Journal on Optimization*, 11(1):223–242, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33506>. [TP02]

Toh:2003:SLS

- [Toh03] Kim-Chuan Toh. Solving large scale semidefinite programs via an iterative solver on the augmented systems. *SIAM Jour-* [TP16]

nal on Optimization, 14(3):670–698, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41981>.

Torczon:1991:CMS

Virginia Torczon. On the convergence of the multidirectional search algorithm. *SIAM Journal on Optimization*, 1(1):123–145, February 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Torczon:1997:CPS

Virginia Torczon. On the convergence of pattern search algorithms. *SIAM Journal on Optimization*, 7(1):1–25, February 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25078>.

Tzitzouris:2002:TSC

James A. Tzitzouris and Jong-Shi Pang. A time-stepping complementarity approach for frictionless systems of rigid bodies. *SIAM Journal on Optimization*, 12(3):834–860, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37036>.

Tsang:2016:TAP

Jeffrey Tsang and Rajesh Pereira. Taking all positive

- eigenvectors is suboptimal in classical multidimensional scaling. *SIAM Journal on Optimization*, 26(4):2080–2090, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Tre95]
- Themelis:2020:DRS**
- [TP20] Andreas Themelis and Panagiotis Patrinos. Douglas–Rachford splitting and ADMM for nonconvex optimization: Tight convergence results. *SIAM Journal on Optimization*, 30(1):149–181, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Trö05]
- Troeltsch:2005:RLM**
- Fredi Tröltzsch. Regular Lagrange multipliers for control problems with mixed pointwise control-state constraints. *SIAM Journal on Optimization*, 15(2):616–634, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42651>.
- Toscano-Palmerin:2022:BOE**
- [TPF22] Saul Toscano-Palmerin and Peter I. Frazier. Bayesian optimization with expensive integrands. *SIAM Journal on Optimization*, 32(2):417–444, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/19M1303125>.
- Tao:2022:CNR**
- [TQP22] Ting Tao, Yitian Qian, and Shaohua Pan. Column $\ell_{2,0}$ -norm regularized factorization model of low-rank matrix recovery and its computation. *SIAM Journal on Optimization*, 32(2):959–988, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M136205X>.
- Treiman:1995:LNG**
- Jay S. Treiman. The linear nonconvex generalized gradient and Lagrange multipliers. *SIAM Journal on Optimization*, 5(3):670–680, August 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Taskesen:2023:DOT**
- [TSAKN23] Bahar Taskesen, Soroosh Shafieezadeh-Abadeh, Daniel Kuhn, and Karthik Natarajan. Discrete optimal transport with independent marginals is #P-hard. *SIAM Journal on Optimization*, 33(2):589–614, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1482044>.
- Tseng:1991:RCP**
- [Tse91] Paul Tseng. On the rate of convergence of a partially asynchronous gradient projection algorithm. *SIAM Journal on Optimization*, 1(4):603–619, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Tseng:1992:CPF**
- [Tse92] Paul Tseng. On the convergence of the products of firmly nonexpansive mappings. *SIAM Journal on Optimization*, 2(3):425–434, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Tseng:1997:APP**
- [Tse97a] Paul Tseng. Alternating projection-proximal methods for convex programming and variational inequalities. *SIAM Journal on Optimization*, 7(4):951–965, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27979>.
- Tseng:1997:IPF**
- [Tse97b] Paul Tseng. An infeasible path-following method for monotone complementarity problems. *SIAM Journal on Optimization*, 7(2):386–402, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27409>.
- Tseng:1998:IGP**
- [Tse98] Paul Tseng. An incremental gradient(-projection) method with momentum term and adaptive stepsize rule. *SIAM Journal on Optimization*, 8(2):506–531, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29479>.
- Tseng:1999:FDS**
- [Tse99] Paul Tseng. Fortified-descent simplicial search method: a general approach. *SIAM Journal on Optimization*, 10(1):269–288, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28285>.
- Tseng:2002:CII**
- [Tse02] Paul Tseng. Convergent infeasible interior-point trust-region methods for constrained minimization. *SIAM Journal on Optimization*, 13(2):432–469, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35794>.
- Tseng:2003:FRA**
- [Tse03] Paul Tseng. Further results on approximating non-convex quadratic optimization by semidefinite programming relaxation. *SIAM Journal on Optimization*, 14(1):268–283, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39589>.
- Tseng:2007:SOC**
- [Tse07] Paul Tseng. Second-order cone programming relaxation of sensor network localization. *SIAM Journal on Optimization*, 18(1):156–185, 2007. CO-

DEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Themelis:2018:FBE

- [TSP18] Andreas Themelis, Lorenzo Stella, and Panagiotis Patrinos. Forward-backward envelope for the sum of two nonconvex functions: Further properties and nonmonotone linesearch algorithms. *SIAM Journal on Optimization*, 28(3):2274–2303, ??? 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Tong:2022:OUR

- [TSR22] Shanyin Tong, Anirudh Subramanyam, and Vishwas Rao. Optimization under rare chance constraints. *SIAM Journal on Optimization*, 32(2):930–958, ??? 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1382490>.

Tang:2024:FMG

- [TT24] Tianyun Tang and Kim-Chuan Toh. A feasible method for general convex low-rank SDP problems. *SIAM Journal on Optimization*, 34(3):2169–2200, ??? 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1561464>.

Todd:1998:NTD

- [TTT98] M. J. Todd, K. C. Toh, and R. H. Tütüncü. On the Nesterov–

Todd direction in semidefinite programming. *SIAM Journal on Optimization*, 8(3):769–796, August 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30060>.

Tutuncu:2003:ABC

- [Tüt03] Reha H. Tütüncü. Asymptotic behavior of continuous trajectories for primal-dual potential-reduction methods. *SIAM Journal on Optimization*, 14(2):402–414, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Tuy:2000:MOP

- [Tuy00] Hoang Tuy. Monotonic optimization: Problems and solution approaches. *SIAM Journal on Optimization*, 11(2):464–494, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35982>.

Terlaky:2014:IOP

- [TW14] Tamás Terlaky and Zhouhong Wang. On the identification of the optimal partition of second order cone optimization problems. *SIAM Journal on Optimization*, 24(1):385–414, ??? 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Tits:2003:PDI**
- [TWB⁺03] André L. Tits, Andreas Wächter, Sasan Bakhtiari, Thomas J. Urban, and Craig T. Lawrence. A primal-dual interior-point method for nonlinear programming with strong global and local convergence properties. *SIAM Journal on Optimization*, 14(1):173–199, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39212>. [TY12]
- Talman:2004:CZP**
- [TY04] A. J. J. Talman and Y. Yamamoto. Continuum of zero points of a mapping on a compact, convex set. *SIAM Journal on Optimization*, 14(4):1128–1139, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41546>. [TZ10]
- Tao:2011:RLR**
- [TY11] Min Tao and Xiaoming Yuan. Recovering low-rank and sparse components of matrices from incomplete and noisy observations. *SIAM Journal on Optimization*, 21(1):57–81, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p57_s1. [TZS02]
- Tao:2012:CRA**
- Min Tao and Xiaoming Yuan. On the $O(1/t)$ convergence rate of alternating direction method with logarithmic-quadratic proximal regularization. *SIAM Journal on Optimization*, 22(4):1431–1448, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Tseng:1996:ECP**
- [TYF96] Paul Tseng, Nobuo Yamashita, and Masao Fukushima. Equivalence of complementarity problems to differentiable minimization: a unified approach. *SIAM Journal on Optimization*, 6(2):446–460, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Thibault:2010:SDE**
- [TZ10] Lionel Thibault and Dariusz Zagrodny. Subdifferential determination of essentially directionally smooth functions in Banach space. *SIAM Journal on Optimization*, 20(5):2300–2326, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Toh:2002:MCA**
- [TZS02] Kim-Chuan Toh, Gongyun Zhao, and Jie Sun. A multiple-cut analytic center cutting plane method for semidefinite feasibility problems. *SIAM Journal on Optimization*, 12(4):1126–1146, March/April 2002. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37050>.
- Tapia:1996:MPC**
- [TZSW96] R. Tapia, Y. Zhang, M. Saltzman, and A. Weiser. The Mehrotra predictor-corrector interior-point method as a perturbed composite Newton method. *SIAM Journal on Optimization*, 6(1):47–56, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Mohy-ud-Din:2015:SNB**
- [uDR15] Hassan Mohy ud Din and Daniel P. Robinson. A solver for nonconvex bound-constrained quadratic optimization. *SIAM Journal on Optimization*, 25(4):2385–2407, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ulbrich:2001:NTR**
- [Ulbr01] Michael Ulbrich. Nonmonotone trust-region methods for bound-constrained semismooth equations with applications to nonlinear mixed complementarity problems. *SIAM Journal on Optimization*, 11(4):889–917, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35634>.
- Ulbrich:2003:SNM**
- [Ulbr03] Michael Ulbrich. Semismooth Newton methods for operator equations in function spaces. *SIAM Journal on Optimization*, 13(3):805–841, November/February 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37156>.
- Usevich:2020:AMT**
- [ULC20] Konstantin Usevich, Jianze Li, and Pierre Comon. Approximate matrix and tensor diagonalization by unitary transformations: Convergence of Jacobi-type algorithms. *SIAM Journal on Optimization*, 30(4):2998–3028, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- vanAckooij:2018:IBM**
- [vAF18] Wim van Ackooij and Antonio Frangioni. Incremental bundle methods using upper models. *SIAM Journal on Optimization*, 28(1):379–410, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- vanAckooij:2014:GFN**
- [vAH14] Wim van Ackooij and René Henrion. Gradient formulae for nonlinear probabilistic constraints with Gaussian and Gaussian-like distributions. *SIAM Journal on Optimization*, 24(4):1864–1889, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Valkonen:2020:ICP**
- [Val20] Tuomo Valkonen. Inertial, corrected, primal-dual proximal

