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Title word cross-reference

$(1 + 1)$ [SP18a]. $(2 + 1)D$ [HP14]. $(MC)^3$ [KSW15]. 0001 [Dan19]. $000\bar{1}$ [Dan19]. 1
[CC14, Gio14a, HTT13, HTT14, MGL13, PM16, RKVL14, SBH⁺14, WNYP17].
 $1 + 1$ [Fan19, SÓON11]. $1/2$ [HvWT17]. $1/t$ [AM17]. 2
[APC⁺14, BBB17b, BVP10, DLM18, EW14a, FJK⁺17, FK12, GCVA14b,
Gwi12, Ixa10, JCL⁺18, KO14b, KO16, RAV11, SW14a, SW14b, SA15b,
SKK11, SW11, TMA⁺15, TY10, TKL⁺12, TPC16, VLM11, WMRR17,
WRMR19, YLKN17, YTYA17, ZSW⁺17a]. 3
[AV13, AM19, AGMS15, BAR12b, CP15a, CPCDdM18, CdLOL19, DGG13,
FLZ⁺18, FRFH10, GS15, Gai17, GMF⁺17, Giu19, GG16, GX15, HKJ⁺12,
HDM⁺12, JEC⁺12, JCL⁺18, JKIS16, KAK12, KL11, KO14b, KO16, KMJS16,
LHJZ10, LHC⁺13, LX14, LKW11, LBP15, MGO13, MCP⁺11, NHD16,
NCB18, PR10, PCGM14, QSC14, Qia17, RF15, RS12, RJLL16, RHBH15a,
RHBH15b, TGH⁺16, TIM⁺16, VMGP⁺19, WNYP17, WRBL19, YKK⁺19,
ZXL16, ZZD⁺16, ZSW⁺17a, ZFR18]. $3 + 1$ [KHB14]. 4 [GGF⁺13, dSLF13]. 5

[GAB⁺16]. 6 [YKK⁺19]. 71 [JTH14]. ⁻ [KH11]. ¹ [LM16]. ^{125I} [RMS⁺12]. ² [BG13b, BG14a, BLG14, Bon15, Bon16, GBD10, HFSK12, RPB⁺15]. ³ [CDTV10]. ^{3Σ} [Faw10]. ^(R) [LNSD15]. TM [RJKC16]. ^{Web} ^{tools} [LSJ13]. ^{1-w} [TMA⁺15]. ^{11-x} [LQZ⁺13]. ² [CJH11, CHW⁺15, DSM⁺11, LS11]. ²⁰ [CHW⁺15]. ²¹ [CHW⁺15]. ³ [BKA⁺14, CJH11, CHW⁺15, DSM⁺11, KAR⁺15, LQZ⁺13]. ⁴ [LQZ⁺13]. ⁵ [LS11]. ⁶ [CJH11, CHW⁺15]. ^{aMC@NLO} [ADF⁺15]. ^p $F_{p-1}, F_1, F_2, F_3, F_4$ [BKK13]. ^w [TMA⁺15]. ^x [LQZ⁺13]. ^A [ARYT17, HR11]. ^{A =} [CHW⁺15]. ^α [HFSK12]. ^{α_s³} [GGGH14]. **\$Apart** [Fen12a]. ^{B_c} [CWW15, YWW13]. ^{B_c} [WW12]. ^β [HS19]. ^{BR(B_{s,d}⁰ → ℓℓ̄)} [DNPS13]. ^C [Nik12b]. ^{C_{3v}} [Nik12b]. ^{N = 4} [SD15]. ^{O(α_t²)} [HP17]. ^{COCOS} [SM13]. ^D [CZ17, Kap12b, KTB17]. ^{D = 4} [Fis12]. ^{Δ(S²)} [MC17]. ^{δf} [DF14]. ^{e⁺e⁻} [YWW13]. ^{e⁺e⁻ → e⁺e⁻π⁺π⁻} [CI11]. ^{e⁺e⁻ → e⁺e⁻π⁰} [CI11]. ^{e⁺e⁻ → e⁺e⁻R(J^{PC} = 0⁻⁺)} [DKT14]. ^{E₆} [Dep17]. ^{ep} [AFIS12]. ^{η'} [AHK⁺12]. ^{ηm(Z)} [CEPI10]. ^F [DGS⁺19, GAB⁺16, KTB17]. ^{F_c} [BK16b]. ^{F_D} [BKM14]. ^{F_S} [BKM14]. ^G [CNMC10a, HR11]. ^Γ [DEMM19, GTK⁺19a, BHN⁺16, CCM12, ESM17, HCM19, LL15, MM11, WT12]. ^{γ_j} [Ker17]. ^{GGA + U} [HWW12]. ^{GW} [JGAL⁺13]. ^H [MR13]. ^{hp} [CMC⁺15, BCM⁺16]. ^{HΦ} [KYM⁺17]. ⁱ [HWM⁺15, KB19]. ^j [Wei11a]. ^{jj} [Erm18]. ^k [AWK⁺16, Ell17b, MDGC⁺12, OBH10]. ^{k_T} [vH18]. ^{k · p} [Bot12, MBF⁺10]. ^L [SS13b]. ^{L₂} [ZY19b]. ^{L_∞} [TK14b]. ^Λ [WL11b]. ^{λφ⁴} [Chr18]. ^{LDA + U} [HWW12]. ^{O(N)} [PSP16]. ^μ [TACA15]. ^N [BBL⁺13, CDS13a, MTM13, MBFD12, PIH11, SGNL17, WSH⁺12, dlHV12, GJ14, RF10]. ^{N = 8} [Fis12]. ^{Nf = 2 + 1 + 1} [BBC⁺11]. ^ν [BHN⁺16, HCM19]. ^{O(N)} [SPSP18]. ^{Oh} [Nik12b]. ^p [Wie13]. ^{P³M} [KK17]. ^{p^m_{1/2+iτ}(x)} [GST12]. ^{φ⁴} [KVW11]. ^π [KS12]. ^q [FDWC12, KO13]. ^{q = 3} [dSLF13]. ^{Q²} [HK12]. ^R [AB10, AKH12, Bot12, Des16, NPM16]. ^{R₂} [Deg15]. ^S [ACDdM19, BG19b, DdMN16, LB10a, LB11, LB12, LB13, SAS11]. ^{S⁴} [LF12]. ^{SO(2N)} [CECGS16]. ^{SO(8)} [Fis12]. [★] [Tos10]. ^{SU(2)} [Alv12]. ^{SU(3)} [BW12a]. ^{SU(N_c)} [CB13a]. ^T [HCRD14, TU14]. ^{T₁ - T₂} [GWF⁺16]. ^{T₂} [GCF⁺17]. ^{T_c} [CMJ⁺11]. ^{T_d} [Nik12b]. ^τ [CPWZ18]. ^Θ [BJ11]. ^{U(1)} [BB13a]. ^{U(3)} [LDD⁺19]. ^{U(N)} [LDD⁺19]. ^V [ABB⁺16]. ^W [QGLP13, Veb12]. ^{w = 8} [ABRS19]. ^{Ξbb} [CWW10]. ^{Ξbc} [CWW10]. ^{Ξcc} [CWW10]. ^{XY} [KO14b]. ^Z [GLPQ11]. ^{Z₂} [FWZ⁺12].

-body [CDS13a, MTM13, MBFD12, PIH11, WSH⁺12]. **-conjugated** [KS12]. **-coupled** [QSC14]. **-Coupling-based** [Erm18]. **-D** [WRBL19, FK12, Gio14a, GX15, LHJZ10, LHC⁺13, RKVL14]. **-dependent** [vH18]. **-diff** [TACA15]. **-dim** [GMF⁺17]. **-dimensional** [Kap12b, dlHV12]. **-electron** [PM16]. **-function** [ACDdM19, DdMN16]. **-gauged** [Fis12]. **-gradient** [ZY19b]. **-helices** [HFSK12]. **-Inclusive** [DLM18]. **-matrix** [BG19b, Bot12, Des16, HCRD14, NPM16, SAS11]. **-mesh** [AWK⁺16]. **-method** [DEMM19]. **-parity** [AB10, AKH12]. **-point** [MDGC⁺12].

-polymers [BJ11]. **-product** [Tos10]. **-qubit** [RF10]. **-ray** [BHN⁺16, CCM12, HCM19, LL15, MM11]. **-Reverse** [SGNL17]. **-scattering** [AFIS12]. **-space** [OBH10]. **-stable** [SS13b]. **-state** [FDWC12, KO13]. **-states** [LB10a, LB11, LB12, LB13]. **-topologies** [ABB⁺16]. **-type** [WL11b]. **-values** [Wie13].

/Python [SV14].

1 [BRH⁺16, TU14]. **1-loop** [DNPS13]. **1.0** [FYK18, KPK⁺17, RVDS16, SHW18, SNG⁺11]. **1.1** [LS15a, MSHL17, SRS⁺18]. **1.2** [CGV13]. **1.23** [DGPW11]. **1.4** [Wie15]. **1/2** [PGD17]. **10** [SV14]. **11** [Ara14a, Ara14b]. **12** [Nik12b]. **120** [Wei11a]. **180** [Nat10, Ram10, Ras17, Wu10]. **181** [ERS10c]. **182** [SGM11a, Sco13]. **183** [YQM14]. **184** [LR16, SIMGCP14, ZTG14]. **185** [AAT⁺20]. **186** [KYKN15a]. **187** [RHBH15a]. **198** [Ano20].

2 [AHH⁺19, AMR⁺18, CKFB12, DLU18, DDK⁺17, DES⁺11, Fen16, FP14, HD17, HM12c, JNN13, LS17b, dIRL11, dIRAPL11, dIRJL14, PGD17, PR12, RNdB19, RSB14, TBB⁺14, ZE16, Cro16]. **2.0** [AFIS12, ACD⁺14b, ABH⁺18, BCH13, BHS15, DDKM15, GLPQ11, GBR⁺14, GTK⁺19b, HEPW13, HHS⁺10, KRM⁺19, Liu15a, LRR⁺15, LCRL10, OG14, PSMS14, Pat17, PBL⁺18, RDVS18, SZY⁺12, SZY⁺13, Sha16]. **2.0-Hybrid** [GBR⁺14]. **2.0.0** [BBH⁺11a]. **2.0.2** [VRV18]. **2.02** [DIR⁺19]. **2.1** [BH13, CNMC10a, PSMS15, QGLP13, SZY⁺13, YZCS18]. **2.2** [YZCS18, ZYL⁺15]. **2.8** [OK12]. **2.9** [OK18]. **2014** [MAM14]. **2019** [Sco19]. **213** [AZ17a]. **220** [Maż19, MLK⁺19]. **228** [SJY20]. **230** [Wei11a]. **2d** [WWVB11]. **2d-Ising** [WWVB11]. **2F** [ML17]. **2HDMC** [ERS10c, ERS10a, ERS10b]. **2HDME** [Ore19]. **2nd** [FMRP16]. **2ODEs** [AddM14].

3 [CZ17, GLR17, LS17a, NGG⁺13, Pos18, Smi14, vH10]. **3-state** [MEG12]. **3.0** [BHJ⁺15, CXH⁺15, CK19, GCVA14a, LHWL16]. **3.1** [PS12]. **3.2** [LHG⁺19, Sem16, Sta13]. **3.4** [BCP13]. **39** [AANA12, MSNI11]. **3C** [Dan17]. **3V** [CC14].

4 [EJG⁺19, Gri10, Sta14]. **4.0** [KUVV13, OO15b]. **4.1** [KRW13]. **4.5** [CBYG18]. **4OEC** [SK15].

5 [CFS13]. **512** [WN19].

6 [Nik12b]. **6.4** [KRW13]. **6.5** [KRW13]. **64-bit** [TC11a].

70th [Pat12]. **77** [GH18, GHN19].

8.2 [SAC⁺15].

9 [Nik12b]. 9.0 [SMO16a]. 90 [GST12, KS12, SSG⁺10, SSG⁺18, SS10a]. 95 [FGJB19, vH10].

= [LQZ⁺13].

A-Track [AKKK16]. **A.I.K.E.F.** [MSM⁺11]. **AACSD** [LZ18]. **AAfrag** [KMO19]. **Ab-initio** [NSH⁺19, BKS15, QZ19, RH11]. **abelian** [MGS13, SV13]. **ABINIT** [ERP⁺12, GJA⁺16]. **AbinitioD** [GTK⁺19a]. **ABJ** [Pre18]. **abrasion** [EBCB⁺14, EBCBG17]. **abrasive** [EBCB⁺14]. **Abrikosov** [Maž19]. **abscissas** [Odr11]. **Absorbing** [NVW⁺13, DV11, Wil19]. **Absorbing-like** [NVW⁺13]. **absorption** [HZC19, VDA⁺19, YÇÖ15]. **Abstract** [SBQ14]. **abstraction** [BBB⁺19]. **abundances** [Arb12]. **accelerate** [XHLUF⁺18]. **Accelerated** [CGSB18, FSH13, JP11, SDS15, Sza13b, Sza13a, BS14a, BWB⁺17, BCFR15, BVP10, BTL⁺17, Cap13, CP15a, CGRB14, CH11b, CRB⁺17, DS13a, Exl17, FOB⁺15, GP13, GJ13, Ham11, HTJ⁺16, HXW⁺13, HbotRC15, KEH12, KM10, LGW13, LWRQ16, MÁWK18, MFM15, MHR⁺13, Ngu17, PR14, PBS⁺17, PQTGS17, Sai10, iSYS12, SKM15, WSH⁺14, XLX13, ARYT17, ELDS14, GHR⁺16, TL17, WXW14]. **Accelerating** [BK11a, Col14, EGT⁺18, FZY13, GM18, HV15, JK10, KLO⁺19, LHL16, RPL⁺14, SCJH19, SAY⁺18, SAN18, TK14a, WXW13, Kra18b, RB18]. **Acceleration** [ABDR17, BW12b, PE17, SM19, CBYG18, DRR16, ELL⁺17a, GCC⁺18, HE13, HPN18, JPCG15, KPA⁺19, LAG⁺17, MST⁺18, OP12, RLMGM⁺11, YLO13, ZWC⁺19]. **accelerator** [CdFDS16, HDF⁺19, TM19]. **accelerators** [KHBS19, LV19, MFS⁺10a, PR14, SM11, WWR⁺16]. **access** [GGI⁺13]. **accessible** [BHW⁺12, LPBH11]. **accompanying** [SS13c]. **Accord** [ABB⁺14, BBC⁺13a, MHA⁺12, Sta19]. **accretion** [Lan13]. **accumulated** [Wal11]. **Accuracy** [LOK⁺18, AQJ10, CLHL19, HHC16, NHS14, Pit10, WEH⁺19]. **Accurate** [BTM⁺17, DSLP11, GS17b, GS17a, IP14, JYPA18, JZZ⁺19, OT11, SW14a, Van15, BW16, BDJS18, BL19, CZZ⁺19, CdLOL19, CSP⁺19, Cou13a, Cou13b, DG10c, GJ18a, GJHF14, HBP⁺15, JK19, JSLM16, KAK12, LV14, LK12, LC15, MN16, MFG⁺13, PM16, PFFK19, PG10, PSP16, SC16a, TC11b, TL19, TW15, WLQ⁺17, mZfXL15, ZBN⁺19]. **accurately** [BMBC⁺17]. **AcerMC** [KRW13]. **Achievable** [GSKM15]. **acoustic** [HKvH16, IP14, LYL⁺17, MSHLS15, MSHL17, WP10b]. **acquisition** [Fer15, MGFRG12, RMW13]. **action** [ABB⁺19, CK18, Evs14, Wal11]. **activate** [TIMM13]. **activation** [BUJ15, PCR17]. **active** [CLY11, MTE17, OOGP19, SZM⁺14, DAW⁺19]. **Activity** [PCR17, BT17b]. **ADAIS** [ZfZ19]. **ADAMANT** [ML14]. **Adaptable** [DS11a, BCM⁺16]. **adaptation** [DF11a, JG16]. **adapted** [WPAV14, WW10]. **Adapting** [CUL⁺17]. **Adaptive**

[AS16, BDL⁺19, BS15b, MSM⁺11, NHD16, PG17, RPB⁺15, SHT18, SVG10, Sør19, YK19, ACMM19, AWK⁺16, ABH⁺19, ABRS12, CHDF10, CND11, EZBA16, FDZ17, FXZ⁺14, GCH⁺18, GX15, JK19, JFC12, JP10, JAS17, KV19, KRB19, LH18, LCHM10, LCHM13, LWRQ16, PIH11, RCGT16, RLBC⁺14, Sit18, UBRT10, XLX13, YWX11, ZD15, ZHPS10].

adaptive-resolution [ABRS12]. **adaptively** [JL19]. **adaptor** [BV13]. **Added** [LHG⁺19, BBL⁺13]. **Addendum** [Ram10, SIMGCP14]. **adding** [CL15b]. **adding-doubling** [CL15b]. **addition** [GB14]. **additional** [CCK23, GDB10, OTC14]. **additive** [MIW⁺12]. **address** [BY17]. **ADER** [FDZ17, QWZW18]. **ADG** [ADT⁺19]. **adhesion** [MS11, ZFBR11]. **adhesive** [RU12]. **ADI** [KRB15, SA15b, SL14, TY10, Tia11, ZFH14]. **Adiabatic** [YW17, YKS11, GCVA14a, HM17]. **adjacent** [NDSH18].

adjacent-rolling-windows [NDSH18]. **adjoined** [GCVA14b]. **adjoint** [GHR⁺16, VKS16]. **admission** [VPMVH⁺17]. **ADS** [LWP⁺17]. **adsorbed** [SSH16]. **Adsorption** [MJB11, VB11, EY11]. **Advanced** [GTK⁺19b, LBR⁺18, SLR⁺11, Ano11a, BKM11, CXH⁺15, KRM⁺19, PVH⁺17, Tan19, WGVPL17]. **Advances** [SMC⁺17]. **advantageous** [WRBL19]. **advantages** [RFSF18]. **ADVANTG** [BL18b]. **advection** [CYN19, JL10, MMA15, PSB11, PSBT12, WFV14, dTOV18].

advection-diffusion [WFV14, dTOV18]. **advection-dispersion** [JL10, PSB11, PSBT12]. **AELAS** [ZZ17a]. **aerodynamic** [ZS13]. **aerosol** [SSP16]. **AESS** [JP11]. **affine** [Naz12]. **Affine.m** [Naz12]. **AFiD** [ZPS⁺18]. **AFiD-GPU** [ZPS⁺18]. **Afivo** [TE18]. **AFMPB** [LCHM10, LCHM13, ZPH⁺15]. **Africa** [Che11]. **after** [DKMS19]. **Afterlive** [KSS18]. **aggregate** [MS11]. **aggregates** [HCRD14, RU13, Van15].

aggregation [Bis15, MST⁺18, MFLY19, WXW14, XLCW14, BR11, KdMvO14, LX14].

aggregation-fragmentation [MST⁺18]. **aided** [FLW17, Zhe15]. **Air** [MSML10, BTC⁺17, BG14b, KRB15]. **Airy** [JL12]. **Aitken** [HV15]. **Al** [TMA⁺15]. **alanine** [PSMS14, PSMS15]. **ALARIC** [VSG18]. **ALCBEAM** [BRL12]. **Alfvén** [BF10, HSK⁺12, TJH17]. **AlGaN** [YSN⁺14]. **AlGaX** [AM14b]. **algebra** [ABB⁺16, AG14, APV10, Bor14, Gio18, GNT17, MFS10b, MZE13].