- splitting. *SIAM Journal on Optimization*, 30(2):1391–1420, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Van95] Robert J. Vanderbei. Symmetric quasidefinite matrices. *SIAM Journal on Optimization*, 5(1):100–113, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Van14] Bart Vandereycken. Low-rank matrix completion by Riemannian optimization. *SIAM Journal on Optimization*, 23(2):1214–1236, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [vAPA19] Wim van Ackooij and Pedro Pérez-Aros. Generalized differentiation of probability functions acting on an infinite system of constraints. *SIAM Journal on Optimization*, 29(3):2179–2210, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [vAS14] Wim van Ackooij and Claudia Sagastizábal. Constrained bundle methods for upper inexact oracles with application to joint chance constrained energy problems. *SIAM Journal on Optimization*, 24(2):733–765, 2014. CODEN SJOPE8.
- [Vav93] Stephen A. Vavasis. Black-box complexity of local minimization. *SIAM Journal on Optimization*, 3(1):60–80, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vav10] Stephen A. Vavasis. On the complexity of nonnegative matrix factorization. *SIAM Journal on Optimization*, 20(3):1364–1377, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [vBRM24] E. Ruben van Beesten, Ward Romeijnders, and David P. Morton. Pragmatic distributionally robust optimization for simple integer recourse models. *SIAM Journal on Optimization*, 34(2):1755–1783, May 2024. CODEN SJOPE8. ISSN 1095-7189.
- [VD06] Jorge R. Vera and Iván Derpich. Incorporating condition measures in the context of combinatorial optimization. *SIAM Journal on Optimization*, 16(4):965–985, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Vanderbei:1995:SQM**Vavasis:1993:BBC****Vandereycken:2014:LRM****Vavasis:2010:CNM****vanAckooij:2019:GDP****vanBeesten:2024:PDR****vanAckooij:2014:CBM****Vera:2006:ICM**

- [vdBF11] **vandenBerg:2011:SOL** Ewout van den Berg and Michael P. Friedlander. Sparse optimization with least-squares constraints. *SIAM Journal on Optimization*, 21(4):1201–1229, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1201_s1.
- [Ver96] **Vera:1996:IPC** Jorge R. Vera. Ill-posedness and the complexity of deciding existence of solutions to linear programs. *SIAM Journal on Optimization*, 6(3):549–569, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/23352>.
- [vdLTY06] **vanderLaan:2006:RSP** Gerard van der Laan, Dolf Talmán, and Zaifu Yang. Refinements of stationary points with applications to noncooperative games and economics. *SIAM Journal on Optimization*, 16(3):854–870, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vil05] **vanderLaan:2007:VLM** Gerard van der Laan, Dolf Talmán, and Zaifu Yang. A vector labeling method for solving discrete zero point and complementarity problems. *SIAM Journal on Optimization*, 18(1):290–308, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vel15] **Velasco:2015:LFR** Mauricio Velasco. Linearization functors on real convex sets. *SIAM Journal on Optimization*, 25(1):1–27, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [VGO18] **Vanli:2018:GCR** N. D. Vanli, M. Gürbüzbaban, and A. Ozdaglar. Global convergence rate of proximal incremental aggregated gradient methods. *SIAM Journal on Optimization*, 28(2):1282–1300, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vil05] **Villavicencio:2005:SMF** Jorge Villavicencio. Solving multicommodity flow problems by an approximation scheme. *SIAM Journal on Optimization*, 15(4):971–986, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39190>.
- [VIT22] **Vinod:2022:CGO** Abraham P. Vinod, Arie Israel, and Ufuk Topcu. Constrained, global optimization of unknown functions with Lipschitz continuous gradients. *SIAM Journal on Optimization*, 32(2):1239–1264, 2022. CODEN SJOPE8. ISSN 1052-6234

- (print), 1095-7189 (electronic).
URL <https://epubs.siam.org/doi/10.1137/20M1380879>.
- [VJFC18] Apidopoulos Vassilis, Aujol Jean-François, and Dossal Charles. The differential inclusion modeling FISTA algorithm and optimality of convergence rate in the case $b \leq 3$. *SIAM Journal on Optimization*, 28(1):551–574, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vog08] Silvia Vogel. Universal confidence sets for solutions of optimization problems. *SIAM Journal on Optimization*, 19(3):1467–1488, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Voi08] M. D. Voisei. Mathematical programming problems governed by nonlinear elliptic PDEs. *SIAM Journal on Optimization*, 18(4):1231–1249, 2008. CO-
- [VR05] Vassilis:2018:DIM
- [VJM16] Thibaut Vidal, Patrick Jaillet, and Nelson Maculan. A decomposition algorithm for nested resource allocation problems. *SIAM Journal on Optimization*, 26(2):1322–1340, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vog08] Silvia Vogel. Universal confidence sets for solutions of optimization problems. *SIAM Journal on Optimization*, 19(3):1467–1488, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Voi08] M. D. Voisei. Mathematical programming problems governed by nonlinear elliptic PDEs. *SIAM Journal on Optimization*, 18(4):1231–1249, 2008. CO-
- [VSBV14] Villa:2014:AIF
- [Vazquez:2005:EKT] Francisco Guerra Vázquez and Jan-J. Rückmann. Extensions of the Kuhn–Tucker constraint qualification to generalized semi-infinite programming. *SIAM Journal on Optimization*, 15(3):926–937, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/43150>.
- [Vui:2008:GOP] Hà Huy Vui and Pham Tien So'n. Global optimization of polynomials using the truncated tangency variety and sums of squares. *SIAM Journal on Optimization*, 19(2):941–951, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vui:2010:RPP] Hà Huy Vui and Pham Tien So'n. Representations of positive polynomials and optimization on noncompact semialgebraic sets. *SIAM Journal on Optimization*, 20(6):3082–3103, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [VS08] Vidal:2016:DAN
- [VS10] Vogel:2008:UCS

- SIAM Journal on Optimization*, 23(3):1607–1633, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Vui14] Hà Huy Vui. Global Hölderian error bound for nondegenerate polynomials. *SIAM Journal on Optimization*, 23(2):917–933, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Vui:2014:GHE**
- [VW21] Andreas Van Barel and Stefan Vandewalle. MG/OPT and multilevel Monte Carlo for robust optimization of PDEs. *SIAM Journal on Optimization*, 31(3):1850–1876, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **VanBarel:2021:MOM**
- [VVM⁺09] Joris Vanbiervliet, Bart Vander-eycken, Wim Michiels, Stefan Vandewalle, and Moritz Diehl. The smoothed spectral abscissa for robust stability optimization. *SIAM Journal on Optimization*, 20(1):156–171, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Vanbiervliet:2009:SSA**
- [VZQD17] Robin Verschueren, Mario Zanon, Rien Quirynen, and Moritz Diehl. A sparsity preserving convexification procedure for indefinite quadratic programs arising in direct optimal control. *SIAM Journal on Optimization*, 27(3):2085–2109, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Wei:2015:GBD**
- [WA15] Zhou Wei and M. Montaz Ali. Generalized Benders decomposition for one class of MINLPs with vector conic constraint. *SIAM Journal on Optimization*, 25(3):1809–1825, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Wei:2015:GBD**
- [Wac14] Gerd Wachsmuth. Strong stationarity for optimal control of the obstacle problem with control constraints. *SIAM Journal on Optimization*, 24(4):1914–1932, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Wachsmuth:2014:SSO**
- [Wal08] Andrea Walther. A first-order convergence analysis of trust-region methods with inexact Jacobians. *SIAM Journal on Optimization*, 19(1):307–325, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). **Walther:2008:FOC**
- [Wan95] Yang Wang. Existence and regularity of solutions to a variational problem of Mumford and Shah: a constructive approach. *SIAM Journal on Optimization*, 5(4):892–913, November 1995. **Wang:1995:ERS**

- CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Wan11] Xianfu Wang. Self-dual regularization of monotone operators via the resolvent average. *SIAM Journal on Optimization*, 21(2):438–462, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i2/p438_s1.
- [Wan17] Mengdi Wang. Vanishing price of decentralization in large coordinative nonconvex optimization. *SIAM Journal on Optimization*, 27(3):1977–2009, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Wan24] Jie Wang. Weighted geometric mean, minimum mediated set, and optimal simple second-order cone representation. *SIAM Journal on Optimization*, 34(2):1490–1514, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- [War92] J. Warga. A necessary and sufficient condition for a constrained minimum. *SIAM Journal on Optimization*, 2(4):665–667, November 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [War96] D. E. Ward. Dini derivatives of the marginal function of a non-Lipschitzian program. *SIAM Journal on Optimization*, 6(1):198–211, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Wat00] Layne T. Watson. Theory of globally convergent probability-one homotopies for nonlinear programming. *SIAM Journal on Optimization*, 11(3):761–780, November/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36121>.
- [WB05a] Andreas Wächter and Lorenz T. Biegler. Line search filter methods for nonlinear programming: Local convergence. *SIAM Journal on Optimization*, 16(1):32–48, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42654>.
- [WB05b] Andreas Wächter and Lorenz T. Biegler. Line search filter methods for nonlinear programming: Motivation and global convergence. *SIAM Journal on Optimization*, 16(1):1–31, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-

Ward:1996:DDM**Wang:2011:SDR****Watson:2000:TGC****Wang:2017:VPD****Wachter:2005:LSF****Wang:2024:WGM****Wachter:2005:LSFb****Warga:1992:NSC**

7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42655>.

Wang:2016:SFO

- [WB16] Mengdi Wang and Dimitri P. Bertsekas. Stochastic first-order methods with random constraint projection. *SIAM Journal on Optimization*, 26(1): 681–717, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wang:2022:BPA

- [WB22] Xianfu Wang and Heinz H. Bauschke. The Bregman proximal average. *SIAM Journal on Optimization*, 32(2): 1379–1401, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1442474>.

Watson:2014:GCP

- [WBME14] Layne T. Watson, Stephen C. Billups, John E. Mitchell, and David R. Easterling. A globally convergent probability-one homotopy for linear programs with linear complementarity constraints. *SIAM Journal on Optimization*, 23(2):1167–1188, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wang:2024:CFS

- [WC24] Xiao Wang and Xiaojun Chen. Complexity of finite-sum optimization with nonsmooth

composite functions and non-Lipschitz regularization. *SIAM Journal on Optimization*, 34(3): 2472–2502, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1546701>.

Wen:2017:LCP

- [WCP17] Bo Wen, Xiaojun Chen, and Ting Kei Pong. Linear convergence of proximal gradient algorithm with extrapolation for a class of nonconvex nonsmooth minimization problems. *SIAM Journal on Optimization*, 27(1): 124–145, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Walmag:2005:NTR

- [WD05] Jérôme M. B. Walmag and Éric J. M. Delhez. A note on trust-region radius update. *SIAM Journal on Optimization*, 16(2): 548–562, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60256>.

Wood:2023:SSP

- [WD23] Killian Wood and Emiliano Dall’Anese. Stochastic saddle point problems with decision-dependent distributions. *SIAM Journal on Optimization*, 33(3): 1943–1967, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1488077>.

- Wang:2023:DAL**
- [WDLW23] Yifei Wang, Kangkang Deng, Haoyang Liu, and Zaiwen Wen. A decomposition augmented Lagrangian method for low-rank semidefinite programming. *SIAM Journal on Optimization*, 33(3):1361–1390, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1474539>. URL <http://epubs.siam.org/sam-bin/dbq/article/27166>.
- Wen:2010:LSM**
- [WG10] Zaiwen Wen and Donald Goldfarb. A line search multigrid method for large-scale nonlinear optimization. *SIAM Journal on Optimization*, 20(3):1478–1503, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wu:2014:MYR**
- [WDST14] Bin Wu, Chao Ding, Defeng Sun, and Kim-Chuan Toh. On the Moreau–Yosida regularization of the vector k -norm related functions. *SIAM Journal on Optimization*, 24(2):766–794, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2023:SVS**
- [WDZZ23] Shiwei Wang, Chao Ding, Yangjing Zhang, and Xinyuan Zhao. Strong variational sufficiency for nonlinear semidefinite programming and its implications. *SIAM Journal on Optimization*, 33(4):2988–3011, November 2023. CODEN SJOPE8. ISSN 1095-7189.
- Weng:1997:SNS**
- [Wen97] J. F. Weng. Shortest networks for smooth curves. *SIAM Journal on Optimization*, 7(4):1054–1068, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Walther:2019:CTS**
- [WG19] Andrea Walther and Andreas Griewank. Characterizing and testing subdifferential regularity in piecewise smooth optimization. *SIAM Journal on Optimization*, 29(2):1473–1501, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Welzel:2024:AHO**
- [WH24] Karl Welzel and Raphael A. Hauser. Approximating higher-order derivative tensors using secant updates. *SIAM Journal on Optimization*, 34(1):893–917, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- Wang:2019:ENM**
- [WHY⁺19] Jinhua Wang, Yaohua Hu, Carisa Kwok Wai Yu, Chong Li, and Xiaoqi Yang. Extended Newton methods for multiobjective optimization: Majorizing function technique and convergence analysis. *SIAM Journal on Optimization*, 29(3):

- 2388–2421, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Winkler:2008:CEW**
- [Win08] Kristin Winkler. A characterization of efficient and weakly efficient points in convex vector optimization. *SIAM Journal on Optimization*, 19(2):756–765, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2000:SLM**
- [WJ00] X. Wang and V. Jeyakumar. A sharp Lagrange multiplier rule for nonsmooth mathematical programming problems involving equality constraints. *SIAM Journal on Optimization*, 10(4):1136–1148, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35454>.
- Wu:2019:PPS**
- [WK19] Hao-Hsiang Wu and Simge Küçükyavuz. Probabilistic partial set covering with an oracle for chance constraints. *SIAM Journal on Optimization*, 29(1):690–718, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Waki:2006:SSS**
- [WKKM06] Hayato Waki, Sunyoung Kim, Masakazu Kojima, and Masakazu Muramatsu. Sums of squares and semidefinite program relaxations for polynomial optimization problems with structured sparsity. *SIAM Journal on Optimization*, 17(1):218–242, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2023:IRL**
- [WLKK23] Alex L. Wang, Yunlei Lu, and Fatma Kiliç-Karzan. Implicit regularity and linear convergence rates for the generalized trust-region subproblem. *SIAM Journal on Optimization*, 33(2):1250–1278, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1468073>.
- Wang:2016:PPA**
- [WLLY16] Jinhua Wang, Chong Li, Genaro Lopez, and Jen-Chih Yao. Proximal point algorithms on Hadamard manifolds: Linear convergence and finite termination. *SIAM Journal on Optimization*, 26(4):2696–2729, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2022:FWM**
- [WLM22] Haoyue Wang, Haihao Lu, and Rahul Mazumder. Frank–Wolfe methods with an unbounded feasible region and applications to structured learning. *SIAM Journal on Optimization*, 32(4):2938–2968, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

URL <https://epubs.siam.org/doi/10.1137/20M1387869>.

Wang:2023:CRI

- [WLN23] Jinhua Wang, Chong Li, and K. F. Ng. Convergence rate of inexact proximal point algorithms for operator with Hölder metric subregularity. *SIAM Journal on Optimization*, 33(3):1996–2020, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M152147X>.

Wang:2023:LCP

- [WLS23] Peng Wang, Huikang Liu, and Anthony Man-Cho So. Linear convergence of a proximal alternating minimization method with extrapolation for ℓ_1 -norm principal component analysis. *SIAM Journal on Optimization*, 33(2):684–712, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1434507>.

Wang:2015:LCS

- [WLWY15] Xiangmei Wang, Chong Li, Jinhua Wang, and Jen-Chih Yao. Linear convergence of subgradient algorithm for convex feasibility on Riemannian manifolds. *SIAM Journal on Optimization*, 25(4):2334–2358, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wu:2007:PNC

- [WLZY07] Z. Y. Wu, D. Li, L. S. Zhang, and X. M. Yang. Peeling off a nonconvex cover of an actual convex problem: Hidden convexity. *SIAM Journal on Optimization*, 18(2):507–536, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wang:2017:SQN

- [WMGL17] Xiao Wang, Shiqian Ma, Donald Goldfarb, and Wei Liu. Stochastic quasi-Newton methods for nonconvex stochastic optimization. *SIAM Journal on Optimization*, 27(2):927–956, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wang:2021:CTM

- [WML21a] Jie Wang, Victor Magron, and Jean-Bernard Lasserre. Chordal-TSSOS: a Moment-SOS hierarchy that exploits term sparsity with chordal extension. *SIAM Journal on Optimization*, 31(1):114–141, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Wang:2021:TMS

- [WML21b] Jie Wang, Victor Magron, and Jean-Bernard Lasserre. TSSOS: a moment-SOS hierarchy that exploits term sparsity. *SIAM Journal on Optimization*, 31(1):30–58, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Waldrip:2016:MED**
- [WN16] Steven H. Waldrip and Robert K. Niven. Maximum entropy derivation of quasi-Newton methods. *SIAM Journal on Optimization*, 26(4):2495–2511, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2023:SQP**
- [WP23] Jingyi Wang and Cosmin G. Petra. A sequential quadratic programming algorithm for non-smooth problems with upper- C^2 objective. *SIAM Journal on Optimization*, 33(3):2379–2405, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1490995>.
- Wang:2024:CRA**
- [WP24] Xiaozhou Wang and Ting Kei Pong. Convergence rate analysis of a Dykstra-type projection algorithm. *SIAM Journal on Optimization*, 34(1):563–589, February 2024. CODEN SJOPE8. ISSN 1095-7189.
- Wu:2022:MPI**
- [WPD22] David X. Wu, David Palmer, and Daryl R. DeFord. Maximum a posteriori inference of random dot product graphs via conic programming. *SIAM Journal on Optimization*, 32(4):2527–2551, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wu:2023:RNM**
- [WPY23] Yuqia Wu, Shaohua Pan, and Xiaoqi Yang. A regularized Newton method for ℓ_q -norm composite optimization problems. *SIAM Journal on Optimization*, 33(3):1676–1706, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1482822>.
- Wright:1991:PDP**
- [Wri91] Stephen J. Wright. Partitioned dynamic programming for optimal control. *SIAM Journal on Optimization*, 1(4):620–642, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wright:1992:IPA**
- [Wri92] Stephen J. Wright. An interior-point algorithm for linearly constrained optimization. *SIAM Journal on Optimization*, 2(3):450–473, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wright:1995:WPP**
- [Wri95] Margaret H. Wright. Why a pure primal Newton barrier step may be infeasible. *SIAM Journal on Optimization*, 5(1):1–12, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- URL <https://epubs.siam.org/doi/10.1137/20M1389406>.

- Wright:1998:ICC**
- [Wri98] Margaret H. Wright. Ill-conditioning and computational error in interior methods for nonlinear programming. *SIAM Journal on Optimization*, 9(1):84–111, October/December 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32227>.
- Wright:1999:MCF**
- [Wri99] Stephen J. Wright. Modified Cholesky factorizations in interior-point algorithms for linear programming. *SIAM Journal on Optimization*, 9(4):1159–1191, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30471>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- Wright:2000:GPD**
- [Wri00] S. E. Wright. A general primal-dual envelope method for convex programming problems. *SIAM Journal on Optimization*, 10(2):405–414, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33082>.
- Wright:2001:EFP**
- [Wri01] Stephen J. Wright. Effects of finite-precision arithmetic on interior-point methods for nonlinear programming. *SIAM Journal on Optimization*, 12(1):36–78, May/October 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34743>.
- Wright:2002:MSD**
- [Wri02] Stephen J. Wright. Modifying SQP for degenerate problems. *SIAM Journal on Optimization*, 13(2):470–497, September/October 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33373>.
- Wright:2005:ADN**
- [Wri05] Stephen J. Wright. An algorithm for degenerate nonlinear programming with rapid local convergence. *SIAM Journal on Optimization*, 15(3):673–696, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60123>.
- Wright:2012:ABC**
- [Wri12] Stephen J. Wright. Accelerated block-coordinate relaxation for regularized optimization. *SIAM Journal on Optimization*, 22(1):159–186, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Wild:2011:GCR**
- [WS11] Stefan M. Wild and Christine Shoemaker. Global convergence of radial basis function trust region derivative-free algorithms. *SIAM Journal on Optimization*, 21(3):761–781, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p761_s1.
- Wu:2017:QCR**
- [WSLZ17] Baiyi Wu, Xiaoling Sun, Duan Li, and Xiaojin Zheng. Quadratic convex reformulations for semi-continuous quadratic programming. *SIAM Journal on Optimization*, 27(3):1531–1553, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2010:SLD**
- [WST10] Chengjing Wang, Defeng Sun, and Kim-Chuan Toh. Solving log-determinant optimization problems by a Newton-CG primal proximal point algorithm. *SIAM Journal on Optimization*, 20(6):2994–3013, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wright:2004:FTR**
- [WT04] Stephen J. Wright and Matthew J. Tenny. A feasible trust-region sequential quadratic programming algorithm. *SIAM Journal on Optimization*, 14(4): 1074–1105, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41322>.
- Wiesemann:2013:PBO**
- [WTKR13] Wolfram Wiesemann, Angelos Tsoukalas, Polyxeni-Margarita Kleniati, and Berç Rustem. Pessimistic bilevel optimization. *SIAM Journal on Optimization*, 23(1):353–380, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wu:1996:EET**
- [Wu96] Zhijun Wu. The effective energy transformation scheme as a special continuation approach to global optimization with application to molecular conformation. *SIAM Journal on Optimization*, 6(3):748–768, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25469>.
- Wagner:2023:ASU**
- [WUR⁺23] Andrea Wagner, Firdevs Ulus, Birgit Rudloff, Gabriela Kováčová, and Niklas Hey. Algorithms to solve unbounded convex vector optimization problems. *SIAM Journal on Optimization*, 33(4): 2598–2624, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1507693>.