Algebraic [JZJ18, CM10b, FLW17, GLZ17, JHH⁺19, Kap12a, Kap12b, NS15, SS10b, WR16]. **algebras** [Eks11, FK15, HR11, Naz12]. **Algorithm** [BR11, VRV15, VRV18, Wan10b, ART17, Alv12, AZM14, AM17, AFZ17, AFZ18, ATCZ19, BK13a, BWB⁺17, BJCW13, BR13, BVC13, BCM⁺16, BO12, BNO17, Bru13, BY17, BMDP19, CM10a, CHNS18, CNS⁺18, CC14, CC15, CWY⁺17, CZZ⁺19, CXG⁺19, CDS⁺13b, CZGC19, CGRB14, CBGY17, CBAM12, CLF18, DKSG16, DE13, DG10c, DG16, EZL⁺16, Emel11, ES11, FLA⁺16, FSJ⁺16, FRG12, FZ16, FKH15, GCF⁺17, GJ18a, GJLB12, GST12, GV15, GZW17, GTL11, GD14, GES13, GLX⁺14, GX15, GJ18b, Gwi12, HGCARM15, HWT10, HK15, HCH16, HP11, HZW⁺16, Jab12, Jab13, JWJL12, JWC13, JWM⁺18, JvOK17, JJ15, JPK⁺12, JKG⁺18, KP12a,

KBB⁺¹⁷, KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16, KV19, KVV11, Krö19, KSW15, LM19, LDD⁺¹⁹, LKL11, LK12, Lee18, LKA⁺¹⁶, LM12, LHH^{+12a}, Liu14, LZ11a, LZ11b, LYZ13]. **algorithm** [LTP16, Lya15, LOSZ13, MM17, MGO13, MPM14, MH11, MGS13, MEM⁺¹¹, MC10, MTO15, MFLY19, NBN⁺¹⁴, Nem16, NFD⁺¹⁹, OL12, OOK⁺¹², OCM⁺¹⁹, PH13, PSB11, PDRG10, PP13, PYW⁺¹⁴, PR10, PG17, PdMML19, QwWL⁺¹⁵, Ray10, RU13, Rom15, RW11, SGM11a, SGM11b, SCB^{+17a}, SCB⁺¹⁹, SG15, ST19, SWL⁺¹⁵, SPS10, Sin12b, SKK11, SQA⁺¹⁵, SOYHDD19, SOJ14, Ste17, TMS19, TTT16, TIM⁺¹⁶, UW12, Urb18, US16, VSG18, VvAV^{+11b}, VLL⁺¹⁷, VGM⁺¹⁵, WP11, WRFS15, WWHW14, Wei12, WRVdL15, XWhZ13, YZZ⁺¹⁷, YvOSM15, YLYL17, ZKG⁺¹⁸, ZZHG18, ZCC19, Zhe15, ZMJ13, Zou18, vRWS14, Cho11, KS16a, SKH⁺¹⁰, YKS11]. **Algorithmic** [HB12, Mey18, GHR⁺¹⁶]. **Algorithms** [Fri14a, KD17, KBLJ18, Pan15, TK14a, BS14a, BK11b, BAF18, CWJ19, CLH⁺¹⁷, CCW10, CR12, CF17, CLB11, DS11a, DS14, Dim14, DS13c, ER19, FDWC12, Fri10, FHA17, GBR⁺¹⁴, GWF⁺¹⁶, GBJ⁺¹⁹, GCHL15, GSC⁺¹⁶, Has11, HLLH16, HRC11, Hon18, HVMR10, HCSW10, JPH⁺¹⁴, KMS19, KK17, KME⁺¹¹, LBM⁺¹⁴, LYJY10, Mag18, MEG12, MD11b, MA11, PBS⁺¹⁷, STK10, SGM18, SJ17, SMJ17, Sha18, TRM⁺¹², VPP⁺¹², Vuk12, WG11, XQ19, ZHC16, dSF18]. **Alias** [SKSK13]. **ALICE** [Ano19m]. **aligned** [DXY⁺¹⁹, HO13, HWS16, LDR⁺¹⁷, PHT⁺¹⁹]. **alignment** [BKM11, SJY18, SJY20]. **alkali** [SPAW17]. **All-electron** [KCA⁺¹⁵, ONS⁺¹⁵, AKZ⁺¹³, JGAL⁺¹³, LRW⁺¹⁵, RCGT16]. **all-optical** [PM14]. **all-speed** [Fu19b]. **all-to-all** [EPS15]. **Allen** [KL17, LK12, ZFH14]. **allowed** [HS19]. **alloy** [DGMZ15, KZ14, LS17a, SWL⁺¹⁵]. **alloys** [AM14b, CHDCJA17, NS11b, PE17, ZZH⁺¹⁶]. **almaBTE** [CVK⁺¹⁷]. **almost** [PdMML19]. **AIN** [Dan19]. **ALOHA** [dALM⁺¹²]. **along** [McM17]. **Alpgen** [CUL⁺¹⁷]. **Alphen** [RJ12]. **ALPS** [DBK⁺¹⁴, GAC⁺¹⁷]. **alteration** [SVG10]. **AlterBBN** [Arb12]. **Alternating** [Sok13, SPP19, XZ12, BDK11, LST15, TT14, XYK12]. **alternating-direction-implicit** [TT14]. **Alternating-order** [Sok13]. **Alternative** [ADdM17, Arb12, BKA⁺¹⁴, CLF18, KAR⁺¹⁵, SPP19]. **altruistic** [HLS12]. **Am** [MSNI11]. **AMB** [KB19]. **AMBER** [NBW16]. **Amdahl** [JAS17]. **AMGA** [Ano11a]. **among** [RE19]. **amorphous** [HYM11, MHV17]. **amount** [DO14a]. **Amp** [KP16]. **amphiphilic** [FFIH11, SSF⁺¹⁷]. **amplified** [EZBA16, ZLM12]. **Amplitude** [Raw15, BT17b, MPSV15, Raw16]. **Amplitudes** [DLU18, BBU11, BvH15, KvdO11, Per14, dALM⁺¹², ADH⁺¹⁷]. **AMR** [GX15, TE18, TK19, ZKG⁺¹⁸]. **AMRVAC** [TK19]. **analog** [CO11, Fer15]. **analyser** [LW11, LW13]. **analyses** [Ham11, KSTR15, SUS^{+17a}, WLM14]. **analysing** [BPMS16]. **Analysis** [BBB⁺¹⁵, Car10a, CAN11, GdGB⁺¹⁸, GES13, IB11, SLLP17, ÜS18, WHB16, vdSM16, AAA⁺¹⁶, ÁSS18, ASEA14, AS11b, AMR15, Ano11o, ADdM^{+12b}, ACDdM14, APC⁺¹⁴, BHN⁺¹⁶, BKN⁺¹⁷, BHH⁺¹⁰, BBH⁺¹⁵, CSC11, Car10b,

CMRVVR⁺¹⁴, CF16, CPW17, CZL⁺¹¹, DRR16, DGPOR18, EBCB⁺¹⁴, EBDM17, EW14b, EW16, Faw10, FF11, FNPMB10, FBN⁺¹³, Fri17, GWL⁺¹⁷, GMRHRCME13, GMPFC⁺¹⁴, GMC18, Gio14b, GMO19, GHBL18, GA13, GBJ⁺¹⁰, GBJ⁺¹², GBJ⁺¹³, GFJ⁺¹⁴, GAO13b, Hak16, Hak19, HC16, HJL⁺¹⁴, JuIAM16, JCW⁺¹³, KKP11, KYKN15a, KYKN15b, Lev19, LS16, LHWL16, LRR⁺¹⁵, LWP⁺¹⁷, MMO⁺¹⁷, MLW⁺¹⁰, ME18, MB12, ML14, MPSV15, NEW⁺¹⁸, Nov17, Ost10, dIRJL14, OVSI15, PCVZ11, PVH⁺¹⁷, PM14, Ram10, RRCSCJ10, Ram19, RV10, RJW⁺¹⁹, Ruf13, RWKS15, SAA⁺¹⁰, iSYS12, Ser10, Sha13a, SLW19a, SLW19b, SLC11, Sin11, Sin12a]. **analysis** [SUS^{+17a}, TRM⁺¹², TBZ12, TS11, UW12, VV16, WLH⁺¹², WLS13, XJS16, sX19, Yan09, GGF⁺¹³]. **Analytic** [BK13b, NS10, AC15, AC16, AC18, HSF⁺¹⁹, Kau13, KH19, LLG17, LLL12, LLL13, LYL⁺¹⁷, PSB11, PSBT12, Pat15, Pat17, Ser10, THDS16, TGUvS19, WAHL13, YOM⁺¹⁹]. **Analytical** [MCAdF14, NCS17, BHW⁺¹², DS10, FMRP16, FJK⁺¹⁷, JDG12, KCT15, KR14, MRVF13, MHWH19, SVV19, Tan19]. **analytics** [DS15]. **analyze** [GWM13, GNT17]. **analyzed** [dSF18]. **Analyzer** [FCC15, RJW⁺¹⁹, KHZ⁺¹⁸, LZ18, ZLZ19]. **analyzing** [BPML12, SAHP15, WJCZ18]. **and/or** [XHLM12]. **Anderson** [BHT19, FFT⁺¹⁴, MST⁺¹⁸, SJ17, SPP19]. **angle** [HJ14, SLLP17]. **angular** [LN16, PR12, Pos18, Wei99, WT12]. **angustifolia** [VLM11]. **anharmonic** [Liu15a, LLZ⁺¹⁷]. **anharmonicity** [FCCTFR18, ZMCT12, ZMPT13]. **Anisotropic** [ZFZ19, HWS16, JG16, KYSV⁺¹⁵, LBB⁺¹⁶, MLW⁺¹⁰, McM17, MLS10, MN18, NO14, Ots11, SSB⁺¹⁶, SKML11, Tau10, VVB⁺¹², XYZX19, YSVM⁺¹⁶]. **anisotropically** [CAN11]. **anisotropy** [BDK11, KGNS10, MS11, NO14, QZ19]. **annealing** [BSM13, BWB⁺¹⁷, CM10a, CD12, IZRT15, LOK⁺¹⁶, LM12, ON11, Yam16, JKG⁺¹⁸]. **annihilation** [BUJ15, GGGH14, Gre18, GT19, HLM13, Kol15]. **annotate** [BVC13]. **Announcement** [AAT⁺²⁰, Hak19, YZCS18, AC18, SSG⁺¹⁸, WRMR19]. **anomalous** [CPWZ18, LRK13, PPV⁺¹¹]. **ANOVA** [CC16]. **anQCD** [AC15, AC16, AC18]. **Ansys** [LNSD15]. **antenna** [THDH14]. **ANTICOOL** [Gre18]. **antiferromagnetism** [BG11]. **antipeakon** [HDZ14]. **antivortex** [BUJ15]. **any** [Fer15, HLTW19]. **APart** [Fen16, Fen12a]. **APCAD** [SLLP17]. **aperiodic** [PdMML19]. **aperture** [HKF⁺¹²]. **APFEL** [BCR14]. **APFELgrid** [BCH17]. **API** [NMCR15, Zag14]. **APINetworks** [MCNRC16, NMCR15]. **appearing** [LM16]. **Application** [BL19, BHH⁺¹⁰, BBH⁺¹⁵, CZD15, CGM17, CSSB15, DG10a, Evs14, GZL14, GJHF14, Hon18, HW12, IUM13, KPA13, Kom15a, Kra10, KOK17, Lan13, LHJZ10, MKU⁺¹², MS14, MK10, PGO17, QA13b, RCH19, STK10, SGM11a, SGM11b, SCB⁺¹⁹, SCG11, TKS10, WWR⁺¹⁶, YK10, AAA⁺¹⁶, AS16, APS⁺¹⁶, BJBC⁺¹⁴, BG19a, BALV16, BMW14, BMNS14, Bru13, BDGM⁺¹⁷, CZ17, CGSB18, CTL15, CZGC19, CBYG18, CCN17, Dua12, FBHB17, FK15, Fer15, GBK⁺¹²,

GMHZ19, HCRD14, HTJ⁺¹⁶, HBP14, JHL⁺¹⁵, KPPC13, LOK⁺¹⁶, LWJV18, Mar19, NDSH18, OILK17, PEMS19, PS11, PB16, RWKS15, SPTPR19, SV14, SCJH19, Sva12, TFBW14, TC12, WZS⁺¹¹, WX14, vRWS14, HD17, MFM15]. **application-driven** [BJBC⁺¹⁴]. **application-programming** [SV14]. **Applications** [CM10a, HH11a, sL10, RBB15, VDF15, Asc10, BDPM15, BKA⁺¹⁴, CMSV14, CCY18, Dim14, DBK⁺¹⁴, FUSH14, FOB⁺¹⁵, GMH11, GCHL15, HM18, JHH⁺¹⁹, JTW⁺¹⁷, JKG⁺¹⁸, KV10a, KMJS16, LM12, MCAdF14, MFG⁺¹³, NPM16, Pan15, PBL⁺¹⁸, Ram10, RDC⁺¹⁸, Sai13, SHW18, SKSK13, TK14a, Veb12, VSG18, WJCZ18, ZS13, MD11b]. **applied** [AHK⁺¹², ASS13, BUJ15, BAR12b, DKSG16, FBN⁺¹³, GBSY18, HJL⁺¹⁴, KBB⁺¹⁷, KL11, LAG⁺¹⁷, LHB⁺¹⁹, MCP⁺¹¹, NBCL18, SD14, TH17, VK14, WSTP15, Yam16]. **Applying** [HKZN17, KSH11, BS14a]. **approach** [ÁSS18, AV13, ABF19, AGVP10, Ano20, AKKK16, ADdM14, Aza13, BD12, BOGL17, BSK⁺¹⁸, BTC⁺¹⁷, Bot12, COK19, CSC11, CNMC10b, Cho11, CKCS13, Dan12, DF11a, DCU⁺¹⁹, DBP19, EKO16, ERP⁺¹², FM12, FLW17, Fri19, GLAC13, GMC18, GR19, Gen10, GS14, GLX⁺¹⁴, GCVA14a, HO13, HFSK12, HCC14, Ixa16, Jiw12, JHL⁺¹⁵, JSLM16, KK16a, KY14, Kan14, KLKR11, KP16, KKL⁺¹⁸, KV10a, Kra18b, KSY13, Lan13, LHJ⁺¹⁵, MGRB11, MLR10, Maż19, MBS⁺¹⁰, MC10, MLK⁺¹⁷, MLK⁺¹⁹, MCP10, MCNRC16, NS10, ÓN14, ONS⁺¹⁵, ORCR17, OK14, PC11, PLD15, QJF16, RS12, RM10a, RHC15, RJLL16, RCH16, RCH19, SGAA18, SLY18, Sch14a, SKK11, SCM⁺¹⁶, SMC⁺¹⁷, SSBS15, TVGB15, TGH⁺¹⁶, TUY15, VBMP15, VB19, WG16a, Wei99, WFV14, WAW14, XYZX19, YLK10, YK18, YG12, ZLLP17, ZLL13, Zió14]. **approaches** [AMR15, BDP16, BVSG19, CM10b, DS10, VEM12]. **Approaching** [mZfXL15]. **approximants** [IH11]. **Approximate** [CB13b, Hei12, JL10, CGM17, JC13, KMM13, LLL12, LLL13, MSR⁺¹⁷]. **approximated** [VDF15]. **approximating** [FM12]. **Approximation** [SMJ17, AQJ10, BKOZ16, BK12, Cou13a, Cou13b, Evs14, Kau13, KK14b, LY16, MJKB18, PDRG10, Ram10, RVDS16, RDVS18, WSTP15, WC15, Wit14, DVB11, YLO13, SKB10]. **approximation-based** [LY16]. **approximations** [Ike18, LO14, TK14b, ZY19b]. **AQUA** **Agpusph** [CP15a]. **aqueous** [Beu11, Mar19]. **arbitrarily** [KMJS16, OL12, VSG18]. **Arbitrary** [Asc10, Tic14, Ara14a, Ara14b, BBH⁺¹⁰, BCH13, CCD⁺¹⁶, CLHL19, CC10a, ECH16, FRW17, GM16, HSD17, KAH18, MSRL10, MSR⁺¹⁷, NO14, NMCR15, SH12a, STA18, SW14a, SVV19, SS11a, VV16, vH10]. **arbitrary-order** [SVV19, vH10]. **arbitrary-rank** [Ara14a, Ara14b]. **arbitrary-shaped** [HSD17, MSR⁺¹⁷]. **arc** [JTN⁺¹¹, SCNJ18, SPAW17]. **Architecture** [PMS⁺¹⁵, SCC⁺¹², BW15, CRA10, Dan12, EGT⁺¹⁸, GBK⁺¹², MR14, NBW16, SM19, YLQ⁺¹⁷]. **architecture-independent** [EGT⁺¹⁸]. **architectures** [DS14, HdM16, HWCdM19, HAV⁺¹⁴, HWT10, NBN⁺¹⁴, PH13, RDN⁺¹⁷, TRM⁺¹², TGH⁺¹⁶, VLPPM14, WEH⁺¹⁹, WFV14]. **Arduino** [KSH14]. **area** [BHW⁺¹², EVB14, QLN14, YLK10]. **argon** [JTN⁺¹¹]. **argon-water**

[JTN⁺11]. **argument** [CS17]. **arguments** [Cai11, Maï12]. **ARIADNE** [KRW13]. **arising** [CB13b, DBB12, KMM13, KR14, MN18, PDRG10]. **arithmetic** [MW19]. **ARKN** [LW14b, SW12a, SW13b]. **Armchair** [SPY11, GZL14]. **Arnoldi** [BW12b, GBP13]. **arrangements** [RC18]. **array** [ECD⁺10, HBS⁺11, Vuk12]. **Arrays** [HL18]. **art** [Pat12, MCAdF14]. **article** [Maž19, MLK⁺19]. **articulated** [PA13]. **artificial** [JYPA18, LWZ14, LWJV18, RH17, TMA⁺15, vRWS14]. **artistic** [GES13]. **ARUZ** [KHZ⁺18]. **ARVO** [BHW⁺12]. **ARVO-CL** [BHW⁺12]. **As/GaAs** [TMA⁺15]. **asasim** [Sør19]. **ASCOT** [HAK⁺14]. **ASG** [FBC⁺12]. **ASP** [JC13]. **Aspects** [SÜ18, DGS⁺19, EVB14, Ein16a]. **asphaltenes** [WXW14]. **Aspherical** [NP19]. **Assemble** [DEW16]. **assembled** [KK14b]. **assemblies** [YHCS11]. **Assessment** [HVMR10, Car16, NHS14]. **assignment** [BGHN19]. **assimilation** [BALV16, FBHB17]. **assisted** [BRB12, GTL⁺17, Wil15]. **associated** [LSF14, SSG⁺10, SSG⁺18, VDJ⁺11]. **Astrody** [LSJ13]. **Astrodynamics** [LSJ13]. **AstroPhi** [KCS⁺15]. **astrophysical** [GSKM14, KCS⁺15, RDC⁺18]. **astrophysics** [Asc10, CB13b, JFC12, KMM13, PDRG10]. **Asymmetric** [LTL⁺12, CFSK14, MNV13, SJY18, SJY20]. **asymmetry** [FSF11]. **Asymptotic** [BD12, CCHL11, CM14a, DOP17, MN18, CEF16, PSBT12, NO14]. **Asymptotic-preserving** [MN18]. **Asynchronous** [GXF⁺15, FFT⁺14, UBRT10]. **ATAT** [CSPAD10]. **ATI** [Dem11]. **ATLAS** [dAFdSVM12, MSS⁺16, DBD⁺17]. **atmospheres** [COK19, HTT13, HTT14]. **atmospheric** [BCMS10, BB12, CHH⁺11, KHBS19, LHH⁺12a, MFH⁺13, RDN⁺17, WW15]. **atmospheric-pressure** [CHH⁺11, LHH⁺12a]. **Atom** [Jav17, BH17, CLHL19, CYD11, DFM⁺15, Duf16, FZY17, KCA⁺15, LRW⁺15, LH11, RZ19, RGKR17, SGSG19, TT11, XLX⁺15]. **atom-centered** [KCA⁺15, LRW⁺15]. **Atomic** [FGJB19, Pit12, Ruf13, AAT17, BMF⁺19, CPV13, CJJ⁺17, CKS10, Col14, Cor14, DBJ11, EPP12, Erm18, Ert15, Fri12, Fri19, Gio14a, Gre18, Hei12, Hin11, Hir15, HL19c, JWL13, JTH14, JGB⁺13, KB19, KBSP19, KPST15, Kra17, Kra18a, LB10a, NPVR14, OT11, PM16, PVK⁺18, PLD15, SEW12, SEW14, SLW19b, WR16, YZZ⁺17, ZKW⁺15]. **atomic-molecular** [JWL13]. **atomistic** [AZ17a, AZ17b, BSC⁺13, CHDCJA17, CL13, DZ15, EBCB⁺14, EVB14, EBCBG17, GC12, HHP⁺16, KK13, KP16, LFKD18, LZ18, RK11, RPL⁺14, THDS16, Voy13, WBY11, VFV19]. **atomistic-continuum** [CL13, GC12, KK13]. **atoms** [AKV18, BH14a, BH14b, BRH⁺16, GJ18a, HL19b, Kob13, Lit13, MCA17, MGB18, SLK19, SPAW17, SJHS19, WL11b, ZZ15]. **Atomsk** [Hir15]. **ATOR** [CKFB12]. **ATSP2K** [BSGG10]. **ATSP2K-package** [BSGG10]. **attached** [SCNJ18]. **attempt** [GM18]. **ATUS** [MGL16]. **augmentation** [BGHN19]. **Augmented** [RCGT16, AM14b, CKT17, CSPAD10, DKSG16, DA16, Hol19, JGAL⁺13, KAW⁺10, PBMAD12, THJ⁺10, YLO13, JTH14].