- [WW20] Irène Waldspurger and Alden Waters. Rank optimality for the Burer–Monteiro factorization. *SIAM Journal on Optimization*, 30(3):2577–2602, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX19] Long-Fei Wang and Yong Xia. A linear-time algorithm for globally maximizing the sum of a generalized Rayleigh quotient and a quadratic form on the unit sphere. *SIAM Journal on Optimization*, 29(3):1844–1869, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WWLY21] Jinhua Wang, Xiangmei Wang, Chong Li, and Jen-Chih Yao. Convergence analysis of gradient algorithms on Riemannian manifolds without curvature constraints and application to Riemannian mass. *SIAM Journal on Optimization*, 31(1):172–199, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX20a] Jiulin Wang and Yong Xia. Closing the gap between necessary and sufficient conditions for local nonglobal minimizer of trust region subproblem. *SIAM Journal on Optimization*, 30(3):1980–1995, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX16] Shu Wang and Yong Xia. On the ball-constrained weighted maximin dispersion problem. *SIAM Journal on Optimization*, 26(3):1565–1588, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX17] Lizhi Wang and Pan Xu. The watermelon algorithm for the bilevel integer linear programming problem. *SIAM Journal on Optimization*, 27(3):1403–1430, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX20b] Wei Wang and Huifu Xu. Robust spectral risk optimization when information on risk spectrum is incomplete. *SIAM Journal on Optimization*, 30(4):3198–3229, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [WX22] Qiong Wu and Huifu Xu. Preference robust modified optimized certainty equivalent. *SIAM Journal on Optimization*, 32(4):2662–2689, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1448069>.

- [WY01] **Wu:2001:SCE** Zili Wu and Jane J. Ye. Sufficient conditions for error bounds. *SIAM Journal on Optimization*, 12(2):421–435, November/January 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37155>. [WZ95]
- [WY03] **Wu:2003:FOS** Zili Wu and Jane J. Ye. First-order and second-order conditions for error bounds. *SIAM Journal on Optimization*, 14(3):621–645, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/41298>. [WZ24]
- [WY15] **Wang:2015:FMS** Shuxiong Wang and Yaxiang Yuan. Feasible method for semi-infinite programs. *SIAM Journal on Optimization*, 25(4):2537–2560, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [WZYB08]
- [WyW04] **Wu:2004:WSS** Zili Wu and Soon yi Wu. Weak sharp solutions of variational inequalities in Hilbert spaces. *SIAM Journal on Optimization*, 14(4):1011–1027, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42148>. [WZZ18]
- Wolkowicz:1995:AIE** Henry Wolkowicz and Qing Zhao. An all-inclusive efficient region of updates for least change secant methods. *SIAM Journal on Optimization*, 5(1):172–191, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wang:2024:GCA** Nuozhou Wang and Shuzhong Zhang. A gradient complexity analysis for minimizing the sum of strongly convex functions with varying condition numbers. *SIAM Journal on Optimization*, 34(2):1374–1401, April 2024. CODEN SJOPE8. ISSN 1095-7189.
- Wang:2008:FRS** Zizhuo Wang, Song Zheng, Yinyu Ye, and Stephen Boyd. Further relaxations of the semidefinite programming approach to sensor network localization. *SIAM Journal on Optimization*, 19(2):655–673, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Wu:2018:BRA** Di Wu, Helin Zhu, and Enlu Zhou. A Bayesian risk approach to data-driven stochastic optimization: Formulations and asymptotics. *SIAM Journal on Optimization*, 28(2):1588–1612, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [WZZ22] **Won:2022:OTS**
 Joong-Ho Won, Teng Zhang, and Hua Zhou. Orthogonal trace-sum maximization: Tightness of the semidefinite relaxation and guarantee of locally optimal solutions. *SIAM Journal on Optimization*, 32(3): 2180–2207, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1422707>.
- [XA18a] **Xie:2018:DRD**
 Weijun Xie and Shabbir Ahmed. On deterministic reformulations of distributionally robust joint chance constrained optimization problems. *SIAM Journal on Optimization*, 28(2):1151–1182, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XA18b] **Xu:2018:EAT**
 Wanting Xu and Mihai Anitescu. Exponentially accurate temporal decomposition for long-horizon linear-quadratic dynamic optimization. *SIAM Journal on Optimization*, 28(3): 2541–2573, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XB99] **Xie:1999:PUC**
 Y. F. Xie and R. H. Byrd. Practical update criteria for reduced Hessian SQP: Global analysis. *SIAM Journal on Optimization*, 9(3):578–604, April/
- [XBN20] **Xie:2020:ABM**
 Yuchen Xie, Richard H. Byrd, and Jorge Nocedal. Analysis of the BFGS method with errors. *SIAM Journal on Optimization*, 30(1):182–209, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XC21] **Xu:2021:LOA**
 Hong-Kun Xu and Andrzej Cegielski. The Landweber operator approach to the split equality problem. *SIAM Journal on Optimization*, 31(1):626–652, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XD20] **Xie:2020:SAS**
 Weijun Xie and Xinwei Deng. Scalable algorithms for the sparse ridge regression. *SIAM Journal on Optimization*, 30(4): 3359–3386, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XF24] **Xiong:2024:UTA**
 Zikai Xiong and Robert M. Freund. Using Taylor-approximated gradients to improve the Frank–Wolfe method for empirical risk minimization. *SIAM Journal on Optimization*, 34(3): 2503–2534, 2024. CODEN SJOPE8. ISSN 1052-6234
- June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27861>.

- (print), 1095-7189 (electronic).
URL <https://epubs.siam.org/doi/10.1137/22M1519286>.
- Xu:2021:ANM**
- [XFLP21] Luze Xu, Marcia Fampa, Jon Lee, and Gabriel Ponte. Approximate 1-norm minimization and minimum-rank structured sparsity for various generalized inverses via local search. *SIAM Journal on Optimization*, 31(3): 1722–1747, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Xu:2014:SAM**
- [XHL14] Zi Xu, Mingyi Hong, and Zhi-Quan Luo. Semidefinite approximation for mixed binary quadratically constrained quadratic programs. *SIAM Journal on Optimization*, 24(3): 1265–1293, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Xin:2022:FDN**
- [XKK22] Ran Xin, Usman A. Khan, and Soumya Kar. Fast decentralized nonconvex finite-sum optimization with recursive variance reduction. *SIAM Journal on Optimization*, 32(1):1–28, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1361158>.
- Xue:1999:CMC**
- [XLD99] Guoliang Xue, Theodore P. Lillis, and David E. Dougherty. Computing the minimum cost pipe network interconnecting one sink and many sources. *SIAM Journal on Optimization*, 10(1):22–42, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31368>.
- Xu:2019:MVS**
- [XLS19] Luze Xu, Jon Lee, and Daphne Skipper. More virtuous smoothing. *SIAM Journal on Optimization*, 29(2):1240–1259, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Xiao:2021:EPF**
- [XLxY21] Nachuan Xiao, Xin Liu, and Ya xiang Yuan. Exact penalty function for $\ell_{2,1}$ norm minimization over the Stiefel manifold. *SIAM Journal on Optimization*, 31(4):3097–3126, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Xu:2019:ASC**
- [XLZH19] Weiwei Xu, Wen Li, Lei Zhu, and Xueping Huang. The analytic solutions of a class of constrained matrix minimization and maximization problems with applications. *SIAM Journal on Optimization*, 29(2): 1657–1686, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [XS99] **Xie:1999:EIT**
 Dexuan Xie and Tamar Schlick. Efficient implementation of the truncated-Newton algorithm for large-scale chemistry applications. *SIAM Journal on Optimization*, 10(1):132–154, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31364>.
- [XS16] **Xie:2016:RSU**
 Yue Xie and Uday V. Shanbhag. On robust solutions to uncertain linear complementarity problems and their variants. *SIAM Journal on Optimization*, 26(4):2120–2159, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XSLZ11] **Xia:2011:RDG**
 Yong Xia, Xiaoling Sun, Duan Li, and Xiaojin Zheng. On the reduction of duality gap in box constrained nonconvex quadratic program. *SIAM Journal on Optimization*, 21(3):706–729, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p706_s1.
- [Xu06] **Xu:2006:IPA**
 Huifu Xu. An implicit programming approach for a class of stochastic mathematical programs with complementarity constraints. *SIAM Journal on Optimization*, 16(3):670–696, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Xu17] **Xu:2017:AFO**
 Yangyang Xu. Accelerated first-order primal-dual proximal methods for linearly constrained composite convex programming. *SIAM Journal on Optimization*, 27(3):1459–1484, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Xu18] **Xu:2018:HJG**
 Yangyang Xu. Hybrid Jacobian and Gauss–Seidel proximal block coordinate update methods for linearly constrained convex programming. *SIAM Journal on Optimization*, 28(1):646–670, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Xu19] **Xu:2019:SPO**
 Yashan Xu. Saddle points of obstacles for an elliptic variational inequality. *SIAM Journal on Optimization*, 29(2):1392–1407, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Xu20] **Xu:2020:PDS**
 Yangyang Xu. Primal–dual stochastic gradient method for convex programs with many functional constraints. *SIAM Journal on Optimization*, 30(2):

1664–1692, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Xu:2022:FOM

[Xu22] Yangyang Xu. First-order methods for problems with $O(1)$ functional constraints can have almost the same convergence rate as for unconstrained problems. *SIAM Journal on Optimization*, 32(3):1759–1790, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1371579>.

Xu:2024:DGD

[Xu24] Yangyang Xu. Decentralized gradient descent maximization method for composite nonconvex strongly-concave minimax problems. *SIAM Journal on Optimization*, 34(1):1006–1044, March 2024. CODEN SJOPE8. ISSN 1095-7189.

Xu:2024:DFA

[XWSD24] Zi Xu, Ziqi Wang, Jingjing Shen, and Yuhong Dai. Derivative-free alternating projection algorithms for general nonconvex-concave minimax problems. *SIAM Journal on Optimization*, 34(2):1879–1908, May 2024. CODEN SJOPE8. ISSN 1095-7189.

Xiao:2021:TSC

[XXS21] Peijun Xiao, Zhisheng Xiao, and Ruoyu Sun. Two symmetrized coordinate descent methods can

be $O(n^2)$ times slower than the randomized version. *SIAM Journal on Optimization*, 31(4):2726–2752, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Xue:1997:EAM

[XY97] Guoliang Xue and Yinyu Ye. An efficient algorithm for minimizing a sum of Euclidean norms with applications. *SIAM Journal on Optimization*, 7(4):1017–1036, November 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/28836>.

Xue:2000:EAM

[XY00] Guoliang Xue and Yinyu Ye. An efficient algorithm for minimizing a sum of p -norms. *SIAM Journal on Optimization*, 10(2):551–579, December/February 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32708>.

Xu:2010:NOC

[XY10] Huifu Xu and Jane J. Ye. Necessary optimality conditions for two-stage stochastic programs with equilibrium constraints. *SIAM Journal on Optimization*, 20(4):1685–1715, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [XY15] **Xu:2015:BSG** Yangyang Xu and Wotao Yin. Block stochastic gradient iteration for convex and nonconvex optimization. *SIAM Journal on Optimization*, 25(3):1686–1716, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XYZ15] **Xu:2015:SSM** Mengwei Xu, Jane J. Ye, and Liwei Zhang. Smoothing SQP methods for solving degenerate nonsmooth constrained optimization problems with applications to bilevel programs. *SIAM Journal on Optimization*, 25(3):1388–1410, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XZ14a] **Xiao:2014:PGH** Lin Xiao and Tong Zhang. A proximal-gradient homotopy method for the sparse least-squares problem. *SIAM Journal on Optimization*, 23(2):1062–1091, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [XZ14b] **Xiao:2014:PSG** Lin Xiao and Tong Zhang. A proximal stochastic gradient method with progressive variance reduction. *SIAM Journal on Optimization*, 24(4):2057–2075, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Yan09] **Yang:2009:EBC** W. H. Yang. Error bounds for convex polynomials. *SIAM Journal on Optimization*, 19(4):1633–1647, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YB16] **Yang:2016:TVA** Boshi Yang and Samuel Burer. A two-variable approach to the two-trust-region subproblem. *SIAM Journal on Optimization*, 26(1):661–680, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YCST22] **Yuan:2022:DRT** Yancheng Yuan, Tsung-Hui Chang, Defeng Sun, and Kim-Chuan Toh. A dimension reduction technique for large-scale structured sparse optimization problems with application to convex clustering. *SIAM Journal on Optimization*, 32(3):2294–2318, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1441080>.
- [Ye92] **Ye:1992:PRA** Yinyu Ye. A potential reduction algorithm allowing column generation. *SIAM Journal on Optimization*, 2(1):7–20, February 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- [Ye99] **Ye:1999:OCO**
 J. J. Ye. Optimality conditions for optimization problems with complementarity constraints. *SIAM Journal on Optimization*, 9(2):374–387, March 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/32188>.
- [Ye00] **Ye:2000:CQN**
 J. J. Ye. Constraint qualifications and necessary optimality conditions for optimization problems with variational inequality constraints. *SIAM Journal on Optimization*, 10(4):943–962, June/July 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34847>.
- [Ye04] **Ye:2004:NMR**
 Jane J. Ye. Nondifferentiable multiplier rules for optimization and bilevel optimization problems. *SIAM Journal on Optimization*, 15(1):252–274, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42419>.
- [YF00] **Yamashita:2000:PPA**
 Nobuo Yamashita and Masao Fukushima. The proximal point algorithm with genuine superlinear convergence for the monotone complementarity problem. *SIAM Journal on Optimization*, 11(2):364–379, September/November 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35949>.
- [YFHS16] **Yang:2016:RTP**
 Yuning Yang, Yunlong Feng, Xiaolin Huang, and Johan A. K. Suykens. Rank-1 tensor properties with applications to a class of tensor optimization problems. *SIAM Journal on Optimization*, 26(1):171–196, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YG91] **Yang:1991:EIM**
 Bing Yang and Lin Gao. An efficient implementation of Merrill’s method for sparse or partially separable systems of nonlinear equations. *SIAM Journal on Optimization*, 1(2):206–221, May 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YH01] **Yang:2001:NLA**
 X. Q. Yang and X. X. Huang. A nonlinear Lagrangian approach to constrained optimization problems. *SIAM Journal on Optimization*, 11(4):1119–1144, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/37180>.

- [Yil06] **Yildirim:2006:MVC**
E. Alper Yildirim. On the minimum volume covering ellipsoid of ellipsoids. *SIAM Journal on Optimization*, 17(3): 621–641, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Yil08] **Yildirim:2008:TAM**
E. Alper Yildirim. Two algorithms for the minimum enclosing ball problem. *SIAM Journal on Optimization*, 19(3): 1368–1391, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Yin99] **Yin:1999:RCC**
G. Yin. Rates of convergence for a class of global stochastic optimization algorithms. *SIAM Journal on Optimization*, 10(1):99–120, October/November 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31922>.
- [YK18] **Yanikoglu:2018:DRB**
Ihsan Yanikoglu and Daniel Kuhn. Decision rule bounds for two-stage stochastic bilevel programs. *SIAM Journal on Optimization*, 28(1):198–222, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YKI04] **Yin:2004:RSS**
G. Yin, Vikram Krishnamurthy, and Cristina Ion. Regime switching stochastic approximation algorithms with application to adaptive discrete stochastic optimization. *SIAM Journal on Optimization*, 14(4):1187–1215, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42370>.
- [Yuan:2011:LBD] **Yuan:2011:LBD**
Xiaoming Yuan and Min Li. An LQP-based decomposition method for solving a class of variational inequalities. *SIAM Journal on Optimization*, 21(4): 1309–1318, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i4/p1309_s1.
- [Yuan:2022:SNR] **Yuan:2022:SNR**
Rui Yuan, Alessandro Lazaric, and Robert M. Gower. Sketched Newton–Raphson. *SIAM Journal on Optimization*, 32(3): 1555–1583, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M139788X>.
- [YLG22] **Yang:2003:FSL**
Yu-Fei Yang, Dong-Hui Li, and Liqun Qi. A feasible sequential linear equation method for inequality constrained optimization. *SIAM Journal on Optimization*, 13(4):1222–1244, 2003. CODEN SJOPE8.
- [YL11] **Yin:2004:RSS**
G. Yin, Vikram Krishnamurthy, and Cristina Ion. Regime switching stochastic approximation algorithms with application to adaptive discrete stochastic optimization. *SIAM Journal on Optimization*, 14(4):1187–1215, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42370>.
- [YLQ03] **Yin:2004:RSS**
G. Yin, Vikram Krishnamurthy, and Cristina Ion. Regime switching stochastic approximation algorithms with application to adaptive discrete stochastic optimization. *SIAM Journal on Optimization*, 14(4):1187–1215, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42370>.

- ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38388>.
- [YLS⁺15] **Yang:2015:FMG**
Sen Yang, Zhaosong Lu, Xiaotong Shen, Peter Wonka, and Jieping Ye. Fused multiple graphical lasso. *SIAM Journal on Optimization*, 25(2):916–943, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YLY16] **Yuan:2016:CDG**
Kun Yuan, Qing Ling, and Wotao Yin. On the convergence of decentralized gradient descent. *SIAM Journal on Optimization*, 26(3):1835–1854, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YLZ02] **Yin:2002:RAS**
G. Yin, R. H. Liu, and Q. Zhang. Recursive algorithms for stock liquidation: a stochastic optimization approach. *SIAM Journal on Optimization*, 13(1):240–263, May/August 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39290>.
- [YM14] **Yue:2014:AOP**
Yao Yue and Karl Meerbergen. Accelerating optimization of parametric linear systems by model order reduction. *SIAM Journal on Optimization*, 23(2): 1344–1370, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YMT04] **Yabe:2004:SSB**
H. Yabe, H. J. Martinez, and R. A. Tapia. On sizing and shifting the BFGS update within the sized-broyden family of secant updates. *SIAM Journal on Optimization*, 15(1): 139–160, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/30880>.
- [YmZS15] **Yan:2015:CQH**
Zi-Zong Yan, Yue mei Zhang, and Wen Sun. Connectivity of quadratic hypersurfaces and its applications in optimization, Part I: General theory. *SIAM Journal on Optimization*, 25(2): 995–1012, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YN17] **Yu:2017:SPA**
Hao Yu and Michael J. Neely. A simple parallel algorithm with an $O(1/t)$ convergence rate for general convex programs. *SIAM Journal on Optimization*, 27(2): 759–783, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YNS20] **Yousefian:2020:SDQ**
Farzad Yousefian, Angelia Nedić, and Uday V. Shanbhag. On stochastic and deterministic