Augmented-Wave [RCGT16, JTH14]. **auto_deriv** [SF10].
autocorrelations [CDS⁺13b]. **AutoDipole** [HMU10]. **automata** [FBG10, PC11]. **Automated** [AC13, ADT⁺19, BSWC14, HBP⁺15, HMU10, JC13, JC14, KHKR14, KH10, Per14, SPMM11, YFAT17, HR11, HKVR10, UW12, ZSW⁺17a, ZLZ19].
Automatic [CF16, DAW⁺19, Deg15, GAGW16, LV13, LHWL16, MV11, MO14, Ram19, RC11, Sta11, ZZ17a, ZFZ19, dALM⁺12, CL15a, CD15, Cha16, DZ15, Gio18, Kol14, Kol15, LLQX19, Liu15b, OK10, Ros16, Sem16, Sha13b, SF10, VKS16, Wie15, XWhZ13, YB13, ZPH⁺15, Zlo13, ZUT13, vH10].
automation [GBS⁺16a, GHvSF14]. **automatized** [Str15]. **Automatizing** [TdAdSS11]. **automaton** [FGC⁺11, JEF14]. **autonomous** [Bla15, BCT17].
autostructure [Bad11]. **auxiliary** [GA15, JBKM15]. **auxiliary-field** [GA15]. **available** [Cip13]. **avalanches** [VKLM11]. **average** [SGSG19].
averaged [KQYH17]. **averages** [LP15, Wan16]. **averaging** [KFS17, Koh15, MMO⁺17, WHB16]. **avoiding** [SBB13]. **AVX** [GBS16b, WN19]. **AVX-512** [WN19]. **AVX2** [WN19]. **Aware** [dCD19].
AWESoMe [MSHLS15, MSHL17]. **axes** [BDK11, CNMC10a, CNMC10b].
axial [RS12, Sza13b, Sza13a]. **axial-symmetric** [Sza13b, Sza13a]. **Axially** [PSL⁺17, SSK⁺13, GHMB⁺19, MCP10]. **axially-symmetric** [MCP10]. **axis** [CLW11, DXY⁺19, JTP15, SMdONF14, YKK⁺19]. **axis-symmetric** [CLW11]. **axisymmetric** [EW16, Fuk17, KB15a, KRK16, LC15]. **azimuth** [LWZ14]. **Azurite** [GLZ17].

B [CCK23, CHW⁺15, HM17, LQZ⁺13, BH16, BSC⁺13, Fro11, Jiw15b, LD10b, LX12, RHC15, RCH16, ZF16]. **B-DNA** [BSC⁺13]. **B-spline** [BH16, Fro11, Jiw15b, LD10b, LX12, ZF16]. **B-splines** [RHC15, RCH16].
BACHSCORE [SZC⁺13]. **back** [KSY13]. **backed** [LL15]. **backflow** [MBGV15]. **background** [KOT12, LCRL10]. **Bäcklund** [MWCY14].
Backward [NBCL18, VEM12]. **bacteria** [AD11]. **BADGER** [HM12a].
Bailey [BJCW13, BCJW13]. **BAL** [LS16]. **balanced** [EZBA16, OCF10, STA18]. **balancing** [BS15b, EDPZ19, ER19, FRG12, FN17, GMF⁺17, JFHA19, SKSK13].
ballistic [KLKR11]. **balls** [BHH⁺10, BBH⁺15]. **bamboo** [VLM11]. **band** [CKSM⁺19, CGRB14, GBP13, HC16, HLTW19, LOK⁺16, LHSL14, MD10a, MCV18, QDZ⁺13, RJ12, SW13a, SCG11, Zlo13]. **band-gap** [MD10a, SW13a].
band-structure [CKSM⁺19]. **banding** [SSF⁺14]. **bands** [ZZD15].
bandstructure [DSL11]. **bandwidth** [CSV⁺18]. **Bank** [DPK⁺15].
Baoukina [BL18a]. **Barnes** [WSH⁺12]. **barrier** [CHC⁺11, DT11b, Raw16].
barriers [Den10]. **baryon** [DE13, LCL⁺11, Nem16]. **baryons** [CWW10, WW13]. **BASDet** [WG16a]. **Based** [ZXZ⁺19, AGB⁺15, BLPP13, BD12, BCJW13, BDKS10, BH17, BALV16, BLS17, BK12, BRL12, BPM14, BHT19, BDBV12, BAR12b, BABC19, BMW14, Boe14, BO12, BPS⁺16, BCG⁺15, BC11, BS12, BBO19, BKK13, BKM14, BK15, BK16b, CM10b, CCLL18, Cap13, CMVRB⁺14, CSPAD10,

CC16, CGSB18, CMJ⁺¹¹, CDL⁺¹², CKhN11, CZGC19, CAGL13, CDR⁺¹⁵, DBMR18, DIP11, DSHS17, DG10b, DM17, DDH17, DRR15, DBLF16, DSPJ10, ELDS14, EBDM17, Erm18, ESM17, FRG12, FGC⁺¹¹, FDWC12, FWS⁺¹⁷, FZY17, FHA17, Fu19a, GLZ17, GJ18a, GLX⁺¹⁴, GJ18b, GNT17, HLL13, HFOPF15, HKPF19, HPKF15, HWT10, HS16, HLD13, HKVR10, HM17, IH11, IKS19, ICPD16, JPCG15, JEC⁺¹², JFHA19, rJmYT11, JGAL⁺¹³, JTP15, KVV19, KK13, KCN18, KK14b, KK14a, KHZ⁺¹⁸, KO14a, KSH14, KM17, KO12, KO13, Kom15a, Kom15b, KLV15]. **based** [KPST15, Kra18b, KMA⁺¹², LCC13, LJE11, LFG14, LN16, LYX⁺¹⁷, LO14, Liu13, LH18, LY16, LRSS19, LWRQ16, LNP⁺¹⁷, MGL16, MB12, MHWH19, MKR⁺¹², MW14, MNW⁺¹⁷, MNL19, MRL19, NPAD11, NDSH18, NAQ16, ÓN14, OLG⁺¹⁶, Oti13, OT11, OAKS11, ÖY13, PP13, PFFK19, PG17, PKRS16, RCGT16, RC13, RC16, RCH19, RB18, RH17, SVGS18, SAA⁺¹⁰, SC14, Sha18, Sha13a, SCRS17, SSX14, Sit18, SZM⁺¹⁴, SHL⁺¹¹, SK10, SGSG19, TKJ19, TMS19, TGH⁺¹⁶, TMD11, TB14, TDL⁺¹⁴, UW12, VKP14, VSG17, VMGP⁺¹⁹, VDJ⁺¹¹, VPP⁺¹², WFZG19, WGG⁺¹⁹, WP10a, WLS13, WYH19, WSH⁺¹⁴, WBS⁺¹⁸, Wit14, XLL15, XGH⁺¹⁹, YLL⁺¹⁹, Zag14, ZAFAM16, ZLLP17, ZSW^{+17b}, ZY19b, ZHC16, ZS13, Zhe15, Zlo13, Cho11]. **bases** [GLZ17]. **Basic** [GFB⁺¹⁰]. **Basics** [BC19, CB15a, CB17]. **basin** [LM19]. **basis** [CYOS19, Cor14, DM17, FM12, GYW⁺¹⁰, JH15, JDG12, KAK12, LRW⁺¹⁵, MCWJ15, Mey18, MBFB13, MK10, MCGR11, MAM14, ONS⁺¹⁵, PZY16, PVK⁺¹⁸, PSL⁺¹⁷, Pit12, PVK^{+14a}, PVK^{+14b}, PGMU19, Pra17, RCGT16, Ray10, RHC15, RCH16, RCH19, RLM13, SDM⁺¹², SDS⁺¹⁷, SD10b, SMGK19, SSK⁺¹³, ZDWY10, ZDWM17]. **basis-set** [MBFB13]. **batch** [RJW⁺¹⁹]. **batched** [GNP19]. **bath** [Fri10]. **baths** [DS13b]. **bathymetry** [STA18]. **Bayesian** [AMR15, BPSM16, CRB⁺¹⁷, KZ14, KRB19, WG16a, ZHL11]. **Bayesim** [KRB19]. **BBN** [Arb12]. **BCC** [HBH⁺¹⁷]. **BCS** [RHBH15a, RHBH15b]. **BCVEGPY** [WW12]. **BCVEGPY2.2** [CWW15]. **Be** [MSNI11]. **beam** [BRL12, BKN⁺¹⁷, CZZ⁺¹⁹, FB19, KPA⁺¹⁹, KK17, KKO19, OKP10, PR14, PBL⁺¹⁸, QL10, TZK16, ZPvR16]. **beam-based** [BRL12]. **Beamlet** [AGB⁺¹⁵]. **Beamlet-based** [AGB⁺¹⁵]. **beams** [AGB⁺¹⁵, PBL⁺¹⁸]. **Beating** [CCL15]. **Becke** [GSZ13]. **bee** [vRWS14]. **BEEC** [YWW13]. **behavior** [CND11, DV11, FFIH11, HLS12, HST⁺¹¹, MFS10b, SLC11, vMB14]. **behaviour** [RDN⁺¹⁷, WCT11]. **behind** [BEKP19]. **being** [GK11]. **belief** [EKDGG15]. **Bell** [DMH16, TZG12]. **Belle** [Ano11a]. **below** [BH17]. **BEM** [BD12, YBK⁺¹¹]. **BEM/GO/PO/PTD** [BD12]. **Bénard** [GLW14]. **Benchmark** [BT17b, SISW10, FMRP16]. **Benchmarking** [BPP11, MNW⁺¹⁷, HdM16]. **benchmarks** [Yi11]. **BenderWu** [SÜ18]. **bending** [GSC⁺¹⁶]. **bent** [Bab14, BAF18]. **Bento** [HLM17]. **Benz** [HDM⁺¹², SBPN15]. **Berezinskii** [RMC16]. **BerkeleyGW** [DSS⁺¹²]. **BerryPI** [AKZ⁺¹³]. **bespoke** [WWR⁺¹⁶]. **Bessel** [CCK23, Cai11, GDB10, JL12, KT10, Ser17, TO10a]. **best** [SS13a]. **Beta**

[HS19]. **Bethe** [GGG16, GVS⁺15, SAW18]. **between** [ABB⁺14, AC13, Ano10o, BB13b, CDBM16, FD13, FHTO17, DRI⁺16, GZL14, LSK⁺14, PDC14, TJH17, USOA13, VC10, Yan11]. **Beyond** [BM19, HLM17, ABC⁺18, BCP13, BHJ⁺15, Deg15, DNPS13, DML⁺16, GTK⁺19a, HRC11, PS12]. **BGK** [CM14a]. **biased** [Sin11, Sin12a]. **biasing** [Gio14b]. **BiCGGR** [TKS10]. **BiCGSTAB** [NIK⁺12a]. **BiconeDrag** [SPTPR19]. **bidirectional** [FSF11]. **Big** [GR19, Hoh18]. **biharmonic** [SK15]. **bilayer** [FPY⁺17]. **bilayers** [MSRL10]. **bilinear** [MWCY14, Ram10]. **BilKristal** [OG14, OO15b]. **Bill2d** [SLR16]. **billiard** [TTS11]. **billion** [YBK⁺11]. **Bimolecular** [SAG13]. **Bin** [CMRVVR16, GGG⁺19]. **binary** [CM10b, GCC⁺18, JuIAM16, LM12, WLU11]. **binary-coalescence** [GCC⁺18]. **BiNCa** [BKA⁺14]. **binding** [BBH11b, HSF⁺19, HM17, Jac19, PDC14, RJKC16, SHNM11, YLYL17]. **Binoth** [ABB⁺14]. **bio** [BG13a]. **bio-molecular** [BG13a]. **biochemical** [HL19a]. **BioEM** [CRB⁺17]. **bioheat** [BBB17b, IBB18]. **biological** [BHVMH15, CRNK12, NBM⁺15, Yan11]. **biology** [DS10]. **biomass** [XAPK14]. **Biomolecular** [VPM16, YBK⁺11, CBB14, GCH⁺18, LCHM10, LCHM13, SCC⁺12, TVZ⁺15]. **biomolecules** [Mar19]. **biophysical** [JJ15]. **biopolymers** [PA13]. **BIOTC** [XAPK14]. **bird** [TBB⁺14]. **birthday** [Pat12]. **bit** [MP11, TC11a]. **black** [DIR⁺19, Gin10, Giu19]. **black-hole** [DIR⁺19]. **BlackMax** [DIR⁺19]. **BlackNUFFT** [Giu19]. **blast** [SKH⁺10]. **Bloch** [CCW10, Dem13, SDL⁺16]. **Block** [CSV⁺18, DB13, FRFH10, JBG⁺16, JBG⁺17, LH18, SPS10, DKOS14, HM18, LW14a, NIK⁺12a, Nem16, STK10, SAY⁺18, SMUT19, TKS10, US16, VBS⁺17, WT15]. **Block-based** [LH18]. **Block-Krylov** [CSV⁺18]. **Block-pulse** [SPS10]. **Block-structured** [FRFH10, JBG⁺16, JBG⁺17]. **block-tridiagonal** [LW14a]. **blocking** [TSIM16]. **blood** [BTL⁺17, CRA10, MMC10, MBS⁺10]. **Blue** [CRA10, BW15]. **Blume** [FLP10]. **BN2D** [SBPN15]. **BNL** [GFJ⁺14]. **BO** [sX19]. **Board** [Ano18e, Ano18i, Ano18j, Ano10b, Ano10c, Ano10d, Ano10e, Ano10f, Ano10g, Ano10h, Ano10i, Ano10j, Ano10k, Ano10l, Ano10m, Ano11c, Ano11d, Ano11e, Ano11f, Ano11g, Ano11h, Ano11i, Ano11j, Ano11k, Ano11l, Ano11m, Ano11n, Ano12b, Ano12c, Ano12d, Ano12e, Ano12f, Ano12g, Ano12h, Ano12i, Ano12j, Ano12k, Ano12l, Ano12m, Ano13b, Ano13c, Ano13d, Ano13e, Ano13f, Ano13g, Ano13h, Ano13i, Ano13j, Ano13k, Ano13l, Ano14a, Ano14b, Ano14c, Ano14d, Ano15b, Ano15c, Ano15d, Ano15e, Ano15f, Ano15g, Ano15h, Ano15i, Ano15j, Ano15k, Ano15l, Ano15m, Ano16b, Ano16c, Ano16d, Ano16e, Ano16f, Ano16g, Ano16h, Ano16i, Ano16j, Ano16k, Ano16l, Ano17a, Ano17b, Ano17c, Ano17d, Ano17e, Ano17f, Ano17g, Ano17h, Ano17i, Ano17j, Ano17k]. **Board** [Ano17l, Ano18a, Ano18b, Ano18c, Ano18d, Ano18f, Ano18g, Ano18h, Ano18k, Ano18l, Ano19a, Ano19b, Ano19c, Ano19d, Ano19e, Ano19f, Ano19g, Ano19h, Ano19i, Ano19j, Ano19k, Ano19l]. **bob** [SPTPR19]. **bodies** [MNV13]. **Body** [GBJ⁺13, GBJ⁺15, GBJ⁺19, ADT⁺19, BBC⁺13b, BY13, BRH⁺16, CDS13a, CKS10, EKO16, FCVH17, FEH11, GBJ⁺10, GBJ⁺12,