- quasi-Newton methods for non-strongly convex optimization: Asymptotic convergence and rate analysis. *SIAM Journal on Optimization*, 30(2):1144–1172, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Yos07] Akiko Yoshise. Interior point trajectories and a homogeneous model for nonlinear complementarity problems over symmetric cones. *SIAM Journal on Optimization*, 17(4):1129–1153, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YPL21] Peiran Yu, Ting Kei Pong, and Zhaosong Lu. Convergence rate analysis of a sequential convex programming method with line search for a class of constrained difference-of-convex optimization problems. *SIAM Journal on Optimization*, 31(3):2024–2054, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YPT21] **Yu:2021:CRA**
- [YST14] Junfeng Yang, Defeng Sun, and Kim-Chuan Toh. A proximal point algorithm for log-determinant optimization with group lasso regularization. *SIAM Journal on Optimization*, 23(2):857–893, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YTP20] Minglu Ye and Ting Kei Pong. A subgradient-based approach for finding the maximum feasible subsystem with respect to a set. *SIAM Journal on Optimization*, 30(2):1274–1299, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YTB20] E. Alper Yildirim and Michael J. Todd. An interior-point approach to sensitivity analysis in degenerate linear programs. *SIAM Journal on Optimization*, 12(3):692–714, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38245>.
- [YTC18] Lei Yang, Ting Kei Pong, and Xiaojun Chen. A nonmonotone alternating updating method for a class of matrix factorization problems. *SIAM Journal on Optimization*, 28(4):3402–3430, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [YTD10] Hiroshi Yamashita and Takahito Tanabe. A primal-dual exterior point method for nonlinear optimization. *SIAM Journal on*
- [YST14] **Yoshise:2007:IPT**
- [YTP20] **Ye:2020:SBA**
- [YTB20] **Yildirim:2002:IPA**
- [YTD10] **Yamashita:2010:PDE**

- Optimization*, 20(6):3335–3363, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Yang:2022:BPP**
- [YT22] Lei Yang and Kim-Chuan Toh. Bregman proximal point algorithm revisited: A new inexact version and its inertial variant. *SIAM Journal on Optimization*, 32(3):1523–1554, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1360748>.
- Yan:2024:FOC**
- [YTY24] Weiping Yan, Yu Tang, and Gonglin Yuan. Fast optimization of charged particle dynamics with damping. *SIAM Journal on Optimization*, 34(3):2287–2313, 2024. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1599045>.
- Yun:2014:ICC**
- [Yun14] Sangwoon Yun. On the iteration complexity of cyclic coordinate gradient descent methods. *SIAM Journal on Optimization*, 24(3):1567–1580, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Yildirim:2002:WSS**
- [YW02] E. Alper Yildirim and Stephen J. Wright. Warm-start strategies in interior-point methods for linear programming. *SIAM Journal on Optimization*, 12(3):782–810, January/February 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/36923>.
- Yuan:2017:NRN**
- [YWAS17] Jianhua Yuan, Meiling Wang, Wenbao Ai, and Tianping Shuai. New results on narrowing the duality gap of the extended Celis–Dennis–Tapia problem. *SIAM Journal on Optimization*, 27(2):890–909, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Yang:2019:MSG**
- [YWF19] Shuoguang Yang, Mengdi Wang, and Ethan X. Fang. Multi-level stochastic gradient methods for nested composition optimization. *SIAM Journal on Optimization*, 29(1):616–659, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Yabe:1995:CFB**
- [YY95] Hiroshi Yabe and Naokazu Yamaki. Convergence of a factorized Broyden-like family for nonlinear least squares problems. *SIAM Journal on Optimization*, 5(4):770–791, November 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Yamashita:2003:IPM**
- [YY03] Hiroshi Yamashita and Hiroshi Yabe. An interior point method with a primal-dual quadratic barrier penalty function for nonlinear optimization. *SIAM Journal on Optimization*, 14(2): 479–499, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Yao:2023:RLL**
- [YY23] Wenfang Yao and Xiaoqi Yang. Relative Lipschitz-like property of parametric systems via projectional coderivatives. *SIAM Journal on Optimization*, 33(3): 2021–2040, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M151296X>.
- Ye:2003:NRQ**
- [YZ03] Yinyu Ye and Shuzhong Zhang. New results on quadratic minimization. *SIAM Journal on Optimization*, 14(1):245–267, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39001>.
- Ye:2010:NNO**
- [YZ10] Jane J. Ye and Daoli Zhu. New necessary optimality conditions for bilevel programs by combining the MPEC and value function approaches. *SIAM Journal on Optimization*, 20(4): 1885–1905, 2010. CO-
- Ye:2013:MCN**
- [YZ13] Jane J. Ye and Julie Zhou. Minimizing the condition number to construct design points for polynomial regression models. *SIAM Journal on Optimization*, 23(1): 666–686, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ye:2016:FOO**
- [YZ16] Jane J. Ye and Jinchuan Zhou. First-order optimality conditions for mathematical programs with second-order cone complementarity constraints. *SIAM Journal on Optimization*, 26(4): 2820–2846, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ye:2019:QCC**
- [YZS19] Man-Chung Yue, Zirui Zhou, and Anthony Man-Cho So. On the quadratic convergence of the cubic regularization method under a local error bound condition. *SIAM Journal on Optimization*, 29(1):904–932, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Ye:1997:EPN**
- [YZZ97] J. J. Ye, D. L. Zhu, and Q. J. Zhu. Exact penalization and necessary optimality conditions for generalized bilevel programming problems. *SIAM Journal on Optimization*, 7(2):

481–507, May 1997. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25734>.

Yao:2017:SMR

[YZZ17] Jen-Chih Yao, Xi Yin Zheng, and Jiangxing Zhu. Stable minimizers of φ -regular functions. *SIAM Journal on Optimization*, 27(2):1150–1170, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zavala:2014:SNP

[ZA14] Victor M. Zavala and Mihai Anitescu. Scalable nonlinear programming via exact differentiable penalty functions and trust-region Newton methods. *SIAM Journal on Optimization*, 24(1):528–558, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zufiria:2017:GLM

[ZÁC17] Pedro J. Zufiria and José A. Álvarez-Cubero. Generalized lexicographic MultiObjective combinatorial optimization. Application to cryptography. *SIAM Journal on Optimization*, 27(4):2182–2201, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:2024:RAP

[ZAG24] Xuan Zhang, Necdet Serhat Aybat, and Mert Gürbüzbalaban. Robust accelerated primal-dual

methods for computing saddle points. *SIAM Journal on Optimization*, 34(1):1097–1130, March 2024. CODEN SJOPE8. ISSN 1095-7189.

Zhang:2021:EAD

[ZAL21] Zhe Zhang, Shabbir Ahmed, and Guanghui Lan. Efficient algorithms for distributionally robust stochastic optimization with discrete scenario support. *SIAM Journal on Optimization*, 31(3):1690–1721, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zaslavski:2000:GER

[Zas00] Alexander J. Zaslavski. On a generic existence result in optimization. *SIAM Journal on Optimization*, 11(1):189–198, July/August 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34928>.

Zaslavski:2005:SCE

[Zas05] Alexander J. Zaslavski. A sufficient condition for exact penalty in constrained optimization. *SIAM Journal on Optimization*, 16(1):250–262, 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/61229>.

Zaslavski:2010:CPP

[Zas10] Alexander J. Zaslavski. Convergence of a proximal point

- method in the presence of computational errors in Hilbert spaces. *SIAM Journal on Optimization*, 20(5):2413–2421, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Zas13] Alexander J. Zaslavski. Exact penalty property in optimization with mixed constraints via variational analysis. *SIAM Journal on Optimization*, 23(1):170–187, 2013. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZB18] Yiqiao Zhong and Nicolas Boumal. Near-optimal bounds for phase synchronization. *SIAM Journal on Optimization*, 28(2):989–1016, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZC09] Chao Zhang and Xiaojun Chen. Smoothing projected gradient method and its application to stochastic linear complementarity problems. *SIAM Journal on Optimization*, 20(2):627–649, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZC10] Weijun Zhou and Xiaojun Chen. Global convergence of a new hybrid Gauss–Newton structured BFGS method for nonlinear least squares problems. *SIAM Journal on Optimization*, 20(5):2422–2441, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZC20] Chao Zhang and Xiaojun Chen. A smoothing active set method for linearly constrained non-Lipschitz nonconvex optimization. *SIAM Journal on Optimization*, 30(1):1–30, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZC91] Stavros A. Zenios and Yair Censor. Massively parallel row-action algorithms for some nonlinear transportation problems. *SIAM Journal on Optimization*, 1(3):373–400, August 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZCH⁺23] Wenhao Zhan, Shicong Cen, Baihe Huang, Yuxin Chen, Ja-
- Zaslavski:2013:EPP**
- Zhou:2010:GCN**
- Zhang:2009:SPG**
- Zhang:2000:FSF**
- Zhan:2023:PMD**
- Zhong:2018:NOB**

- son D. Lee, and Yuejie Chi. Policy mirror descent for regularized reinforcement learning: a generalized framework with linear convergence. *SIAM Journal on Optimization*, 33(2):1061–1091, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1456789>. [ZDR24]
- Zhang:2010:DFA**
- [ZCS10] Hongchao Zhang, Andrew R. Conn, and Katya Scheinberg. A derivative-free algorithm for least-squares minimization. *SIAM Journal on Optimization*, 20(6):3555–3576, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v20/i6/p3555_s1. [Zen91]
- Zhou:2010:SCM**
- [ZCT10] Guanglu Zhou, Louis Caccetta, and Kok Lay Teo. A superlinearly convergent method for a class of complementarity problems with non-Lipschitzian functions. *SIAM Journal on Optimization*, 20(4):1811–1827, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZFL06]
- Zhou:2012:NPO**
- [ZCTW12] Guanglu Zhou, Louis Caccetta, Kok Lay Teo, and Soon-Yi Wu. Nonnegative polynomial optimization over unit spheres and convex programming relaxations. *SIAM Journal on Optimization*, 22(3):987–1008, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zeng:2024:TTS]
- Sihan Zeng, Think T. Doan, and Justin Romberg. A two-time-scale stochastic optimization framework with applications in control and reinforcement learning. *SIAM Journal on Optimization*, 34(1):946–976, March 2024. CODEN SJOPE8. ISSN 1095-7189. [Zenios:1991:FGD]
- Stavros A. Zenios. On the fine-grain decomposition of multi-commodity transportation problems. *SIAM Journal on Optimization*, 1(4):643–669, November 1991. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zhao:2006:CGM]
- Yun-Bin Zhao, Shu-Cherng Fang, and Duan Li. Constructing generalized mean functions using convex functions with regularity conditions. *SIAM Journal on Optimization*, 17(1):37–51, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zhang:2003:NSM]
- Yin Zhang and Liyan Gao. On numerical solution of the maximum volume ellipsoid problem.

SIAM Journal on Optimization, 14(1):53–76, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/39723>.

Zhang:2004:NLS

- [ZH04] Hongchao Zhang and William W. Hager. A nonmonotone line search technique and its application to unconstrained optimization. *SIAM Journal on Optimization*, 14(4):1043–1056, 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42820>. [Zha96]

Zhang:2006:CQO

- [ZH06] Shuzhong Zhang and Yongwei Huang. Complex quadratic optimization and semidefinite programming. *SIAM Journal on Optimization*, 16(3):871–890, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zha98a]

Zhang:1994:PHO

- [Zha94a] Ruoxin Zhang. Problems of hierarchical optimization in finite dimensions. *SIAM Journal on Optimization*, 4(3):521–536, August 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zha98b]

Zhang:1994:CCI

- [Zha94b] Yin Zhang. On the convergence of a class of infeasible interior-point methods for the horizon-

tal linear complementarity problem. *SIAM Journal on Optimization*, 4(1):208–227, February 1994. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhao:1996:RBC

Gongyun Zhao. On the relationship between the curvature integral and the complexity of path-following methods in linear programming. *SIAM Journal on Optimization*, 6(1):57–73, February 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:1998:ESP

Yin Zhang. On extending some Primal–Dual interior-point algorithms from linear programming to semidefinite programming. *SIAM Journal on Optimization*, 8(2):365–386, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/29611>.

Zhao:1998:IPA

Gongyun Zhao. Interior point algorithms for linear complementarity problems based on large neighborhoods of the central path. *SIAM Journal on Optimization*, 8(2):397–413, May 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27557>.

- [Zha00] **Zhang:2000:GEB** Shuzhong Zhang. Global error bounds for convex conic problems. *SIAM Journal on Optimization*, 10(3):836–851, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/34429>.
- [Zha20] **Zhao:2020:ORA** Yun-Bin Zhao. Optimal k -thresholding algorithms for sparse optimization problems. *SIAM Journal on Optimization*, 30(1):31–55, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Zhe20] **Zheng:2020:WPS** Xi Yin Zheng. Well-posed solvability of convex optimization problems on a differentiable or continuous closed convex set. *SIAM Journal on Optimization*, 30(1):490–512, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZHE23a] **Zhang:2023:UCD** Xinwei Zhang, Mingyi Hong, and Nicola Elia. Understanding a class of decentralized and federated optimization algorithms: a multirate feedback control perspective. *SIAM Journal on Optimization*, 33(2):652–683, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1475648>.
- [Zhe23b] **Zheng:2023:COP** Xi Yin Zheng. Convex optimization problems on differentiable sets. *SIAM Journal on Optimization*, 33(1):338–359, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/22M1482494>.
- [Zhe23c] **Zheng:2023:CCO** Xi Yin Zheng. Corrigendum: Convex optimization problems on differentiable sets. *SIAM Journal on Optimization*, 33(3):2484–2488, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/23M1562901>.
- [Zhu95] **Zhu:1995:PDS** Ci You Zhu. On the primal-dual steepest descent algorithm for extended linear-quadratic programming. *SIAM Journal on Optimization*, 5(1):114–128, February 1995. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [Zhu96] **Zhu:1996:ACA** Ciyu Zhu. Asymptotic convergence analysis of some inexact proximal point algorithms for minimization. *SIAM Journal on Optimization*, 6(3):626–637, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25592>.

- [Zhu02] **Zhu:2002:NCC**
 Qiji J. Zhu. Necessary conditions for constrained optimization problems in smooth Banach spaces and applications. *SIAM Journal on Optimization*, 12(4):1032–1047, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38333>.
- [Zie14] **Ziems:2014:AMI**
 J. Carsten Ziems. Adaptive multilevel inexact SQP-methods for PDE-constrained optimization with control constraints. *SIAM Journal on Optimization*, 23(2):1257–1283, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZJS18] **Zhang:2018:ACC**
 Yiling Zhang, Ruiwei Jiang, and Siqian Shen. Ambiguous chance-constrained binary programs under mean-covariance information. *SIAM Journal on Optimization*, 28(4):2922–2944, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZK14] **Zhang:2014:FCD**
 Minjiao Zhang and Simge Küçükyavuz. Finitely convergent decomposition algorithms for two-stage stochastic pure integer programs. *SIAM Journal on Optimization*, 24(4):1933–1951, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZK15] **Zhao:2015:NCM**
 Yun-Bin Zhao and Michal Kocvara. A new computational method for the sparsest solutions to systems of linear equations. *SIAM Journal on Optimization*, 25(2):1110–1134, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZL01] **Zhao:2001:MFP**
 Yun-Bin Zhao and Duan Li. Monotonicity of fixed point and normal mappings associated with variational inequality and its application. *SIAM Journal on Optimization*, 11(4):962–973, March/May 2001. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/35795>.
- [ZL02] **Zhao:2002:LLN**
 Yun-Bin Zhao and Duan Li. Locating the least 2-norm solution of linear programs via a path-following method. *SIAM Journal on Optimization*, 12(4):893–912, March/April 2002. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38636>.
- [ZL03] **Zhao:2003:GLS**
 Yun-Bin Zhao and Duan Li. A globally and locally superlin-

- early convergent Non-Interior-Point algorithm for P_0 LCPs. *SIAM Journal on Optimization*, 13(4):1195–1221, 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/38415>. [ZL22b]
- Zhao:2012:RMS**
- [ZL12] Yun-Bin Zhao and Duan Li. Reweighted ℓ_1 -minimization for sparse solutions to underdetermined linear systems. *SIAM Journal on Optimization*, 22(3):1065–1088, 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZLCL21]
- Zhang:2020:PAD**
- [ZL20] Jiawei Zhang and Zhi-Quan Luo. A proximal alternating direction method of multiplier for linearly constrained nonconvex minimization. *SIAM Journal on Optimization*, 30(3):2272–2302, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZLTD22]
- Zhang:2022:GDE**
- [ZL22a] Jiawei Zhang and Zhi-Quan Luo. A global dual error bound and its application to the analysis of linearly constrained nonconvex optimization. *SIAM Journal on Optimization*, 32(3):2319–2346, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M135474X>. [ZM96]
- Zhang:2022:FOA**
- Na Zhang and Qia Li. First-order algorithms for a class of fractional optimization problems. *SIAM Journal on Optimization*, 32(1):100–129, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/20M1325381>.
- Zhao:2021:EQP**
- Ping-Fan Zhao, Qing-Na Li, Wei-Kun Chen, and Ya-Feng Liu. An efficient quadratic programming relaxation based algorithm for large-scale MIMO detection. *SIAM Journal on Optimization*, 31(2):1519–1545, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhu:2022:NPD**
- Yuzixuan Zhu, Deyi Liu, and Quoc Tran-Dinh. New primal-dual algorithms for a class of nonsmooth and nonlinear convex-concave minimax problems. *SIAM Journal on Optimization*, 32(4):2580–2611, 2022. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1408683>.
- Zhu:1996:CCR**
- D. L. Zhu and P. Marcotte. Coercivity and its role in the convergence of iterative schemes for solving variational inequalities.

- SIAM Journal on Optimization*, 6(3):714–726, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/25041>. [ZN04]
- Zweck:2006:MCO**
- [ZM06] John Zweck and Susan E. Minkoff. Modeling compensation for optical fiber communication systems. *SIAM Journal on Optimization*, 17(3):738–775, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZN05]
- Zhou:2020:CMD**
- [ZMB⁺20] Zhengyuan Zhou, Panayotis Mertikopoulos, Nicholas Bambos, Stephen P. Boyd, and Peter W. Glynn. On the convergence of mirror descent beyond stochastic convex programming. *SIAM Journal on Optimization*, 30(1):687–716, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZN07a]
- Zeng:2021:WPO**
- [ZML21] Shengda Zeng, Stanisław Migórski, and Zhenhai Liu. Well-posedness, optimal control, and sensitivity analysis for a class of differential variational-hemivariational inequalities. *SIAM Journal on Optimization*, 31(4):2829–2862, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZN07b]
- Zheng:2004:MRC**
- Xi Yin Zheng and Kung Fu Ng. Metric regularity and constraint qualifications for convex inequalities on Banach spaces. *SIAM Journal on Optimization*, 14(3):757–772, ??? 2004. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/42310>.
- Zheng:2005:PAE**
- Xi Yin Zheng and Kung Fu Ng. Perturbation analysis of error bounds for systems of conic linear inequalities in Banach spaces. *SIAM Journal on Optimization*, 15(4):1026–1041, ??? 2005. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/60179>.
- Zheng:2007:LMR**
- Xi Yin Zheng and Kung Fu Ng. The Lagrange multiplier rule for multifunctions in Banach spaces. *SIAM Journal on Optimization*, 17(4):1154–1175, ??? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zheng:2007:MSC**
- Xi Yin Zheng and Kung Fu Ng. Metric subregularity and constraint qualifications for convex generalized equations in Banach spaces. *SIAM Journal on Optimization*, 18(2):437–460,

???? 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2008:LRC

[ZN08]

Xi Yin Zheng and Kung Fu Ng. Linear regularity for a collection of subsmooth sets in Banach spaces. *SIAM Journal on Optimization*, 19(1):62–76, 2008. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2009:CSM

[ZN09]

Xi Yin Zheng and Kung Fu Ng. Calmness for L -subsmooth multifunctions in Banach spaces. *SIAM Journal on Optimization*, 19(4):1648–1673, 2009. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2010:MSC

[ZN10]

Xi Yin Zheng and Kung Fu Ng. Metric subregularity and calmness for nonconvex generalized equations in Banach spaces. *SIAM Journal on Optimization*, 20(5):2119–2136, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2011:UST

[ZN11]

Xi Yin Zheng and Kung Fu Ng. A unified separation theorem for closed sets in a Banach space and optimality conditions for vector optimization. *SIAM Journal on Optimization*,

21(3):886–911, 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i3/p886_s1.