GBFJ14, HEF12, HLZ⁺13, Ixa16, JWC18, JWM⁺18, JOK13, JDG12, KPA13, KPST15, KHN19, LSDD14, LB13, MTM13, MBFD12, NPAG11, PMMW15, PKRS16, PIH11, RC11, VvAV⁺11b, WZHE18, WSH⁺12, XMLC16, ZC12]. **Bogner** [CCK23]. **Bogoliubov** [ADT⁺19, SP18a, SSK⁺13]. **Bogolyubov** [PSL⁺17, SDM⁺12, SDS⁺17]. **BOINC** [GHdF10]. **Boltzmann** [Asi10, BBB⁺17a, BHNS17, BO12, CVK⁺17, CYN19, CAN11, CB16b, DCU⁺19, FGG11, FKH15, GTSL⁺13, GJ13, HLS⁺17, HCSW10, JK14, JAFP14, LCKM14, LCHM10, LCHM13, MOD13, MR14, Maz13, STA18, Sch14a, SSF⁺17, SD14, SD10a, TS19, TD17, WLU11, ZKG⁺18, ZXZ⁺19, ZCG17, vdS13, vdSM16]. **Boltzmann-cellular** [JAFP14]. **Boltzmann/finite** [CRA10]. **BoltzTraP2** [MCV18]. **BoltzWann** [PVK⁺14a, PVK⁺14b]. **bond** [CM15, HSF⁺19, MH11, THDS16, WDR16, XZF12]. **bond-order** [HSF⁺19, THDS16]. **bond-orientational** [WDR16]. **bonded** [BL14, Faw10, GTPWL12]. **bonding** [Sva12]. **Boost** [Ein16b]. **boosted** [LV19]. **Boosting** [BL18a, dJBIM16]. **BOPfox** [HSF⁺19]. **Boris** [Ume18, Ume19]. **boron** [HW12, Yan11]. **borrow** [Sib17]. **Borwein** [BJCW13, BCJW13]. **Bose** [CCW10, GM14, Hoh14a, JWC13, JWL13, KLM⁺19, LCCC11, MT13, TZM17, US16, VBMS17, WX11, WX14]. **boson** [BGM⁺14, Brá15, Cas12, DDKM15, EMW19, KKS18, OK12, QwWL⁺15]. **bosonic** [ZBG⁺16]. **both** [ACDdM19, LM19]. **bottle** [HP11]. **bottle-brush** [HP11]. **bottom** [HLM13]. **bottom-quark** [HLM13]. **bounce** [KQYH17]. **bounce-averaged** [KQYH17]. **bounces** [GLAC13]. **Bound** [Eba13, LB13, BK11b, CLHL19, DT11b, HL19b, LV13, MLEM19, SAW18, XJS16, HL19b]. **bound-state** [SAW18]. **boundaries** [ADdM⁺12b, CdLOL19, DV11, FJK⁺17, HSD17, KSH11, KS16a, LFKD18, NVW⁺13, VDA⁺19]. **Boundary** [KS16a, KPPC13, WLU11, YZ16, BMHP17, CCHL11, CS10, CBB14, DG10a, DS13c, DGG13, FBHB17, GJ13, GN14, Ham11, HSD17, Hon10, JYPA18, Jiw15b, LX12, LWZ14, LXR⁺18, LCQF18, LS13, MRL18, MRVF13, Mil16, NPM16, NCB18, PN15, PS11, PLCC12, Qia17, Ras09, Ras17, RC13, RC16, RHH12, RTA10, STA18, SP18a, SCNJ18, SN16, SK14, Uty14, Wan16, Wil19, YS17, ZWLZ17, ZLL13, vdS13]. **boundary-layer** [Ras09, Ras17]. **boundary/cut** [NCB18]. **boundary/cut-cell** [NCB18]. **bounded** [MRVF13, ZPS⁺18]. **boundedness** [MD11a]. **bounding** [WP11]. **Bounds** [TK14b, BBH⁺10, BBH⁺11a]. **Boussinesq** [BL19, MA11, SD10b, TL17, YZ16]. **Boussinesq-type** [TL17]. **BOUT** [LXR⁺18]. **box** [Giu19, GES13, JLW13, SOPS12, WP11, YdDH⁺12]. **box-counting** [GES13]. **brachytherapy** [CCY18]. **brackets** [GKM10, GSMK17, MBGK11, MGK13, SMGK14, XMLC16]. **braided** [OVSI15]. **branching** [FSF11]. **brane** [DIR⁺19]. **branes** [DIR⁺19]. **Bratu** [Ano20, Jal10, KK16a]. **Bravais** [HLTW19]. **break** [YS17]. **Breakdown** [KD16, CGSB18, HKF⁺12, JHJG14, YLKN17, ZW15]. **Breaking** [GTPWL12, EW14b, LRC⁺11]. **Breit** [Bad11]. **BREMS** [Pos18]. **bremsstrahlung** [Pos18, Eme11]. **Brenner** [FMRP16]. **bridges** [BALV16].

Bridging [RK11, RV10]. **brief** [Bre10]. **Brillouin** [GJ18b, Kap12a, WQ18]. **Brillouin-zone** [GJ18b]. **brings** [CDSG11]. **broad** [BNV18, Ber14]. **Browndye** [HM10]. **Brownian** [BALV16, BMG⁺15, CHNS18, CSSB15, HM10, SKM15, TSTT13]. **brush** [HP11]. **brushes** [Krö19]. **brute** [LS16]. **brute-force** [LS16]. **BSMPT** [BM19]. **bubble** [NZQL14, Wai12]. **Bubbleprofiler** [ABB⁺19]. **bubbles** [SPS18]. **bubbly** [HKPF19]. **builders** [Sta14]. **Building** [BCJ⁺11, MW14, TOB⁺14]. **bulk** [KSL⁺11]. **bunch** [FB19]. **bundled** [CSL⁺13]. **Burgers'** [BK16a, Jiw12, Jiw15a, KP14]. **Burke** [Sco19]. **Büttiker's** [KKS18].

C [ADH⁺17, Ano11o, Ara14a, Ara14b, Asl14, BV13, COK19, CECGS16, DPW16, Ein16b, Fow18, GH18, GHN19, GC10, GC13, GC16, GC18, GCK19, HL18, KvdO11, KPV16, KLV15, KKO19, KYSV⁺15, KLM⁺19, LCJ10, LSDD14, LYSS⁺16, MD11b, MCAdF14, Sai13, SV14, SS12, Sch18, SWS⁺12, Smi15, SJHS19, Stu10, TS11, Ver16, VVB⁺12, Vuk12, YSVM⁺16, HFSK12]. **C#** [GBJ⁺10, GBJ⁺12, GBJ⁺13]. **C-code** [GC10, GC13, GC16, GC18, GCK19]. **C-library** [MD11b, MCAdF14]. **C2x** [Rut18]. **Ca** [CJH11]. **cable** [OVSI15]. **cache** [SSF⁺14]. **caching** [WMRR17, WRMR19]. **Cadabra** [Bre10]. **CADISHI** [RK19]. **CADNA** [JCL10, LCJ10]. **CADNA_C** [LCJ10]. **Cahn** [KL17, LK12, LLXK16, XYZX19, YZ19, ZFH14]. **CalcHEP** [BCP13, Sta10]. **CalcHep/CompHep** [Sta10]. **calculate** [BBU11, CATK11, FLE19, Fen12b, KA17, KST⁺14b, MPS13, Sar17b, SHZ13, UFKB19, ZKW⁺15]. **calculated** [HS16, LS12b, RJ12, YFAT17]. **Calculating** [ABB⁺16, ECSH16, Fon12, LKM⁺16, AM10, AM11, Arb12, AMR19, BBL⁺13, BNV18, BBPS14, Brá15, CLJ12, EZBA16, FS17, FEH11, GPS⁺13, HEF12, HL19b, Jab12, Jab13, LZL11, LCHM10, LCHM13, MCV18, MH11, NGM⁺10, PH13, PCR17, Pos18, SEW12, SEW14, STY15, STY18, SC16a, SPAW17, SW12b, VDJ⁺11, WCL14, YLTS16, ZMCT12]. **Calculation** [GKM10, Kir10, LXR⁺18, MK19, Pla16, Sar17a, SMGK19, WW15, WBY11, AHK⁺12, AC17, AG14, AAT17, Aza13, BGM⁺14, BPC12, Buc19, CMVRB⁺14, CMRVVR⁺14, CHDCJA17, CYD11, CFSK14, Cip11, Cip13, CM14b, DBDP12, DSS⁺12, DRR15, DNPS13, Eba13, ELL⁺17a, FWZ⁺12, GSMK17, GAHP15, GM16, HLM13, HK15, HAN⁺16, JL12, KAK12, LPRPR17, LFKD18, LSF14, LKL11, LSCZ11, Liu15b, LHGF18, MGK13, MSNI11, MPSV15, MSRL10, MSHLS15, MSHL17, MC17, NKS15, Nik12b, ORCR17, PBMAD12, Pat15, Pat17, QZ19, QZWU19, QLN14, Ram10, RK19, SD10a, Shi16, SS11a, SZM⁺14, SKK11, Sta11, Ste17, SMGK14, TZG12, TMA⁺15, WLG18, Wei99, Wit14, XMLC16, Yan09, ZPH⁺15, ZTG13, ZTG14, ZFBR11]. **Calculations** [Lit13, PDC14, ZZY10, APS⁺16, ART17, AC15, AC18, BK13b, BC10, BDPM15, DdJC⁺19, BH17, BBH11b, BS13b, Bor14, BHS15, CLHL19, Cas12, CKSM⁺19, CPV13, CCGC13, Cor14, Cri18, Dan11, Dat13, DN18, DSW⁺15a, DHS14, DA16, DO14b, DML⁺16, EJG⁺19, Erm18, FSH13,

FUSH14, FCC15, Fri12, FZY13, GA15, GGG16, GVS⁺15, GBSY18, HSF⁺19, HWW12, HHS⁺10, HW12, HL19c, Jac19, JPCG15, JWCW17, JL19, JOK13, KB19, KT12, KCT15, KKL⁺18, KSL⁺11, KPK⁺17, KPST15, KH10, LA13, LS19, LZP12, LSR⁺17, LS17a, MED11, Maż19, MAM14, MLK⁺17, MLK⁺19, NGG⁺13, NSXZ14, Nis11, OBH10, OT11, PB13, PUO14, PKRS16, PSP16, RPL⁺14, Roh16, RC11, SAW18, SW14a, SZ15, SCRS17, SAY⁺18, SPMM11, SMUT19, SLR⁺11, SSF⁺14, SST11, Smi14, Smi16, SQL⁺10, SPSP18, TC12].

calculations

[VSG17, VCM⁺13, WL11a, WR16, Wil15, XJS16, Zit11, VPM16].

calculator [ERS10c, ERS10a, ERS10b, HTY17, ZZH⁺16, ALL⁺11]. **calculus**

[GLMG12, KD17, SBQ14]. **Calibration**

[BMG⁺15, BDGM⁺17, Ost10, ZUT13]. **callbacks** [BV13]. **calorimeter**

[dAFdSVM12, GRZ10, BPMM14]. **CALPHAD** [TKP15]. **CALYPSO**

[WLZM12]. **Camassa** [ZST11]. **camera** [MGA⁺13]. **CAMORRA**

[KvdO11]. **Can** [Pra11, CBB14, KSL⁺11]. **cancer** [SCW⁺11].

cancer-related [SCW⁺11]. **candidates** [BBPS15]. **CANONICA** [Mey18].

Canonical [AS16, PA13, GA15, Mey18, Pra17, PLCC12, RMC16, Sit18].

canonical-ensemble [GA15]. **canonicalization** [Nie18]. **capabilities**

[OTC14]. **capability** [LLE⁺18]. **capacitance** [CLC14]. **capacities**

[ZMCT12]. **capacitively** [SBL16]. **Capel** [FLP10]. **capillaries** [vdS13].

capped [RM14]. **Capture** [SGAA18, GT19, SR12]. **capturing** [Fu19a]. **Car**

[VCMS⁺13]. **carbide** [OPR14]. **carbon**

[Beu11, CSL⁺13, LHSL14, OPO⁺11, OPSR13, OPR14, RM14, TM19].

carcinogenesis [SCW⁺11]. **cardinal** [LD10b]. **cardiovascular** [MBS⁺10].

cards [GLB13, RPL⁺14]. **Carlo**

[ZTG14, AFIS12, ASGLK10, AK15, ABB⁺14, ASPDL⁺16, AIG16, Ano10o,

AK13a, AK13b, AMJ18, BKV16, Bar11a, Bar12a, BDP16, BVP10, BG11,

BMW14, BG13b, BLG14, Bon15, Bon16, BHJ⁺19, BMDP19, BENK⁺17,

CXG⁺19, CL11, CZGC19, CL15b, CKS10, CNS⁺14, CI11, CK19, DSHS17,

DGPW11, DEMM19, DPK⁺15, Dem11, DDKM15, DKT14, EBDM17, ES11,

FGGM11, FLE19, FW11, FDWC12, GTPS19, GA15, Gin10, GSB⁺14,

GWF⁺11, GB17, HKZN17, HKZN19, HBE10, HMR14, HP11, HWM⁺15,

Hua17, IUM13, JPSS10, JLA⁺14, JA17, KOT12, KMO19, KEH12, Kan14,

KRW13, KC14, KKK⁺17, KNS⁺17, KV19, KLO⁺19, KSW15, KPVvdH13,

LS14, LS15a, LS15b, LLE⁺18, LWL11, Lut15, MP11, MBRV⁺13, MRZ10,

MEM⁺11, MW14, MHR⁺13, MMY⁺19, NPAD11, NHD16, NDSH18, NSXZ14,

NBCL18, NM14, OPO⁺11, OPSR13]. **Carlo**

[OPR14, PZL⁺19, PEMS19, PM14, RF16, Ram19, RMS⁺12, RV10, RV11,

RB18, SI11, SGNL17, SFP11, SL16, SHT18, SMJ17, SM19, SD14, SKFP16,

SLZ16, SSF⁺14, SKM15, SKSK13, TZG12, TVZ⁺15, Tic10, Tic14, TKP12,

TMS19, TU14, Trö11, TDL⁺14, UKKB19, UA17, Urb18, VK14, WRFS15,

WDL11, WSTP15, WBS⁺18, WvSL13, WT12, WWVB11, WLZN17,

XGH⁺19, YWOD19, ZBG⁺16, ZLM12, ZTG13, ZDD⁺13, dSF18, dHGCS11].

Carlo-based [EBDM17, MW14]. **carlomat** [Kol14]. **carlomat_3.0** [Kol15].

carrier [Buc19]. **carriers** [MSRL10]. **Cartesian** [BOGL17, BLAS19, FZY17, MAM14, NKS15, SDM⁺12, SDS⁺17, SHL⁺11].
Cartesian-grid-based [FZY17]. **cascade** [LMAB16, SZY⁺12, SZY⁺13, SZM⁺14, TB14, ZYL⁺15]. **cascaded** [LJD⁺19].
cascades [BTM⁺17, Fri19, KOT12, RLS16]. **case** [Asi10, CMRVVR⁺14, Che11, CZ19, FKL13, sLqSqL⁺13]. **Casimir** [AG14].
CASS [FBC⁺12]. **Castep** [Rut18]. **catalogue** [Var16]. **cathode** [SCNJ18].
Causal [CK18]. **CAVE** [BHH⁺10, BBH⁺15, OK10]. **CAVE-CL** [BBH⁺15].
Caveats [CH11b, SYE⁺18]. **cavities** [AG14, BHH⁺10, BBH⁺15, CBB14, CdFDS16, VBMP15]. **cavity** [LLSK17].
CBFM [GMC18]. **CCA** [FLZ⁺18, ZXL16, ZZD⁺16]. **CCD** [SL14].
CCOMP [Zou18]. **Cd** [DSM⁺11]. **CE** [NAQ16, QYM11, QA13a, SP18b, WZS⁺11, CHW⁺15]. **CE/SE** [NAQ16, QYM11, QA13a, SP18b, WZS⁺11]. **Celeris** [TL17]. **Celestial** [LSJ13]. **Cell** [BOPL17, DS11a, HZW⁺16, AM14a, BPB⁺17, BCP⁺16, BDL⁺19, CH19, CC14, CC15, DBP⁺18, DG16, GHMB⁺19, JvOK17, KKG⁺15, KHK⁺11, LJE11, LYJY10, LWRQ16, MKL17, MKU⁺12, MEM⁺11, MTO15, NCB18, OBPL19, PG17, QDZ⁺13, QL10, RKVL14, SSS⁺11, SC15, SC16b, SKK17, Sok13, VS19a, VMFS16, WWC⁺16, WN10, WG11, ZLFM11, CDBM16, CHZ18, DS14, IBP⁺15, KC18, LKA⁺16, PMMF15, RD10, SVG10, SBE⁺16, VKLM11, VLM11, VLL⁺17]. **cell-based** [LWRQ16]. **cell-centered** [SC15, SC16b]. **cellGPU** [Sus17b]. **CellMatch** [Laz15]. **cells** [BTL⁺17, DJ12, FRG12, HGCARM15, KMJS16, Laz15, LHG⁺19, NGCI⁺12].
CellSim3D [MÅWK18]. **Cellular** [TD11, CRA10, FGC⁺11, FBG10, JEF14, MÅWK18, PC11, DG16]. **center** [BAR12b, DT18, Nis11]. **centered** [KCA⁺15, LRW⁺15, SC15, SC16b].
CENTORI [KTE⁺12]. **central** [DJ11, GST15, QA13b, TYH⁺15]. **centre** [PCGM14]. **centric** [Sie16]. **Centroid** [AS16]. **Centroidal** [JFHA19, FJ19].
Cerenkov [LYX⁺17, YXD⁺15, YXT⁺15]. **CESE** [FXZ⁺14]. **CFD** [CDR⁺15, HdM16, HJH17, KDM17, LNSD15, LSD18, Sha13a, XAPK14].
CFEL [FBC⁺12]. **Chain** [EBDM17, KSW15, APV10, Lev19, RV10, RV11, UIY11, LN16].
Chain-based [LN16]. **chains** [BDK11, KS19, Krö19, MNC15]. **challenges** [KT12]. **Chambers** [DAW⁺19]. **Chandrasekhar** [Jab12, Jab13, Jab15, Jab19, MR13]. **change** [HYM11]. **changes** [BLS17, LSD18, ZBMM11]. **Channel** [KSW15, CCL18, Des16, GCVA14a, LLQX19, ZLFM11]. **channeled** [Aza13, BP12]. **channeling** [Aza13]. **channels** [BEKP19, TXZL15, WJHW14]. **chaos** [GBJ⁺10, GBJ⁺12, GBJ⁺13, GFJ⁺14, GBFJ14, MCL⁺17, GBJ⁺13, GBJ⁺15, GBJ⁺19]. **Chaotic** [HVP⁺19, ADdM16a, ADdM17, GTS14, HLD13, KI11, ÖY13, RDN⁺17, TTS11].
CHAPLIN [BD14]. **CHAPLIN-Complex** [BD14]. **characteristic** [LSDD14, MH18]. **Characteristics** [TGH⁺16, CSRV13, KK13, KFF⁺16, SZM⁺14, TKJ19, SC14].

characteristics-based [TKJ19]. **Characterization** [CKLM10, HFSK12, CZN14]. **characterize** [Mar19]. **characterizing** [SPY11]. **Charge** [Kap16, SCW⁺11, Buc19, CC14, CC15, CAGL13, MSRL10, MTO15, NFI17, iNSK⁺15, PFFK19, Qia17, SGM11a, SGM11b, Sok13, VLL⁺17, XNK⁺16, YXT⁺15]. **charge-conserving** [CC14, CC15, MTO15, Sok13]. **Charge-sign** [Kap16]. **charge/current** [VLL⁺17]. **charged** [BBH⁺11a, BG13b, BG14a, BLG14, Bon15, Bon16, BAK⁺17, CLC14, Gwi12, KB15a, KRK16, KFS⁺13, MF17, NJ18, PCGM14, SBPD19, SKK11, TAFD19, Ume18, Ume19, XQ19]. **charges** [SGDS16]. **CHARM** [PLRT14]. **Chebyshev** [DT11a, LD10b, SW14c, Wan10a]. **check** [HWW12]. **checkerboard** [BW12a]. **checking** [ÇÖSÜ11, Yam16]. **CheckMATE** [DDK⁺17, DDK⁺15, KSTR15]. **chemical** [BBF⁺10, BO12, BSWC14, DBDP12, GAGW16, LCC13, LSK⁺14, LL12, MLGVE14, MEG12, NCS17, dIRJL14, PBD⁺15, Pla16, PB16, RH11, SAN18, SAG13, TM14, TPC16]. **chemically** [MTE17]. **chemistries** [YFAT17]. **chemistry** [CHH⁺11, GHK19, IIO16, KEH12, Sou14, WPAV14, WMI19]. **chemokine** [rJmYT11]. **CheMPS2** [WPAV14, WPD⁺15]. **Chen** [HLD13, ÖY13]. **Cherenkov** [GV15]. **chi** [GST15]. **chi-square** [GST15]. **CHICOM** [Gag12a, GHN19]. **CHIEF** [MJKB18]. **chiral** [CZ19, GBD10]. **CHIWEI** [Gag12b, GH18]. **choice** [DDM14]. **Cholesky** [LHJZ10]. **choosing** [GLR17]. **Christoffel** [JC16]. **CI** [DKG⁺14, KPST15]. **CIF2Cell** [Bjö11]. **CIJET** [Gao13a]. **circuit** [LW11, LW13]. **circular** [DA16, KGG⁺16, LWZ14, OILK17]. **citation** [wHwH11]. **CL** [BHW⁺12, BBH⁺15]. **clarifying** [vMB14]. **class** [BPC12, BPC13, GCHL15, Kra17, Kra18a, LLP15, MP11, MST⁺18, MNOØ11, SS13b, SCM14]. **classes** [rJmYT11]. **Classical** [CPHL14, VMFS16, BDJS18, BTM⁺17, CEF16, DT11b, DS13b, GH15, Gwi12, KO12, MCV18, SKK11, SLR16, SA14, WJCZ18]. **classically** [Wil15]. **classification** [CFSK14]. **classifications** [sL10]. **ClassSTRONG** [CPHL14]. **clathrate** [MD19]. **cleaning** [LLQX19]. **Clebsch** [HR11]. **CleGo** [HR11]. **climate** [DBD⁺17, MW19]. **cloning** [BS12]. **close** [BAK⁺15, BAK⁺16, BAK⁺17, WISA11]. **close-coupling** [BAK⁺15, BAK⁺16, BAK⁺17, WISA11]. **closed** [Faw10, MCA17, SL17]. **closed-shell** [Faw10, MCA17]. **closure** [CXL19]. **cloud** [CNS⁺14, JTW⁺17, JVR12, KCN18, VPMVH⁺17]. **clouds** [APC⁺14, JH11]. **CLUMPY** [BHN⁺16, HCM19, CCM12]. **Cluster** [LX14, PEMS19, Smi14, BTC⁺17, CSPAD10, CGSB18, CZGC19, FLW17, GTL11, HLW16, JSLM16, KP12b, KSL⁺11, KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16, KZ14, LKM⁺16, MCA17, MTM13, MFLY19, TKR13, TMS19, XLCW14, ZSW⁺17b, LX14]. **cluster-application** [CGSB18]. **cluster-cluster** [MFLY19, XLCW14]. **Cluster-Expansion** [PEMS19]. **cluster-labeling** [Kom15a]. **Cluster-parallelizable** [Smi14]. **Clustering** [HBP14, MKMK10, DAW⁺19, LLHC11]. **clusters** [BBF⁺13, BG13b, BG14a, BLG14, Bon15, Bon16, BRH⁺16, DRR16, DCVB⁺13, GS17b,

GZZ19, Gwi12, KSL⁺¹¹, LLHC11, Law19, LSYZ12, LS17a, RRCSCJ10, RD10, SKK11, SQL⁺¹⁰, VK14, YZZ⁺¹⁷, YHL11, YLYL17, ZPS⁺¹⁸. **CMBE** [GFJ⁺¹⁴]. **CMFD** [PZL⁺¹⁹]. **CMIstark** [CFSK14]. **CN** [PYW⁺¹⁴]. **CN-ICCG-FDTD** [PYW⁺¹⁴]. **Co** [CJH11, LQZ⁺¹³, DS13c, TG11]. **coalescence** [GCC⁺¹⁸]. **Coarse** [GB11, AGVP10, AMJ18, ESM17, FPY⁺¹⁷, HJE⁺¹⁹, MNL19, NLB⁺¹⁹, PA13, SM19]. **coarse-grained** [AMJ18, ESM17, FPY⁺¹⁷, NLB⁺¹⁹, PA13, SM19]. **Coarse-graining** [GB11, MNL19]. **coated** [CKLM10]. **coating** [CDSG11]. **Code** [GHN19, KUV15, ZCC19, Bab14, BSM13, BNV18, Bar11a, Bar12a, BMU11, BDPM15, BH14a, BW12a, BM16, BRL12, BG13b, BG14a, BLG14, Bon15, Bon16, BF10, CR13, CTT17, CJ12, CCM12, CPR12, CL14, CB16a, CB16b, DCM⁺¹², DET12, DGJH19, DLGP10, DBJ11, DBP⁺¹⁸, DT11b, DT18, DA16, DGS⁺¹⁹, DFM⁺¹⁵, Duf16, EZBA16, Ein16a, ELL^{+17a}, FVH18, FLZ⁺¹⁸, Faw10, Gag12b, Gag12a, GH18, GLPQ11, GSMK17, Gio18, GC10, GC13, GC16, GC18, GCK19, GHBL18, GAB⁺¹⁶, GBJ⁺¹³, HdM16, HBE10, HV15, Hak16, Hak19, HCRD14, HTT13, HTT14, Hol19, HF16, HHM⁺¹⁵, IBP⁺¹⁵, JuIAM16, JCW⁺¹³, JFC12, JGAL⁺¹³, JHL⁺¹⁵, KHB14, KSS18, KPA⁺¹⁹, KTE⁺¹², KBSP12, KCS⁺¹⁵, LAA⁺¹⁰, LLE⁺¹⁸, LHH^{+12b}, LJZ⁺¹⁸, Lit13, LO14, LL15, LDF⁺¹⁶, LMAB16, LRSS19, LR13, LR16, MDW16]. **code** [MT13, MD19, MGA⁺¹³, MGRB11, MRSU14, MTM14, ML17, MW19, MTM13, MAM14, MSHLS15, MSHL17, MJKB18, MO14, Nik12b, NMS14, OBPL19, dIRL11, dIRAPL11, Oti13, PPV⁺¹¹, PBMAD12, PGD17, PG10, PVK^{+14a}, PVK^{+14b}, PBL⁺¹⁸, PGMU19, RF16, REtVH12, RtV16, Rei10, RB18, RWKS15, RHBH15a, RHBH15b, SSS⁺¹¹, SCB^{+17a}, SKB10, SGNL17, SL16, SHW18, SEW12, SEW14, SRS⁺¹⁸, SM14, SHZ13, SQS⁺¹⁶, SD10a, SS11a, SC16a, SC15, SC16b, SHL⁺¹¹, SCB17b, SF10, SGSG19, SMGK14, TAFD19, Tau10, TVGB15, TRN16, TKL⁺¹², VKP14, VSG17, VPM12, VMGP⁺¹⁹, WLQ⁺¹⁷, WN10, WR16, WEH⁺¹⁹, WSH⁺¹², XAPK14, YLKN17, Zag14, ZD15, ZXL16, ZZD⁺¹⁶, ZZSW19, ZMPT13, vWB10, MZE13, GBJ⁺¹⁰, GBJ⁺¹², OKP10, SKK⁺¹⁹]. **Code_Saturne** [Sha13a]. **codes** [BDL⁺¹⁹, BPP11, BFPP12, CYD11, DGS⁺¹⁹, FMRP16, Gio18, HWCdM19, HTJ⁺¹⁶, HL18, ILZ⁺¹⁹, KLV15, Kro16, LW14a, LZ17, LTP16, MHA⁺¹², MNPY14, OLG⁺¹⁶, PMMF15, Rut18, SISW10, Sch18, VLL⁺¹⁷, VKS16, VGM⁺¹⁵, WRFS15, XNK⁺¹⁶, YB13, YXD⁺¹⁵]. **coding** [BBB^{+17a}, CFCB12, FFT⁺¹⁴]. **coefficient** [BBB17b, IBB18, PR13, PYW⁺¹⁴]. **coefficients** [ABC⁺¹⁸, ARYT17, BNPPD19, CATK11, DT10, Dev12, HR11, Ixa12, KKS18, LZZL10, LKT⁺¹⁶, MCV18, Moh14, ORCR17, PKT15, Shi16, SMGK19, VCD16, Wei99, Wit14, YÇÖ15]. **CoFFEE** [NJ18]. **CoFlame** [EZL⁺¹⁶]. **coflow** [EZL⁺¹⁶]. **coherence** [SSM⁺¹⁷]. **coherent** [BP12, CCXC15]. **coincidence** [WT12]. **COKOSNUT** [SCB17b]. **collaborative** [DBP⁺¹⁸, Liu14]. **collapse** [BNAB11, KHN19]. **collective** [GLR17, Gio18, WR16]. **Collider** [BBB⁺¹⁸, CKhN11, EFG⁺¹⁰, BCP13, BDDM18, CFS13, YWW13, BSW12].

colliders [AHH⁺19, BDC⁺14, BHZ13, CM14b, DDKM15, Gao13a, GLS⁺13].
colliding [Lit13]. **Collier** [DDH17]. **collision** [ART17, BTM⁺17, BO12, CYD11, HPN18, HDZ14, MWI⁺19, NNWS15, RF16, SD10a, WSH⁺14].
collisional [CXL19, DGS⁺19, HJ14]. **Collisions** [BH14a, BH14b, CUL⁺17, CKS10, Col14, DCC⁺10, Gin10, GFJ⁺14, GBJ⁺15, HL19c, JH11, KKK⁺15, KHB14, KHK⁺11, KNS⁺17, MEM⁺11, Nis11, OK12, OK18, SZY⁺12, SHT18, SQS⁺16, SKK17, Tom16, VC10, VS19b].
Collocation [LD10a, LX12, LCCC11, MM10, PDRG10, ZWLZ17, ZST11].
Colloidal [TCCV18, BHND16, DGPOR18, HAN⁺16, HCSW10, MDPTK15, Van15].
colloids [OOGP19]. **COLONEMA** [Car16]. **colony** [vRWS14]. **color** [HKK11]. **Columbus** [Pit12]. **combination** [LAG⁺17]. **combinations** [KCT15]. **Combinatorial** [BR14, DS13c]. **Combined** [BBB⁺15, BKS15, PEMS19, SCM14]. **Combining** [Laz15, SC16b, SKK17, GWF⁺16, KPST15]. **ComDMFT** [CSK⁺19].
Comm [AAT⁺20, Ano20, AZ17a, Ber16a, KYKN15a, LR16, Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14]. **Comment** [BL18a, CCK23, Mel19, Maż19, MLK⁺19, Ram10]. **Comments** [San15, Hol19, MR13]. **common** [ATA⁺19, Bar11b, Laz15]. **Commun** [ERS10c, Kra18a, Nat10, ZTG14]. **communication** [DO14a, KP12b, RSSH⁺10, SCM13, TIM⁺16, WLZN17]. **Communications** [Ano16a, Maż19, MLK⁺19, Ram10, Wu10, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a]. **communicator** [CBGY17]. **communicators** [YKK⁺19].
communities [IBKK11, Kra10]. **commutator** [BCT17]. **commutator-free** [BCT17]. **Compact** [Dua12, IKS19, LS19, MBGK11, BK16a, Cap13, DT10, FFT⁺14, HZ11, LLXK16, lLSZ14, SR12, SA15b, SB11, TY10, Tia11, WZ13, XYK12, YTYA17, ZFH14, ZNT15]. **Compactly** [YKK⁺19]. **Comparative** [SS18, VEM12, JTN⁺11, LHSL14]. **Comparing** [SAN18, Gag12a, GHN19, GVR19]. **Comparison** [CM10b, CDBM16, Fuh15, LYJY10, WLM14, BR13, CDS13a, CHC⁺11, CS10, ER19, TBZ12, WG12].
Comparisons [ABH⁺19, CHZ18, DGPW11]. **ComPat** [LHB⁺19].
compatibility [BS13a]. **compatible** [BHJ⁺19]. **compensation** [AAJA14].
competing [BSWC14]. **Competition** [MS11]. **competitive** [Dan11].
CompHep [Sta10]. **compilation** [CW13]. **compile** [Vuk12]. **compile-time** [Vuk12]. **compiler** [LWC14, LW16]. **complement** [UKKB19].
complementarity [YSLY19]. **Complete** [FBG10, ACD⁺14b, Boy15, sL10].
complex [AQJ10, AC16, BGM⁺14, BH14b, BH16, BBF⁺13, BKM11, BH11, BDV11, Cai11, CHDF10, CdLOL19, CC10b, CC12, CGH⁺11, DDH17, EKK14, FGC⁺11, FHH⁺14, GCHL15, GYW⁺10, HLS12, HM18, JJ15, JMG⁺17, KS16a, KHZ⁺18, KCS⁺15, Lit13, LOV10, Maı12, MVI⁺16, MCNRC16, NMCR15, NLSJ17, Nov17, PHA18, PB16, SGW17, SA15b, Sol11, SOYHDD19, UIY11, UO15b, UO15a, VSG18, WZ13, WAHL13, ZMCT12, Zou18, BD14].
complexation [HB13]. **complexes** [Faw10]. **complexity**

[BHVMMH15, YKS11]. **complicated** [AKR15]. **component** [Eba13, Erm18, HLS⁺17, TZM17, WLM14]. **components** [KCA⁺15]. **Composite** [ACMM19, CKLM10, KP14, Pra11, Vuk12]. **Composition** [HJ14, SOYHDD19]. **compositional** [FKS⁺19]. **compositions** [RH11]. **compounds** [BSWC14, DMC⁺15, LHWL16]. **comprehensive** [CEZ16, SAHP15, VBG⁺10, WJCZ18]. **compressed** [JL19]. **compressibility** [LWJV18, RH17]. **Compressible** [FDZ17, ACM12, BOGL17, HJGL18, HJGL19, PVK⁺17, SP18b, TFBW14, TCP13, VL19, XD16, YSLY19]. **Compressing** [HZC19]. **Compression** [BCC⁺18]. **Compressive** [HJL⁺14]. **comprising** [PDC14]. **compromise** [LGW13]. **Comput** [AAT⁺20, Ano20, AZ17a, Ber16a, ERS10c, KYKN15a, Kra18a, LR16, Nat10, Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14, ZTG14]. **Computation** [ADH⁺17, AKH12, AD14, DLU18, DKOS14, Ihn12, JH15, LNP⁺17, Mil16, AM19, AB10, ACTP15, Bal19, BT17b, Cai11, CMN12, CNMC10a, Che17, CGRB14, CK12, DG10c, DADS11, Fuk17, Gao13a, GLS⁺13, GLAC13, GBP13, Gar19, GBD10, GST15, GST17, GA13, HR11, JC13, JC14, JZZ⁺19, JU17, KHBS19, KCN18, KZ11, KP12b, KvdO11, KMS19, Kol14, LPBH11, LV13, LM16, LLL12, LLL13, LAS⁺17, Mel19, MSS⁺14, NHSY15, PO14, RA13, RZ19, Sai13, Sch14b, SDL⁺16, USOA13, WWS10, WISA11, Wie13, YdDH⁺12, ZZ17a, Zou18, BCTP18]. **Computational** [ABB13, AL17, BBB⁺17a, BBC⁺13b, JAS17, MCGR11, NMS14, NFS15, RH11, SWS⁺12, WWR⁺16, YFAT17, ÁSS18, BHNS17, BCP⁺16, CL15a, Che11, CRC⁺13, Fri19, GBSY18, GBS⁺16a, HWCdM19, JOR⁺12, LFKD18, LHJ⁺15, LLX14a, MWI⁺19, MMC10, MCP10, Mül14c, NMCR15, NVAFO18, PSMS14, PSMS15, RK11, RBB15, RCD⁺10, Ros15, Sou14, WC15, ZTG13, ZTG14, dSVLP13, dSF18]. **Computationally** [WRBL19, DMC10]. **Computations** [Dan10a, Dan10b, BKS15, Bog16, Bre10, DS13c, GJ18a, GLW14, HKSW10, MKR⁺12, Naz12, NOR15, Wie15, YRR13, ZFZ19, dALM⁺12]. **compute** [BH11, Boy15, HHP⁺14, PB16, RLS16, RW11, SSG⁺10, SSG⁺18, TZM17, VB19, Wei11a, ZZSW19]. **computed** [FWS⁺17, MH18, SBvD13]. **Computer** [Ano16a, BRB12, FLW17, Gio18, JWJL12, Maż19, MSNI11, MLK⁺19, Ram10, Wu10, ABB⁺16, AG14, BJBC⁺14, BF16, BNV18, CDSG11, CYD11, CSK⁺19, Cip11, CK18, DJW⁺19, DS14, DSS⁺12, Dev12, GRTZ10, HHM⁺15, JuIAM16, Lit13, LO14, MLW⁺10, MSI⁺10, MNV13, MFS10b, MZE13, MSS⁺14, OYK⁺14, PCR17, DMH16, REtVH12, RtV16, iSSMI11, TJD11, Tab16, WR16, WSO⁺12, WEH⁺19, YKK⁺19, Zhe15, ZMPT13, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a]. **Computer-aided** [FLW17, Zhe15]. **Computer-algebra** [Gio18]. **Computer-assisted** [BRB12]. **computer-generated** [MSS⁺14]. **computer-generated-hologram** [WSO⁺12]. **computers** [BWPT11, BKPT12, BY13, ILZ⁺19, IW15, LS12b, MNW⁺17, SOM⁺13]. **Computing** [ÁSTT16, ADF⁺15, BBC⁺11, Gio14a, LSG⁺12, RE19, TCP13, Vit19, Wai12, YE14a, ARAB⁺17, ARYT17, ABDR17, Ara14a, Ara14b,