Zheng:2014:MSP

[ZN14a]

Xi Yin Zheng and Kung Fu Ng. Metric subregularity of piecewise linear multifunctions and applications to piecewise linear multiobjective optimization. *SIAM Journal on Optimization*, 24(1):154–174, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2014:PNC

[ZN14b]

Xi Yin Zheng and Kung Fu Ng. Proximal normal cone analysis on smooth Banach spaces and applications. *SIAM Journal on Optimization*, 24(1):363–384, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2015:HSM

[ZN15]

Xi Yin Zheng and Kung Fu Ng. Hölder stable minimizers, tilt stability, and Hölder metric regularity of subdifferentials. *SIAM Journal on Optimization*, 25(1):416–438, 2015. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2021:PAM

[ZN21]

Xi Yin Zheng and Kung Fu Ng. Perturbation analysis of metric subregularity for multifunctions. *SIAM Journal on Optimization*,

- 31(3):2429–2454, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [Zol03]
- Zou:1993:NEL**
- [ZNB+93] X. Zou, I. M. Navon, M. Berger, K. H. Phua, T. Schlick, and F.-X. Le Dimet. Numerical experience with limited-memory quasi-Newton and truncated Newton methods. *SIAM Journal on Optimization*, 3(3):582–608, August 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhu:1999:QCR**
- [ZNW99] M. Zhu, J. L. Nazareth, and H. Wolkowicz. The quasi-Cauchy relation and diagonal updating. *SIAM Journal on Optimization*, 9(4):1192–1204, September 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/33179>. Dedicated to John E. Dennis, Jr., on his 60th birthday.
- Zhang:2020:GCT**
- [ZOB20] Junzi Zhang, Brendan O’Donoghue, and Stephen Boyd. Globally convergent Type-I Anderson acceleration for nonsmooth fixed-point iterations. *SIAM Journal on Optimization*, 30(4):3170–3197, ??? 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). [ZPR93]
- Zolezzi:2003:CNT**
- T. Zolezzi. Condition number theorems in optimization. *SIAM Journal on Optimization*, 14(2):507–516, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zakeri:2000:ICB**
- [ZPR00] Golbon Zakeri, Andrew B. Philpott, and David M. Ryan. Inexact cuts in Benders decomposition. *SIAM Journal on Optimization*, 10(3):643–657, February/March 2000. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31870>.
- Zhou:2021:QCS**
- [ZPXQ21] Shenglong Zhou, Lili Pan, Naihua Xiu, and Hou-Duo Qi. Quadratic convergence of smoothing Newton’s method for 0/1 loss optimization. *SIAM Journal on Optimization*, 31(4):3184–3211, ??? 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhu:1993:PDP**
- Ci You Zhu and R. T. Rockafellar. Primal-dual projected gradient algorithms for extended linear-quadratic programming. *SIAM Journal on Optimization*, 3(4):751–783, November 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

- Zhang:2017:GLT**
- [ZSL17] Lei-Hong Zhang, Chungen Shen, and Ren-Cang Li. On the generalized Lanczos trust-region method. *SIAM Journal on Optimization*, 27(3):2110–2142, 2017. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhao:2010:NCA**
- [ZST10] Xin-Yuan Zhao, Defeng Sun, and Kim-Chuan Toh. A Newton-CG augmented Lagrangian method for semidefinite programming. *SIAM Journal on Optimization*, 20(4):1737–1765, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhang:2019:TSQ**
- [ZSX19] Min Zhang, Jie Sun, and Honglei Xu. Two-stage quadratic games under uncertainty and their solution by progressive hedging algorithms. *SIAM Journal on Optimization*, 29(3):1799–1818, 2019. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhu:2010:URE**
- [ZSY10] Zhisu Zhu, Anthony Man-Cho So, and Yinyu Ye. Universal rigidity and edge sparsification for sensor network localization. *SIAM Journal on Optimization*, 20(6):3059–3081, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhou:1992:TMC**
- [ZT92] Jianxin Zhou and Guo Qiang Tian. Transfer method for characterizing the existence of maximal elements of binary relations on compact or noncompact sets. *SIAM Journal on Optimization*, 2(3):360–375, August 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhang:1993:SCP**
- [ZT93] Yin Zhang and Richard A. Tapia. A superlinearly convergent polynomial primal-dual interior-point algorithm for linear programming. *SIAM Journal on Optimization*, 3(1):118–133, February 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- Zhou:1996:SAF**
- [ZT96] Jian L. Zhou and André L. Tits. An SQP algorithm for finely discretized continuous minimax problems and other minimax problems with many objective functions. *SIAM Journal on Optimization*, 6(2):461–487, May 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). See erratum [ZT98].
- Zhou:1998:ESA**
- [ZT98] Jian L. Zhou and André L. Tits. Erratum: “An SQP Algorithm for Finely Discretized Continuous Minimax Problems and Other Minimax Problems with Many Objective Functions” [SIAM J. Optim. (1996), no. 2,

- 461–487; MR 97a:90101]. *SIAM Journal on Optimization*, 8(1): 284–285, February 1998. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/31365>. See [ZT96].
- [ZTD92] Yin Zhang, Richard A. Tapia, and John E. Dennis, Jr. On the superlinear and quadratic convergence of primal-dual interior point linear programming algorithms. *SIAM Journal on Optimization*, 2(2):304–324, May 1992. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZTP93] Yin Zhang, Richard Tapia, and Florian Potra. On the superlinear convergence of interior-point algorithms for a general class of problems. *SIAM Journal on Optimization*, 3(2):413–422, May 1993. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZU11] J. Carsten Ziemis and Stefan Ulbrich. Adaptive multilevel inexact SQP methods for PDE-constrained optimization. *SIAM Journal on Optimization*, 21(1):1–40, ??? 2011. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v21/i1/p1_s1.
- [Zua03] **Zualinescu:2003:SEH**
C. Zualinescu. Sharp estimates for Hoffman’s constant for systems of linear inequalities and equalities. *SIAM Journal on Optimization*, 14(2):517–533, January 2003. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZVP06] **Zuluaga:2006:LAC**
Luis F. Zuluaga, Juan Vera, and Javier Peña. LMI approximations for cones of positive semidefinite forms. *SIAM Journal on Optimization*, 16(4): 1076–1091, January 2006. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZW12a] **Zheng:2012:CAS**
Xi Yin Zheng and Zhou Wei. Convergence of the associated sequence of normal cones of a Mosco convergent sequence of sets. *SIAM Journal on Optimization*, 22(3):758–771, ??? 2012. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZW12b] **Zheng:2012:PAE**
Xi Yin Zheng and Zhou Wei. Perturbation analysis of error bounds for quasi-subsmooth inequalities and semi-infinite constraint systems. *SIAM Journal on Optimization*, 22(1): 41–65, ??? 2012. CODEN SJOPE8. ISSN 1052-

6234 (print), 1095-7189 (electronic). URL http://epubs.siam.org/siopt/resource/1/sjope8/v22/i1/p41_s1.

Zhang:2018:GAA

[ZW18] Richard Y. Zhang and Jacob K. White. GMRES-accelerated ADMM for quadratic objectives. *SIAM Journal on Optimization*, 28(4):3025–3056, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:2023:PDF

[ZWHZ23] Junyu Zhang, Mengdi Wang, Mingyi Hong, and Shuzhong Zhang. Primal-dual first-order methods for affinely constrained multi-block saddle point problems. *SIAM Journal on Optimization*, 33(2):1035–1060, 2023. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <https://epubs.siam.org/doi/10.1137/21M1451944>.

Zhang:2010:NEM

[ZWL10] Liping Zhang, Soon-Yi Wu, and Marco A. López. A new exchange method for convex semi-infinite programming. *SIAM Journal on Optimization*, 20(6):2959–2977, 2010. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:1999:CID

[ZX99] Jianzhong Zhang and Chengxian Xu. A class of indefinite

dogleg path methods for unconstrained minimization. *SIAM Journal on Optimization*, 9(3):646–667, April/June 1999. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/27523>.

Zhang:2021:MCS

[ZX21] Junyu Zhang and Lin Xiao. Multilevel composite stochastic optimization via nested variance reduction. *SIAM Journal on Optimization*, 31(2):1131–1157, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:2016:QSA

[ZXZ16] Jie Zhang, Huifu Xu, and Liwei Zhang. Quantitative stability analysis for distributionally robust optimization with moment constraints. *SIAM Journal on Optimization*, 26(3):1855–1882, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zheng:2007:WSM

[ZY07] Xi Yin Zheng and Xiao Qi Yang. Weak sharp minima for semi-infinite optimization problems with applications. *SIAM Journal on Optimization*, 18(2):573–588, 2007. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).

Zhang:2014:EMS

[ZY14] Lei-Hong Zhang and Wei Hong Yang. An efficient matrix split-

- ting method for the second-order cone complementarity problem. *SIAM Journal on Optimization*, 24(3):1178–1205, 2014. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZYP21] Liaoyuan Zeng, Peiran Yu, and Ting Kei Pong. Analysis and algorithms for some compressed sensing models based on L1/L2 minimization. *SIAM Journal on Optimization*, 31(2):1576–1603, 2021. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZZ96] Jianzhong Zhang and Detong Zhu. A bilevel programming method for pipe network optimization. *SIAM Journal on Optimization*, 6(3):838–857, August 1996. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic). URL <http://epubs.siam.org/sam-bin/dbq/article/26069>.
- [ZZ16] Xi Yin Zheng and Jiangxing Zhu. Generalized metric subregularity and regularity with respect to an admissible function. *SIAM Journal on Optimization*, 26(1):535–563, 2016. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZZN18] Xi Yin Zheng, Jiangxing Zhu, and Kung Fu Ng. Fully Hölderian stable minimum with respect to both tilt and parameter perturbations. *SIAM Journal on Optimization*, 28(3):2601–2624, 2018. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).
- [ZZS23] Peiyuan Zhang, Jingzhao Zhang, and Suvrit Sra. Sion’s minimax theorem in geodesic metric spaces and a Riemannian extragradient algorithm. *SIAM Journal on Optimization*, 33(4):2885–2908, October 2023. CODEN SJOPE8. ISSN 1095-7189.
- [ZZST20] Yangjing Zhang, Ning Zhang, Defeng Sun, and Kim-Chuan Toh. A proximal point dual Newton algorithm for solving group graphical lasso problems. *SIAM Journal on Optimization*, 30(3):2197–2220, 2020. CODEN SJOPE8. ISSN 1052-6234 (print), 1095-7189 (electronic).