BHW⁺¹², CR13, CLC14, CKhN11, CSRV13, CL15b, ÇÖSÜ11, CRB⁺¹⁷, CNS⁺¹⁴, Dan10a, Dan10b, Dan11, DMC⁺¹⁵, DGST17, Ein16a, FBN⁺¹³, GXF⁺¹⁵, GLHR19, GST12, GHdF10, GCVA14a, GCVA14b, HCH16, JTP15, JVR12, KDP⁺¹⁴, KO14b, KO16, KK17, LR18a, LR18b, Lee18, LS17b, NFS15, PNL13, PG10, Qia10, SDS15, Sha13a, TKP15, TACA15, TGH⁺¹⁶, VPMVH⁺¹⁷, WX14, WGVPL17, YK18]. **CONAN** [LKT⁺¹⁶]. **concentrated** [BE14]. **concentrations** [Buc19, DMC⁺¹⁵]. **concept** [Vuk12]. **concise** [KKG⁺¹⁵]. **concurrency** [Dan11]. **Concurrent** [Hah16, HWT10]. **condensate** [VBMS17]. **condensates** [CCW10, GM14, Hoh14a, JWC13, JWL13, KLM⁺¹⁹, MT13, TZM17, WX11, WX14]. **condensation** [Ker17, LCCC11]. **condensed** [Jab17, MKB⁺¹¹, ONS⁺¹⁵, SBH⁺¹⁴]. **condition** [PN15, STA18, SCNJ18, WLU11]. **Conditions** [KFF⁺¹⁶, KPCC13, BMHP17, CCHL11, DGG13, EY11, FJK⁺¹⁷, HSD17, JYPA18, Jiw15b, LWZ14, LLL12, LHWL16, LS13, MD11a, MRL18, MRVF13, Mil16, NPM16, PLCC12, Qia17, QHC⁺¹⁰, RC13, RC16, RHH12, RTA10, SP18a, SN16, Uty14, Wan16, Wil19, vdS13]. **conductance** [SPMM11]. **conductances** [TXZL15]. **conducting** [JPK⁺¹², Qia16, RBG⁺¹⁹, SKML11]. **conduction** [CAN11, HWS16, MLS10, iSYS12, SN16]. **conduction-radiation** [CAN11]. **conductivity** [AWK⁺¹⁶, CKT17, FSH13, KST^{+14b}]. **cone** [Hal17]. **Confidence** [Zlo14, SC14]. **Configuration** [Kra17, Kra18a, UFKB19, BSC⁺¹³, CF16, Gar19, GBSY18, KGG⁺¹⁶, KPST15, QZWU19, RE12, SAY⁺¹⁸]. **configurations** [BPS⁺¹⁶, CB13a, Gwi12, MCP⁺¹¹, SKK11]. **confined** [LKT⁺¹⁶, MSRL10, RS12, RAV11, SGNL17, SNB11, SCM⁺¹⁶, vdS10]. **confinement** [Den10, GBJ⁺¹⁹, HJL⁺¹⁴, LLQX19, LHJ⁺¹⁵, LZ17, MJB⁺¹⁰, RV11, ZHCR18]. **conformal** [WWC⁺¹⁶, ZDWM17]. **conformational** [LOK⁺¹⁶, JKG⁺¹⁸]. **conformations** [CS16]. **conforming** [YWX11]. **Confronting** [BBH⁺¹⁰, BBH^{+11a}, DDK⁺¹⁵]. **congruential** [SS13a, TC11a]. **conical** [DGST17, GST12, SPTPR19, DGST17]. **conjugate** [ÁSTT16, AG12a, EFK⁺¹⁹, HbotRC15, RE19]. **conjugated** [KS12, SS10a]. **Connecting** [Sht17]. **conquer** [PA13]. **conservation** [AAD14, Cha19, DJ11, HKJ⁺¹², HHC⁺¹⁰, MMT⁺¹¹, MWCY14, ZY19b]. **conservative** [BMBC⁺¹⁷, EW14a, KL17, LMRC15, LL19, UNK12]. **conserved** [Mar15, Nog17a, Nog17b]. **Conserving** [GHBL18, GHMB⁺¹⁹, AK15, CC14, CC15, DCC⁺¹⁰, GVPJ18, MTO15, Sok13, YXT⁺¹⁵, vSGB⁺¹⁸]. **Consideration** [WTH15]. **considerations** [WLU11, dSFdFF13]. **considering** [GLAC13]. **consist** [Faw10]. **consistency** [Sit18, SHNM11, SIMGCP13, SIMGCP14]. **Consistent** [MNC15, Buc19, CDTV10, CCGC13, DR12, Erm18, KOK17, NPVR14, Pit12, SEW12, SEW14, XNK⁺¹⁶]. **constant** [CLHL19, DT10, KA17, Moh14, SH12a]. **constants** [GPS⁺¹³, LSCZ11, Maż19, MLK⁺¹⁷, MLK⁺¹⁹, TW15, Voy13, WBY11, ZZY10, ZC12]. **constrained** [BS15a, Mar15, NSXZ14]. **constraint** [WX14, YLK10].

constraints [AKK⁺18, NPAG11]. **construct** [Ray10]. **Constructing** [CSP⁺19, RU13, SOJ14, VSG18]. **Construction** [DIP11, ACMM19, ART17, FG13, GAGW16, OWS⁺14, RC11]. **Constructive** [HH11b]. **contact** [BG13a, CCLL18, EVB14, Gao13a, NFD⁺19, OL12, TTG11, dSdO12]. **contact-impact** [CCLL18]. **Containers** [GBC⁺18]. **containing** [Bot13]. **contaminated** [MW12]. **contamination** [PCEH15]. **context** [OLG⁺16]. **continuation** [CCW10, JWC13, KH19, KSW12, LLG17, TGUvS19, YOM⁺19]. **Continuous** [GMRHRCME13, GMPFC⁺14, GWF⁺11, GLW14, SGW17, BR13, Bis15, BVC13, CM10a, CXG⁺19, FGC⁺11, HWG13, HWM⁺15, Hua17, IW15, PBS⁺17, SKFP16, SLLP17, WRFS15, WLG⁺13, YWOD19]. **continuous-angle** [SLLP17]. **continuous-energy** [WRFS15]. **Continuous-time** [GWF⁺11, SGW17, HWG13, HWM⁺15, Hua17, IW15, PBS⁺17, SKFP16, YWOD19]. **continuum** [CL13, FM12, FZR19, GC12, HLS⁺17, KK13, MBF⁺10, MNPF17, NFA⁺16, NB17, PG10, SYE⁺18, TKL⁺12, WSTP15]. **continuum-scale** [HLS⁺17]. **contracted** [AC13]. **contraction** [DE13, PGO17]. **Contribution** [TW11, Pat12]. **control** [BM13, CAN11, CLL16, CB16a, FBHB17, FR15, HRC11, Hoh14a, KHK⁺11, KSW12, KSY13, MS14, MLEM19, MD10b, MGFRG12, OK10, SH18, SJHS19, SCB17b, SCM⁺18, VPMVH⁺17, vWB10]. **control-variate** [KHK⁺11, MS14]. **controlled** [Exl17, HST⁺11, Pla16]. **Controlling** [LYX⁺17, CB15d, KSH14, PEMS19, RBG⁺19]. **convection** [FM15, GA10, GN14, GSKM15, GLW14, Kau13, SL14, Tia11, ZKG⁺18]. **convection-diffusion** [GN14, SL14, Tia11]. **conventional** [Kom15a, PE17]. **conventions** [SM13]. **Convergence** [Dua10, LV19, SMJ17, Sha18, ACC17, CB16b, HV15, HGCARM15, KV19, MBFB13, XHLUF⁺18]. **convergent** [HRC11]. **converging** [QLE16]. **conversion** [Hsu11b]. **Converting** [PDL⁺18, Hir15]. **convex** [LHGF18, LHG⁺19, RLL12]. **convex-roof** [RLL12]. **Convolution** [MCP⁺11, Bot11, Qia10]. **convolutional** [HZC19, LZL10]. **convolutions** [HHP⁺14]. **COOL** [Bar11a, Bar12a]. **cooling** [Gre18]. **Cooperation** [QHC⁺10]. **Cooperative** [Dan11]. **coordinate** [BMNS14, FGLB12, HO13, LDR⁺17, OK14, RVDS16, RDVS18, SM13, SMC⁺17, SCG11, XGH⁺19, HSD17]. **coordinates** [AV13, BLAS19, DXY⁺19, GHMB⁺19, HF16, NKS15, PM16]. **coprocessor** [MSS⁺14]. **coprocessors** [SH16, SAN18, SBE⁺16]. **copy** [JPH⁺14]. **Core** [NBW16, ALC18, AZM14, ACTP15, BNAB11, CND11, ELDS14, Erm18, FLSZ13, FBN⁺13, GAC⁺17, GVS⁺15, HWT10, LHZ11, MW19, MNPY14, RCGT16, RB18, RJKC16, TRM⁺12, TDL⁺14, ZLZ19]. **core-collapse** [BNAB11]. **core-excitation** [GVS⁺15]. **core-level** [MNPY14]. **core-shell** [ACTP15]. **corr3p_tr** [EKO16]. **Correct** [WHB16]. **Corrected** [BPC13, Cip13, BGM⁺14, HWW12, HM17, JOR⁺12, KKS18, SO19]. **correction** [FKL13, KK14a, KO14a, LYX⁺17, LLZ⁺17, Mar15, MSR10, SW13a, TAFD19, TZG12]. **corrections**

[ABdA15, AMRdA17, BBUY13, BCR14, HP17, LP15, Sta11, YW17, NJ18]. **corrector** [PAS11, PS14, SD10b, SA15b, TYH⁺15, Yua19]. **correlated** [APS⁺16, BKS15, CSK⁺19, DB13, HLL13, JDG12, KH11, MDF11, OOK⁺12, PZY16]. **correlated-electron** [CSK⁺19]. **correlation** [ARAB⁺17, CMVRB⁺14, CMSN18, DKG⁺14, KCL11, LAA⁺10, MHHL11, MOB12, PZL⁺19, QHZ⁺14, RMW13, RGKR17, WPD⁺15]. **Correlations** [DBB12, CLKK11, GTK⁺19a, KÓG17, MBGV15, RE19, iT11, WT12, YK12]. **correlators** [DE13, Nem16]. **correspondence** [GLX⁺14]. **corresponding** [GCVA14a]. **Corrigendum** [AAT⁺20, Ano20, AZ17a, Ber16a, KYKN15a, Kra18a, LR16, Ras17, RC16, RHBH15a, YQM14, ZTG14, Sco13]. **corrugation** [ZFB11]. **CORSIKA** [BG14b]. **cosine** [Ert15, GH11, PH11, TK14b]. **cosine-screened** [GH11]. **cosmic** [HCRD14, LKW11, TS10, VDJ⁺11]. **Cosmo** [Asl14]. **Cosmological** [CMRVV⁺14, ABB⁺19, Sai10, Wai12]. **cosmologies** [Arb12]. **cosmology** [Asl14]. **CosmoTransitions** [Wai12]. **Cost** [HJH17, ATA⁺19, KL14].

Coulomb
[EUT⁺15, GH11, HK15, JH15, JZZ⁺19, LB13, MC16, Mil16, MSRL10, Nis11, PH11, RZ19, RGKR17, Sar17a, Sar17b, SHT18, SV13, XD13, XHD15, ZHPS10]. **Coulomb-distorted** [HK15]. **Counterexamples** [YE14a]. **counterterms** [SV12]. **Counting** [Kan18, Liu15a, GdGB⁺18, GES13, SBB13]. **COuntLOss** [Car16]. **COUP** [KKS18]. **coupled**
[AV13, BSM13, BK16a, CZS10, CZL⁺11, DT11a, DN13, DHJ13, Des16, DGMZ15, EEGW12, FBHB17, FCCTFR18, GMHZ19, GCVA14a, HWCH11, KGFS18, KP14, LWL12, MCA17, MZE13, PGO17, QSC14, SBL16, TK19, TPC16, WX14, YS17, ZMPT13]. **coupled-channel** [Des16, GCVA14a]. **coupled-cluster** [MCA17]. **coupled-wave** [CZL⁺11]. **Coupling**
[DRI⁺16, KST14a, SCN18, BAK⁺15, BAK⁺16, BAK⁺17, CL14, FLSZ13, FHTO17, KA17, KVV11, LSK⁺14, MKL17, NGM⁺10, PMVG16, Pre18, Sch14a, SS12, TD17, WISA11, WX11, WNYP17, WLG18, Wei99, YLL⁺19, ZCC19, Erm18]. **couplings** [AGH⁺16, AC16, KKS18]. **covalent** [HXW⁺13]. **covariant** [BS12]. **cover** [Ano16m]. **Cowan** [Kra18a, Kra17]. **CP** [CRC⁺13, LCE⁺13, PS12, RCD⁺10, Ros15]. **CP-phases** [PS12]. **CP-violating** [CRC⁺13, RCD⁺10, Ros15]. **CPC** [Wei11a]. **CPMC** [NSXZ14]. **CPMC-Lab** [NSXZ14]. **CPPPO** [MGR16]. **CPsuperH2.3** [LCE⁺13]. **CPU** [BPP11, DCGG13, ELDS14, FBN⁺13, FOB⁺15, LSYZ12, Lya15, MDW16, MPM14, WC13]. **CPU/GPU** [LSYZ12]. **CPUs** [AEKO18, BS14a, ÓN12, RK19, SAN18]. **CR** [AANA12, BTM⁺17]. **CR-39** [AANA12]. **Crank** [BB10, CWS14]. **CrazyDSE** [HM12b]. **create** [KSTR15]. **creation** [DEW16, Krö19]. **criteria** [AG12a]. **criterion** [HFSK12, SK10]. **Critic** [dlRJL14]. **Critical** [CND11, CM10a, Fri10, OML11, XZF12]. **Cross**
[CPW17, SJY18, SJY20, ALL⁺11, ASEA14, BPC12, BS13b, BHS15, CYD11, CFW17, Cip11, Cip13, CM14b, DHS14, DLM18, Gao13a, GLS⁺13, Kol14, Lit13, LWJV18, OILK17, PDL⁺18, SGAA18, Shi16, VC10, vdS13].

cross-machine [CFW17]. **Cross-platform** [CPW17, SJY18, SJY20, LWJV18]. **cross-section** [CYD11, CM14b, OILK17, vdS13]. **cross-sections** [Lit13]. **crossed** [BDGG19]. **crosswell** [CL15a]. **Crowd** [GK11]. **crowded** [BJ11]. **cruncher** [LKT⁺16]. **CRunDec** [HS18, SS12]. **crystal** [AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, Aza13, BP12, Bab14, BK13a, BBO19, FLA⁺16, FBP⁺14, HWCH11, HLTW19, KMJS16, LLSK17, Liu14, LZ18, LZ11a, LZ11b, LZ12, LOV10, MW14, OG14, OO15b, OO15a, Ste17, WS11a, WLZM12, WYH19, WBY11, YZY10, ZY19a, ZY19b, HBH⁺17]. **crystal-cutting** [KMJS16]. **crystalline** [AKZ⁺13, DBJ11, TKP12]. **crystallization** [AYDY11]. **crystals** [BBH11b, CLC14, Gen10, HXW⁺13, HLW16, KMJS16, LOK⁺16, NJS17, PYW⁺14, RDP14, Sin12b]. **CS** [War16]. **CSD** [CW13]. **CT** [LP15, YWOD19]. **CT-X** [YWOD19]. **CTF** [YLL⁺19]. **CTHYB** [SKFP16]. **Cu** [LS17a, TG11]. **Cuba** [Hah16]. **cube** [SPS18, CD12, MGO13]. **cubic** [Jiw15b, LD10b, LST15, Lin13, WZ13, WBY11, XZ12, YSN⁺14]. **cubic-quintic** [WZ13]. **CuCheb** [AKS17]. **CUDA** [BHS18, BTC⁺17, CB13a, CFF19, DM12, FWS⁺17, GRTZ10, HE13, HD11, JK10, KHBS19, KO14b, KO16, LBB⁺16, LYSS⁺16, LYZ13, MSML10, iSYS12, SKM15, WGG⁺19, WMRR17, WRMR19, WWFT11, YHL11, ZAFAM16]. **CUDA-based** [WGG⁺19]. **CUDA-enabled** [KHBS19]. **CUDA/MPI** [LYSS⁺16]. **CUDA-EASY** [Sai10]. **CUGatesDensity** [LW13]. **Cummings** [KAvdL11]. **Cumulative** [AMR15, GST15]. **cuPentBatch** [GNP19]. **curation** [GVPJ18]. **current** [Fuk17, GBSY18, LYX⁺17, MTM14, VLL⁺17, YXT⁺15, ZDWM17]. **currents** [BL19, CPWZ18, HLS⁺17]. **Curvature** [KCN18]. **curve** [ERPDLFS15]. **curves** [Bog16]. **Curvilinear** [GSKM14, MGA⁺13, OCM⁺19]. **customisable** [BGL⁺14]. **customised** [KSTR15]. **customizable** [Giu19]. **customized** [DGG13, LYX⁺17]. **cut** [JvOK17, LCRL10]. **cut-cell** [JvOK17, NCB18]. **CutLang** [ÜS18]. **cutoff** [BL18a, SH12a, dJBIM16]. **cutting** [KMJS16]. **CWO** [SWS⁺12]. **cycle** [PZL⁺19]. **cycles** [GTSL⁺13]. **cyclokinetics** [ZW15]. **cyclotron** [BB13b, JGC⁺11, KMD12, PBL⁺18, SS11a]. **CYL** [GHMB⁺19]. **cylinders** [MCM⁺12]. **cylindrical** [BLAS19, GHMB⁺19, LKA⁺16, LJZ⁺18, XHD15]. **cylindrically** [RS12].

D

[BL18a, JCL⁺18, LBP15, RPB⁺15, RHBH15a, TGH⁺16, WNYP17, WRBL19, AV13, AM19, AGMS15, APC⁺14, BBC⁺11, BBB17b, BAR12b, BVP10, CP15a, CPCdM18, CC14, CdLOL19, DGG13, EW14a, FLZ⁺18, Fan19, FJK⁺17, FK12, FRFH10, GS15, Gai17, Gio14a, Giu19, GG16, GAB⁺16, GGF⁺13, GX15, GCVA14b, Gwi12, HKJ⁺12, HTT13, HTT14, HDM⁺12, Ixa10, JEC⁺12, JCL⁺18, JKIS16, KAK12, KL11, KO14b, KO16, KMJS16, LHJZ10, LHC⁺13, LX14, LKW11, MGL13, MGO13, MCP⁺11, NHD16, NCB18, PR10,

PCGM14, Qia17, RKVL14, RF15, RS12, RAV11, RJLL16, RHBH15b, SBH⁺14, SW14b, SP18a, SA15b, SKK11, SW11, TMA⁺15, TY10, TKL⁺12, TIM⁺16, TPC16, VMGP⁺19, VLM11, WNYP17, WMRR17, WRMR19, YKK⁺19, YLKN17, YTYA17, ZXL16, ZZD⁺16, ZSW⁺17a, ZFR18, SW14a]. **D-3V** [CC14]. **D-FFT** [YKK⁺19]. **D/** [JCL⁺18]. **Dalitz** [BGH⁺18]. **dam** [YS17]. **damage** [MBRV⁺13]. **damped** [DZ13, Eba13]. **damped-relaxation** [Eba13]. **damping** [MD11a, SS11a]. **DAMQT** [LRR⁺15, LRR⁺17]. **Darboux** [ADdM14, ACDdM15, ADdM15, ACDdM19]. **Dark** [GT19, AMR19, BBB⁺11, BBPS14, BBPS15, BHN⁺16, CCM12, HTY17, HCM19]. **DarkCapPy** [GT19]. **Darwin** [CC14, CC15]. **dash** [SCG11]. **Data** [BCJ⁺11, Car10a, DPK⁺15, KST⁺14b, XLCW14, AAA⁺16, Ano10n, Ano11a, Ano11o, Ano19m, BDKS10, BALV16, BG13a, BBV10, BMF⁺19, CL15a, Car10b, CZ18b, CMSV14, CSP⁺19, CZ19, CO11, DAW⁺19, DRUE12, DDK⁺15, DADS11, ECD⁺10, End11, Fer15, FCC15, FWS⁺17, GMRHRCME13, GTL⁺17, GVPJ18, GR19, GdGB⁺18, Gor19, HBP14, Hir15, JTH14, KFF⁺16, Kom15b, LLQX19, MW12, MGO13, MD10b, MM11, MGFRG12, MGR16, dLRL11, PCVZ11, PGO17, Ram19, RJW⁺19, RMW13, RSSH⁺10, SPTPR19, SEW12, SEW14, Shi16, Sin11, Sin12a, SAS11, SOJ14, SSM⁺17, TRM⁺12, TGUvS19, Var16, WMK11, YG12, ZSW⁺17a, Zlo14, dBCH14]. **data-assisted** [GTL⁺17]. **data-driven** [CZ18b]. **data-sharing** [TRM⁺12]. **Database** [RPB⁺15, BDT15, BBH⁺18, CYOS19, LL15]. **datasets** [CKT17, SHW18, WvSL13]. **Davey** [GML15]. **Davidson** [HLW16, ZHC16]. **DBpedia** [ZLLP17]. **DBSR_HF** [ZF16]. **dc** [CFSK14]. **DCDEM** [CCD⁺16]. **DD** [CDS⁺13b]. **DD-HMC** [CDS⁺13b]. **Dealing** [ACDdM19]. **dealloying** [ZDD⁺13]. **Decay** [APV10, Lev19, ADF⁺15, BGM⁺14, CDL⁺12, CLF18, GTPS19, Gin10, LMAB16]. **decays** [AC17, CGV13, CPWZ18, CCN17, DET12, DGPW11, ES16, EMW19, FEH11, HEF12, WT12]. **decimation** [US16]. **Decomposition** [ZYL⁺19, ASPW13, APC⁺14, BS15a, BS15b, CECGS16, CH11a, DO14a, DO14b, EDPZ19, GWF⁺16, JU17, JKIS16, KU10, LHWL16, MRL18, MCL⁺17, QL10, San15, ST19, SO19, TD14, WM13, WYH19, YKK⁺19, ZHC16]. **decompositions** [FRG12, GLHR19, SPS18]. **Decoupled** [ZKS⁺18]. **decoupling** [SS12]. **dedicated** [MH11, Pat12]. **deep** [WZHE18]. **DeePMD** [WZHE18]. **DeePMD-kit** [WZHE18]. **deexcitation** [RLS16]. **defect** [Buc19, DMC⁺15, HWW12, MBRV⁺13, NJ18, OO15b, OO15a]. **defects** [BMZ⁺18, CLC14, LZ18]. **defined** [ASPDL⁺16, Sza13a, WWS10]. **definition** [CNMC10b, DADS11, Vuk12]. **deflation** [NLSJ17]. **deformation** [RTÅT15, Wit14, ZC12]. **deformation-fluctuation** [ZC12]. **deformations** [Maż19, MAM14, MLK⁺17, MLK⁺19, OK14]. **deformed** [GC13, GC18, PSL⁺17, PUO14, SDM⁺12, SDS⁺17, SSK⁺13]. **Degasperis** [HDZ14]. **degenerate** [AAD13, AAT17, KGNS10, PFFK19]. **degenerated** [ABF19]. **degree** [BCDP18, Er14, TK14b, UNK12]. **Delaunay** [CHNS18, FLP10, GMH11]. **delay** [DS10, Fan19, LTP⁺17]. **delayed** [DDM14, JHJG14, LL15, ZTG13, ZTG14]. **delayed-choice** [DDM14].

delocalization [HW11]. **Delta** [SCM⁺18]. **Delta-plus-SPH** [SCM⁺18].
demand [CLH⁺17]. **dendrite** [ZKG⁺18]. **dendritic** [JEFP14, JK19]. **dense**
 [BMC⁺11b, CNS⁺18, MSZW11]. **densities** [BR14, Gio14a, GZW17, SHZ13].
Density [GS17a, NJS17, VCMS⁺13, ASA18, AKZ⁺13, AG14, AM10, AM11,
 AM17, BL19, BBH11b, BCH17, BR13, BSGG10, CDTV10, CXH⁺15,
 DSM⁺11, Dua12, FTI18, FLE19, GWL⁺17, GBR⁺14, GJ18a, Gio14a,
 GCP⁺15, HYM11, HHS⁺10, JCW⁺13, KT12, KCT15, KK16b, KKL⁺18,
 KBSP19, KSY13, Liu15a, LW13, LS11, LRR⁺15, LRR⁺17, MGRB11,
 MOB12, MSS⁺16, Mil16, MNPY14, MC17, NPAD11, NBN⁺14, OOK⁺12,
 OT11, QJF16, RHC15, RCH19, RGH10, RWKS15, SH12a, SCRS17,
 SSX14, SBH⁺12, SAHP15, SA14, TVGB15, VBS⁺17, VSG18, VvAV⁺11b,
 VvAV⁺11a, WLG18, Wit14, WPAV14, XLL15, XNK⁺16, YKK⁺19,
 YLYL17, YRR13, BC10, DBB12, GS17b, LT15]. **density-based** [SSX14].
density-functional [GBR⁺14, MGRB11, MC17, SCRS17, SA14, TVGB15].
DensToolKit [SAHP15]. **dependence** [Maž19, MLK⁺17, MLK⁺19].
dependencies [Kan14]. **Dependent**
 [LB10b, BBB17b, BMBC⁺17, CFCB12, CVK⁺17, DS13a, DHR14, DM12,
 FGLB12, GWL⁺17, GS15, GBR⁺14, GTG⁺11, HST⁺11, HM18, IBB18,
 Ixa12, JL19, Kap16, Ker17, KBSP19, KTA12, KYSV⁺15, LV14, LBB⁺16,
 LYSS⁺16, MC16, MGRB11, MGL16, MC17, NPM16, ÓN12, PR13, PM16,
 RVDS16, RDVS18, SSB⁺16, SHZ13, SSH⁺13, SLC11, SBH⁺12, SCB17b,
 Ste17, TC11b, TVGB15, TT11, UW12, VBS⁺17, VVB⁺12, WL11b, XJS16,
 YSVM⁺16, YSMA⁺17, ZHCR18, ZYZ15, ZKS13, dSF18, vH18]. **depending**
 [EY11]. **depinning** [SLZ16]. **deployment** [HKK11]. **deposit**
 [YXT⁺15, Lit13, LO14]. **deposition** [BT17a, RH11, VLL⁺17, ZLFM11].
Derivation [CWS14, ZFZ19, BENK⁺17, HB12, Miy15]. **derivations**
 [ZZ17a]. **derivative** [RVA14, SK10, SAHP15]. **derivatives**
 [BDJS18, GCVA14b, KTB17, KCA⁺15, LWZ14, MDHD18, NS15, PB16,
 WWS10, dTOV18]. **describing** [ÁSTT16, BDKS10, HJ14]. **Description**
 [ÜS18, DCM⁺12, DPK⁺15, DOP17, DSLP11, MNC15, TKP15]. **Design**
 [CFCB12, Fri14b, Dan12, LOK⁺16, ML14, NFA⁺16, NVAFO18, TUY15,
 SAA⁺10]. **Designed** [UO15a, DLW⁺18, MCAdF14]. **Designed-walk**
 [UO15a]. **DESOLVII** [VJC12]. **detail** [OK10]. **Detailed**
 [HWW12, MPSV15, Str15, VV16, BTC⁺17, CFFR15, LCC13, dSF18].
Details [JG16, GHBL18]. **detect** [RMC16]. **detecting** [DBJ11]. **Detection**
 [Ber14, AKKK16, BLS17, BHH⁺10, BBH⁺15, BMG⁺15, HTY17, KME⁺11,
 LTP⁺17, NDSH18, OL12, ZBMM11]. **detector**
 [AANAJ12, BPMM14, BKM11, PCEH15, TdAdSS11]. **detectors** [JuIAM16].
determinantal [Zou18]. **determinants** [USOA13]. **determination**
 [BR13, BHVMH15, JK13, JMG⁺17, KKCC19, MD10b, SBB⁺17, Ver16,
 VvAV⁺11b, WG16a]. **determinations** [BCH17]. **determine**
 [BG19b, BMF⁺19, BSWC14, MD19]. **determined** [Buc19, RU13].
Determining [ACDdM14, VdLF14, MC10]. **Deterministic**
 [UO15b, ALC18, Asi10, BL18b, GJLB12, TZG12, ZTG13, ZTG14].

deterministic/stochastic [GJLB12]. **detonations** [MTE17]. **detuning** [CdFDS16]. **Development** [Dan10a, Dan10b, GdGB⁺18, HF16, HCHW11, KYKN15a, KYKN15b, KKO19, LHH⁺12b, OILK17, QLN14, SCLW16, SYD17, Sit14a, Sit14b, SHL⁺11, YLKN17, YS17, ZKG⁺18, BBB⁺19, DBMR18, Gio14b, HvAS⁺13, HVMR10, HKVR10, RK11, Sch18, Uty14]. **developments** [GJA⁺16, LOSZ13, SAW18, SMO16a]. **deviates** [AM14a]. **device** [CDSG11]. **devices** [ASGLK10, AK15, AGB⁺15, BKA⁺14, HEF⁺11, KRK16, KPK⁺17, LLQX19, NAQ16, SO19, WWC⁺16]. **devoted** [Org15]. **DeWitt** [SMdONF14]. **DF** [LAA⁺10]. **DFMDEF18** [GC18]. **DFMSPH14** [GC16]. **DFMSPH19** [GCK19]. **DFT** [BFD⁺11, DSW⁺15a, DO14b, HM17, KST14a, LM19, SW13a, VCMS⁺13]. **DFT-calculations** [VCMS⁺13]. **DFT/LDA** [SW13a]. **dftatom** [CPV13]. **DFTB** [IIO16, LM19]. **DFTBaby** [HM17]. **DFTTools** [APS⁺16]. **DG** [FDZ17, dIRM18]. **DG/FV** [dIRM18]. **DGLAP** [War16]. **DGLAP-CS** [War16]. **diagnostic** [MTM14]. **diagnostics** [BRL12, MGA⁺13]. **diagonal** [IH11]. **Diagonalisation** [MKV11, OILK17]. **Diagonalization** [NLSJ17, CL10, ID18, SA15a, SH12b, SH16, TC12]. **Diagonalizing** [Chr18]. **diagram** [BDGG19, GBP13, Liu15b, MS11, XWhZ13, XW15, dALM⁺12]. **diagrams** [ADT⁺19, BLS17, Ell17b, YdDH⁺12]. **dialog** [Zlo13]. **diameter** [SBB⁺17]. **diamond** [Aza13, ZFBR11]. **diamond-structure** [Aza13]. **DIAPHANE** [RDC⁺18]. **diatomic** [Faw10, Kob13, PZY16, TC11b, YLTS16, ZYZ15]. **dichroic** [PBMAD12]. **dichroism** [DA16]. **Dielectric** [MCP10, CHC⁺11, KSH11, MSR⁺17, Ser10, TMD11]. **diesel** [ZLFM11]. **diff** [TACA15]. **Difference** [Wil19, AAD13, ACTP15, BMNS14, CW16, DT10, DM17, DJ12, DSPJ10, FNPMB10, GS17b, GS17a, GA10, GB14, GMHZ19, HE13, Hsu11b, HZ11, JK19, JLM18, Kob13, LD10a, LV15, LLXK16, LYX⁺17, MSS⁺16, MBFD12, ICD13, ÓN14, OWS⁺14, Ram14, RC13, RC16, SP16, TT14, Ter17, TMA⁺15, TYH⁺15, TCP13, VLPPM14, VDB14, VV16, WZ13, Wit14, XYK12, YXT⁺15, YTYA17, YQM12, YQM14, MCM⁺12]. **difference-collocation** [LD10a]. **difference-FFT** [YXT⁺15]. **difference/Hermite** [GMHZ19]. **differences** [PVK⁺17, SCG11, UA17]. **differentiating** [PTMDPK14]. **different** [BEKP19, CDS13a, DN13, EMW19, GVR19, MJB11, TRM⁺12, XLX⁺15]. **Differential** [BKK13, BKM14, BK15, BK16b, DSW15b, PTS12, APV10, ADdM12a, ADdM14, ACDdM15, ADdM15, ACDdM19, CJJ⁺17, DHJ13, DdMN16, DGST17, DSP15, FSJ⁺16, FBHB17, FF11, GJ14, GM17, GCVA14b, HJ14, IH11, Jan10, JK10, JC13, JC14, JPM12, Jiw15b, KD17, KBSP12, Kra10, Lev19, LLL12, LLL13, sL10, MJB⁺10, MZE13, NO12, Ras09, Ras17, RBB15, VBC⁺12, VJC12, WYSW10, WT15]. **differentiate** [Gio18]. **differentiation** [CL15a, CD15, Cha16, Gio18, GHR⁺16, HAV⁺14, Ram19, SF10, VKS16, YB13, vH10]. **differentiator** [LZZL10]. **difficult** [ACDdM19]. **diffraction** [FNPMB10, GTL⁺17, MSPD12, SLW19a, SLW19b, WG16a, WS11a].

diffractive [FNPMB10]. **diffuse** [Gri10, XD13, XHD15]. **diffusion** [BMW14, BO12, CYN19, CATK11, CB15b, CMdB11, CM14a, DMP18, DJ12, EZL⁺16, FZR19, GA10, GN14, HJ14, HZ11, LRSS19, MBRV⁺13, MFM15, MS11, Pla16, SGAA18, SO19, SCM14, SL14, Tau10, Tia11, WXW14, WFW14, XWF18, YQM12, YQM14, ZSW⁺17b, dSF18, dTOV18, BR11, KdMvO14, MNPF17]. **diffusion-controlled** [Pla16]. **diffusion-convection** [GA10]. **Diffusion-Limited** [KdMvO14]. **diffusion-wave** [HZ11]. **diffusive** [ACMM10, ACML11, ACM12, WJHW14]. **digital** [JTP15, DMH16, ZSW⁺17a]. **DigitalMicrograph** [SLW19a]. **digitized** [KME⁺11]. **dilute** [WZS⁺11]. **diluted** [SFP11]. **dim** [GMF⁺17]. **dimension** [ADdM⁺12b, BNAB11, Ein16a, EGPS10, GFB⁺10, GGF⁺13, JWC18, LXR⁺18, LKT⁺16, RU13]. **dimensional** [AG14, ASS13, AH13, BT17a, BDP16, BC11, CZD15, Cap13, CAN11, CZ18b, CS16, CJH11, CLJ12, CC15, CW16, CHC⁺11, CC10b, CC12, CR12, CvW12a, CvW12b, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, DM17, DS13c, Dua10, DO14a, DO14b, FFT⁺14, Fen12b, dAFdSVM12, Fil13, GTPWL12, HHC⁺10, HLW16, HLTW19, HCSW10, JEF14, JWCW17, JPM12, Kap12b, KHB14, KS16a, KKP11, KP12b, KYKN15a, KYKN15b, KH12, KO12, KO13, KS12, KRB15, KKO19, KMA⁺12, LJSW11, LLSK17, LWL12, LST15, LLXK16, LCQF18, LHH⁺12b, LJZ⁺18, LLX14b, LR13, LR16, MHWH19, MEM⁺11, MKR⁺12, MSZW11, MNPF17, Mü14a, Naz12, NAQ16, PBE14, QA13a, Qia16, QLE16, QSB19, RtV16, Rei11, Rei12, RHC15, RCH16, RCH19, RGKR17, RWKS15, SFP11, SÓÓN11, SCLW16, SLR16, SDJ⁺12, SJW10, TD14, TT14, VK14, WC10, WWC⁺16]. **dimensional** [WvSL13, XZF12, XZ12, YWX11, ZFH14, ZYZ15, dIHV12, dTOV18, vRWS14]. **dimensionality** [BH17]. **dimensions** [BDDM18, Chr18, DMC10, DKOS14, Exl17, KAvdL11, LA13, MÅWK18, TSIM16, dSdO12]. **dimer** [Ots11]. **diminishing** [MKU⁺12]. **diodes** [YSN⁺14]. **dipolar** [KYSV⁺15, LBB⁺16, LYSS⁺16, MLEM19, TZM17]. **dipole** [HMU10, HRC11, RE12, SGDS16, Tan19, TU14, vWB10]. **dipole-dipole** [Tan19]. **Dirac** [MN16, MFS10b, AL17, BB15, BW12b, BBF⁺10, CPV13, FGLB12, HP14, KCT15, PB16, STK10, SFV19, SP16, Sta13, TKS10, TKS19, ZF16, dIHV10]. **DiracSolver** [TKS19]. **Direct** [LLZ⁺17, SKH⁺10, Wei11a, BCM⁺16, CDS13a, GJ13, LOK⁺16, LSK⁺13, ML16, OP12, SKK⁺19, WBS⁺18, WAW14]. **direct-drive** [SKK⁺19]. **Direct-MPI** [WAW14]. **direct-sum** [GJ13]. **directed** [FLP10, QHC⁺10, dSLF13]. **direction** [LST15, LSK⁺13, MRL18, NO14, TT14, XYK12, XZ12]. **directional** [TKJ19]. **directions** [Hal17]. **directive** [BCG⁺15]. **directive-based** [BCG⁺15]. **directly** [Kon11, Sco13]. **DIRHB** [NPVR14]. **Dirichlet** [RC16, HSD17, Jiw15b, RC13, RHH12]. **disaggregation** [Bis15]. **disc** [Lan13]. **discharge** [CHC⁺11, LHH⁺12a, UBRT10]. **discharges** [FK12, HCHW11, KRB15, KSYY13, MRL18, SVG10, SBL16]. **disciplinary**

[WSH⁺12]. **Disconnected** [BWWM19, ACD⁺14a, BCS10]. **discontinuities** [DR12]. **Discontinuous** [SVS19, EW14a, Ein16a, HLLH16, HWS16, LLP15, LLMW17, Maz13, QWZW18, WP10b, YWX11]. **discovery** [LCRL10]. **discrepancy** [VLD⁺12]. **Discrete** [CR12, EW16, ZXZ⁺19, AGMS15, ELDS14, GMRHRCME13, GMPFC⁺14, GJHF14, KV10b, Law19, LCH11, LYL⁺17, MD10a, NMS14, RTÁT15, SL17, SWL⁺15, Sza13b, Sza13a, Sza16, ZAHA10, EW14b, EEGW12]. **discrete-dopant** [LCH11]. **discrete-element** [RTÁT15]. **discrete-time** [GJHF14]. **discretization** [CDBM16, DM17, DJ12, MLS10]. **discretized** [HLLH16, JYPA18, LHC⁺13]. **discrimination** [sL10]. **discussion** [Nem16]. **disks** [TACA15]. **dislocation** [DZ15, MTS⁺16, Pei18, ZLZ19]. **dislocation-simulation** [Pei18]. **dislocations** [PE17]. **Disorder** [CZGC19, ABCM14, TKP12]. **Disorder-based** [CZGC19]. **disordered** [CLJ12, CRNK12, CZN14, Dan10a, Dan10b, JA17, LZL11]. **disperse** [Sie16]. **dispersion** [BSK⁺18, FMW10, JL10, Kon11, LKA⁺16, MFH⁺13, PSB11, PSBT12, RE19, Sco13, SB11, sX14, vMB14]. **dispersion-free** [LKA⁺16]. **dispersions** [ZZSW19, ZZ17b]. **dispersive** [CW16, GAO13b, HLW16, Ram10, Ram12, Ram14, WWHW14]. **displaced** [BGHN19]. **displacement** [EDPZ19, UW12]. **displacements** [LS15b]. **dissemination** [LHC⁺12]. **dissipation** [Fu19a, PDJ10]. **Dissipative** [JBKM15, ASPW13, BTL⁺17, CCWL11, FDZ17, GAHP15, GTS14, MDPTTC17, MNC15, TK14a, TKJ19, TD17, WXW13, WXW14, YLQ⁺17, BJM15, LBM⁺14, MDPTK15]. **dissolution** [XHLM12]. **DIST** [Pei18]. **distance** [PDC14, RK19]. **distances** [Raw15]. **distant** [Ste17]. **distant-dependent** [Ste17]. **Distinct** [Cro16]. **distorted** [Bad11, GRLS18, HK15]. **Distributed** [GHdF10, AM14a, BKS15, CL15b, GB11, GBS⁺16a, IW15, MV11, OLG⁺16, SOJ14, WMK11, WC13, WAW14, YG12, RPB⁺15]. **distributing** [HWT10]. **Distribution** [CGO17, AMR15, Ber14, BDBV12, CMR17, DCC⁺10, DSM⁺11, DRR15, FSF11, FP14, FCC15, Fuk17, GST15, HEF⁺11, wHwH11, LSF14, LSDD14, LN16, MST⁺18, PN15, PM13, Ram10, SLW19b, SS11a, SSP16, VKLM11, Yan09]. **distributions** [BT17b, BMF⁺19, ECSH16, PDC14, Pos18, VSG18, WCT11]. **districting** [Cho11]. **Disturbance** [HJGL18, HJGL19]. **divergent** [Fen12b, dDYK⁺18]. **diverging** [LNP⁺17]. **diverse** [JKG⁺18]. **divide** [PA13]. **divide-and-conquer** [PA13]. **division** [MÁWK18]. **DMRG** [Alv12, WPD⁺15]. **DMTDHF** [ZYZ15]. **DNA** [BSC⁺13, DPK⁺15, KSH11, MVI⁺16, Sva12]. **DNA-radiation** [BSC⁺13]. **DNAD** [YB13]. **DnaFabric** [MVI⁺16]. **DNS** [APC⁺14]. **DNSLab** [VK16]. **docking** [BGHN19]. **documentation** [DNP⁺12, DPW16, KLV15]. **doing** [GLMG12]. **Domain** [BS15a, IBP⁺15, ASPW13, APC⁺14, BS15b, BNO17, CKSM⁺19, CW16, DO14b, EDPZ19, FRG12, FNPMB10, HJH17, HE13, HC16, HC17, HKvH16, Hsu11b, JLM18, JU17, Kap12b, LLQX19, MRL18, MBFD12, ICD13,

MCL⁺¹⁷, Oti13, QL10, Ram14, SGM18, SVV19, SO19, SW12b, TD14, TT14, VDB14, WYH19, ZLL13, ZHC16, HKF⁺¹², MCM⁺¹², Wil19].

domain-decomposition [MRL18]. **domains** [Bot13, DS13a, GMHZ19, JYPA18, KSW12, OOK⁺¹², SNB11, SK15].

dominated [Kau13]. **dopant** [LCH11, SD14]. **doped** [KAR⁺¹⁵, NS11b, SQL⁺¹⁰]. **Doppler** [MGA⁺¹³]. **Dose** [RMS⁺¹²].

dosimetry [ACdS13]. **dot** [BMNS14, CL10, KPK⁺¹⁷, YÇÖ15, ZHC16]. **dots** [Den10, GWL⁺¹⁷]. **double** [CWW10, GC10, GC13, GC16, GC18, GCK19, MD10a, Ram14, TTG11].

double-dispersive [Ram14]. **Doublet** [Ore19, ERS10c, ERS10a, ERS10b].

doubling [CL15b, FGLB12]. **Doubly** [GH11, SEW12, SEW14, WW13].

DPD [MDPTK15, PTMDPK14, SH12a]. **DPM** [RB18]. **Dr** [OTC14]. **DRA** [LM16]. **drag** [RC15]. **drainage** [GTSL⁺¹³]. **DRED** [SV12]. **DREG** [SV12].

Drift [DOP17, CEP18, DJ12, Evs14, SISW10, SO19, XYM⁺¹³].

Drift-Asymptotic [DOP17]. **drift-diffusion** [DJ12]. **drift-kinetic** [CEP18, Evs14, SISW10]. **drive** [MTM14, SKK⁺¹⁹]. **Driven** [Dan10a, Dan10b, BJBC⁺¹⁴, CZ18b, CHC⁺¹¹, De 11, GTL11, GAB⁺¹⁶, Hin11, HJL⁺¹⁴, IBKK11, LDW13, LHJ⁺¹⁵, MiH12, MS11, RHHF12, RTT⁺¹⁸, VPM12]. **driving** [BNAB11, THDH14]. **droplet** [MLEM19, Tom16]. **droplets** [APC⁺¹⁴]. **drosophila** [SLC11]. **Drude** [HLW16]. **DSAM** [SLLP17]. **dsDNA** [AGVP10]. **DSMC** [JvOK17, OCF10, TKL⁺¹²]. **dsmcFoam** [WBS⁺¹⁸]. **Dual** [Gar19, CBGY17, DG10a, LCQF18, VvAV^{+11b}, YB13]. **dual-level** [LCQF18]. **DualSPHysics** [CDR⁺¹⁵, VDA⁺¹⁹]. **duct** [ZNT15]. **due** [Cip13, Eme11, TW11, XYM⁺¹³]. **dugksFoam** [ZCG17]. **Duguet** [CCK23].

Duo [YLTS16]. **duplicate** [LZ12]. **during** [Gai17, GTSL⁺¹³, XLX⁺¹⁵, YK18, ZBMM11]. **dust** [HCRD14]. **DVCI** [Gar19]. **Dyck** [Brá15]. **dye** [HG13]. **Dynamic** [ALS16, Bar12a, DSHS17, FRG12, SJ17, SUS^{+17a}, SKSK13, AGMS15, Bar11a, BS15b, CD12, DF11a, DGMZ15, EDPZ19, HST⁺¹¹, JFHA19, JOR⁺¹², Krö19, KHN19, PE15, Sus17b, Sva12]. **Dynamical** [KLKR11, LLHC11, AG14, ADdM^{+12b}, ACDdM14, BVC13, BG11, CZ18b, CZ19, Dan11, DT11b, Er14, GTK^{+19a}, KP12a, KS19, KI11, LS16, LMAB16, MW19, TTS11, WHG⁺¹⁹, Wie18]. **dynamically** [CFCB12]. **Dynamics** [AS16, AD15, DRR15, wHwH11, JBKM15, MDPTK15, Ngu17, NLB⁺¹⁹, SBPN15, TD17, WWR⁺¹⁶, ADD⁺¹¹, ASPW13, ABB13, BS14b, Bar11a, Bar12a, BHS18, BBB⁺¹⁹, BPML12, Bin13, BTL⁺¹⁷, BG14a, BVSG19, BWPT11, BKPT12, BY13, BCG⁺¹⁵, BBV⁺¹⁶, BMDP19, BENK⁺¹⁷, CTT17, CMM14, CLLK11, CXH⁺¹⁵, CKS10, CH11b, DCM⁺¹², Dat13, DLGP10, DEW16, DT11b, DHR14, DS13b, ENEO15, ER19, ESM17, FSH13, FCVH17, FRG12, Fil14, FJ19, Fu19b, FFIH11, GK11, GM11, Gio14b, GLR17, GNA⁺¹⁵, GAHP15, GTS14, GH15, HWCdM19, Has11, HST⁺¹¹, HL19a, HRC11, HG13, HYM11, HXW⁺¹³, HLZ⁺¹³, HPN18, HBH⁺¹⁷, HWL⁺¹⁷, HM10, HM17, HDM⁺¹², JW13, JPH⁺¹⁴, JNN12, JNN13, JSLM16, JKIS16,

KST14a, KKCC19, KPA⁺19, KDM11, Kon11, KK17, KKO19, KS15, KCS⁺15, KR14, KHN19, KSY17, LGW13, Leó12, LS12b, LHZ11]. **dynamics** [LK15, LLZ⁺17, LBR⁺18, LSK⁺14, LDF⁺16, LS17a, MDW16, MIW⁺13, MDPTTC17, MM17, MTSI11, Miu11, MNC15, MKB⁺11, MSH11, NBM⁺15, NBW16, NPAG11, NP19, iNSK⁺15, ÓKC11, OKM12, OYK⁺14, PR14, PLCC12, QL10, QLE16, RC15, Rap11, RFSF18, RBB15, SV14, SGM18, SBH⁺14, SL17, SH18, Sco13, SCRS17, SOM⁺13, SMO16b, SKM15, SYE⁺18, SAG13, SJY18, SJY20, TM19, TK14a, TZM17, Tan19, TSTT13, TL19, TS11, WJCZ18, WC10, WX11, WXW13, WXW14, WZHE18, WSI13, WSH⁺14, XQ19, YW17, YHCS11, YLQ⁺17, YK12, Zag14, ZZHG18, ZS13, Zhe15, ZPvR16, BJM15, BHND16, DLGP10, LBM⁺14]. **dynamics-based** [ZS13, Zhe15]. **DynaPhoPy** [CTT17]. **Dyson** [HB12, HM12b, SAW18].

e-infrastructures [GBS⁺16a]. **e-Science** [LSJ13, CKhN11]. **E6Tensors** [Dep17]. **early** [SCW⁺11]. **Earth** [MPS13]. **Easy** [DEW16, Sou14]. **EasyFeynDiag** [XW15]. **EBT2** [ACdS13]. **EC** [MTM14]. **ECE** [MTM14]. **ECOM** [LC15]. **ECPSSR** [BPC12, Cip11]. **ECR** [MTM14]. **ecs** [BH16]. **ECsim** [GHBL18, GHMB⁺19]. **ECsim-CYL** [GHMB⁺19]. **eddy** [MRL19, TIMM13]. **edge** [BMU11, CCLL18, FRFH10, FR15, LDR⁺17, SCB⁺17a, SPY11, ZDWM17, ZFR18]. **edge-based** [CCLL18]. **Editor** [Sco13]. **Editorial** [Ano18e, Ano18i, Ano18j, Sco16, Ano10b, Ano10c, Ano10d, Ano10e, Ano10f, Ano10g, Ano10h, Ano10i, Ano10j, Ano10k, Ano10l, Ano10m, Ano11c, Ano11d, Ano11e, Ano11f, Ano11g, Ano11h, Ano11i, Ano11j, Ano11k, Ano11l, Ano11m, Ano11n, Ano12b, Ano12c, Ano12d, Ano12e, Ano12f, Ano12g, Ano12h, Ano12i, Ano12j, Ano12k, Ano12l, Ano12m, Ano13b, Ano13c, Ano13d, Ano13e, Ano13f, Ano13g, Ano13h, Ano13i, Ano13j, Ano13k, Ano13l, Ano14a, Ano14b, Ano14c, Ano14d, Ano15b, Ano15c, Ano15d, Ano15e, Ano15f, Ano15g, Ano15h, Ano15i, Ano15j, Ano15k, Ano15l, Ano15m, Ano16b, Ano16c, Ano16d, Ano16e, Ano16f, Ano16g, Ano16h, Ano16i, Ano16j, Ano16k, Ano16l, Ano17a, Ano17b, Ano17c, Ano17d, Ano17e, Ano17f, Ano17g, Ano17h, Ano17i, Ano17j]. **Editorial** [Ano17k, Ano17l, Ano18a, Ano18b, Ano18c, Ano18d, Ano18f, Ano18g, Ano18h, Ano18k, Ano18l, Ano19b, Ano19c, Ano19d, Ano19e, Ano19f, Ano19g, Ano19h, Ano19i, Ano19j, Ano19k, Ano19l]. **Editors** [Ano10a, Ano11b, Ano12a, Ano13a, Ano15a, Ano16a]. **EDRIXS** [WFDK19]. **education** [LPBH11, Mü14c, TN11]. **Edwards** [FFT⁺14, SJ17]. **EERAD3** [GGGH14]. **ef** [DIP11]. **ef-based** [DIP11]. **Effect** [CHH⁺11, KSH11, SBL16, AG14, CFSK14, Kri12, OCL⁺13, QHZ⁺14, SWL11, SDJ⁺12, WBY11, XGH⁺19]. **Effective** [BCS10, VLD⁺12, CLC14, CM15, CGG⁺14, Cri18, Erm18, GR19, HHC16, IKS19, Jab12, LSG⁺12, Nem16, NRSVW12, ZTG13, ZTG14]. **effective-mass** [HHC16]. **effectiveness** [SS18]. **Effects** [iT11, BDK11, DGMZ15, GTSL⁺13, GB14, KZ11, KS16b, KKS18, LHSL14, Liu15a, MDPTK15, NLB⁺19, OOGP19, PBE14, VV16, WT12, dSVLP13].

Efficacy [DML⁺16]. **Efficiencies** [AMJ18]. **Efficiency** [LV15, WG11, ZPvR16, AKK⁺18, FZ16, GLAC13, GSKM15, JAS17, KK17, LCRL10, VKS16, WW12]. **Efficient** [AS11b, AAT17, BCJW13, CMN12, CZ18b, CSRV13, FUSH14, FCVH17, GBP13, GST17, GGG16, GVS⁺15, GA13, HWG13, HXW⁺13, HAN⁺16, HPN18, HCH16, JU17, JMG⁺17, KA17, Krö19, LDD⁺19, LHZ11, LAG⁺17, sLqSqL⁺13, MA11, MSRL10, NVAFO18, Qia16, QZ19, RA13, RF15, RZ19, SZ15, SHNM11, SOYHDD19, SCM14, SA14, THDS16, USOA13, VDF15, VBS⁺17, Wal11, WS11a, WLH⁺12, WT12, Wil15, WWFT11, WAW14, WMI19, XYZX19, YZ19, ZY19a, vRWS14, ARAB⁺17, ASPW13, AMM11, AGH⁺16, AL17, ACTP15, BJCW13, BBB⁺19, BB13b, BHW⁺12, CZZ⁺19, CSP⁺19, CSV⁺18, CLB11, DCC⁺10, DKSG16, DMC10, DG16, FVH18, FLW17, FHTO17, Gar19, GS17b, GS17a, GMHZ19, GJ18b, HJH17, HBP⁺15, HLTW19, JCL⁺18, JKIS16, Koh15, KBSP19, LM19, LK12, LYJH19, Leó12, LHJ⁺15, LKPH19, LW11, Lya15, MFG⁺13, MGR16, MCNRC16, NPAD11]. **efficient** [Nik12b, OK14, PMS⁺17, PM16, PS11, Pos19, QLN14, RLM13, RJKC16, SW13a, ST19, SR12, Shi16, SK14, SPP19, TSIM16, TZM17, VdLF14, VLL⁺17, WWS10, Wan10a, WX11, WZ13, WLG18, WDR16, YWOD19, Zou18, dBCH14]. **efficiently** [MHWH19, RTT⁺18, SZC⁺13]. **EFT** [GBD10]. **eHDECAY** [CGG⁺14]. **eigen** [CHDCJA17]. **eigen-stress** [CHDCJA17]. **eigenfunctions** [BAF18, GCVA14b, MGL13]. **eigenmodes** [HSK⁺12, TJH17]. **eigenproblems** [DBB12, RLM13]. **eigensolution** [FZ16]. **eigensolver** [GBP13, GAO13b, HLTW19, SAY⁺18]. **eigensolvers** [DB13, LT15, VBS⁺17]. **eigenstates** [RPL⁺14]. **eigenvalue** [BMU11, CDMCN11, DB13, DPB16, DS15, GHvdL11, HKSW10, Ixa10, JWM⁺18, LR13, LR16, MKR⁺12]. **eigenvalues** [BW12b, DKOS14, GCVA14b, HLW16, JZJ18, NJ18]. **eigenvectors** [JZJ18]. **eight** [PAS11, PS14]. **eight-step** [PAS11, PS14]. **eigSUMR** [CL16]. **Einstein** [ARYT17, CCW10, GM14, Hoh14a, JWC13, JWL13, KLM⁺19, LCCC11, MT13, TZM17, VBMS17, WX11, WX14]. **Einstein-** [ARYT17]. **EIRENE** [SK12]. **Eisenbud** [RA13]. **EKHARA** [CI11, CK19]. **EIAM** [MLW⁺10]. **elastic** [ASEA14, AFIS12, CKSM⁺19, CHDCJA17, CGJ14, DMC10, GPS⁺13, Gri10, Jab17, Kas14, KGFS18, LSCZ11, MLW⁺10, Maz⁺19, MLK⁺17, MLK⁺19, QDZ⁺13, TH17, TW15, Voy13, WBY11, ZZY10, ZC12, ZZ17a, GPS⁺13]. **elasticity** [MBF⁺10]. **Elastodynamic** [MAIVAH14]. **ElecSus** [KAH18, ZKW⁺15]. **Electric** [OCL⁺13, RE12, CFSK14, GBSY18, JTN⁺11, JPK⁺12, LXR⁺18, MRL18, SCNJ18, ZKW⁺15, ZDWM17]. **electrical** [CKT17]. **electrically** [HC16, Ram12]. **electro** [PGO17, Wie18]. **electro-dynamical** [Wie18]. **electro-mechanics** [PGO17]. **electrodes** [OBH10]. **Electrodynamics** [HBS⁺11, GH15]. **electrolyte** [Mar19]. **electromagnetic** [AHK⁺12, CC14, CC15, CSJ⁺17, CZF18, Fuk17, GLAC13, GMC18, GH15, GCHL15, JLM18, KOT12, KC14, KTE⁺12, LPRPR17, LHJZ10, LHC⁺13, LL19, LF12, MIW⁺13, MKU⁺12, MCM⁺12, ORI⁺10,

Oti13, OVSI15, PP13, PYW⁺¹⁴, Ram10, Ram14, SKK17, Sør19, SDL⁺¹⁶, TM19, VV18, WGG16, WGG⁺¹⁹, WN10, ZHSL13]. **electromagnetically** [WL11b]. **electromagnetics** [QWZW18]. **electromechanical** [SWL11]. **electromigrative** [DSK19]. **Electron** [DSM⁺¹¹, FP14, PB13, PMVG16, YSN⁺¹⁴, AKZ⁺¹³, ART17, ACTP15, AG12b, BH16, BH17, BMW14, BSGG10, CYD11, CL11, CSK⁺¹⁹, CGRB14, CRB⁺¹⁷, DCC⁺¹⁰, Dua12, FYK18, FUSH14, Gai17, GGGH14, GH11, Hoh14b, Ihn12, IUM13, ID18, JA17, JGAL⁺¹³, JH15, KEH12, KK14a, KCA⁺¹⁵, Kol15, KA17, LSF14, LRW⁺¹⁵, LZL11, Lit13, LB10a, LRR⁺¹⁵, LRR⁺¹⁷, MHV17, MSPD12, MJKB18, NBM⁺¹⁵, NPM16, NGM⁺¹⁰, ONS⁺¹⁵, PM16, PBE14, PR10, PR12, PBL⁺¹⁸, Pos18, RF16, RCGT16, RFSF18, STT11, SMOB19, SW14b, SNG⁺¹¹, SD14, SLW19a, SLW19b, SS11a, SAHP15, TVGB15, TO10b, WS11a, YÇÖ15, YW17, VFV19]. **electron-atom** [BH17, CYD11]. **electron-cyclotron** [PBL⁺¹⁸]. **electron-electron** [DCC⁺¹⁰]. **electron-loss** [Lit13]. **electron-molecule** [ART17]. **Electron-phonon** [PMVG16, CGRB14, KA17, NGM⁺¹⁰]. **electron-positron** [GGGH14, Kol15]. **electron-repulsion** [TO10b]. **electron-surface** [CL11]. **electron-transfer** [NBM⁺¹⁵]. **electron/hole** [Dua12]. **ElectronDiffraction** [SLW19a]. **Electronic** [BDPM15, CJH11, CSL⁺¹³, GZL14, THJ⁺¹⁰, WWL11, BC10, Bjö11, CLC14, CSK⁺¹⁹, Cor14, DO14b, FZ16, GWL⁺¹⁷, GCP⁺¹⁵, HKSU10, HCC14, Hol19, JWCW17, KKS18, LCY⁺¹¹, LS19, LZP12, LSK⁺¹⁴, MED11, MNPY14, MC17, PVK^{+14a}, PVK^{+14b}, PSP16, Rut18, RJKC16, SS10a, TMA⁺¹⁵, TC12, TG11, YFAT17, zYCG⁺¹⁸, YG12, ZZD15, XNK⁺¹⁶]. **electronic-structure** [LS19, MED11]. **electrons** [Aza13, BH14a, BH14b, Jab17, KTB17, KQYH17, MDF11, NNWS15, OOK⁺¹², RS12, Sit18, SLEF17]. **electroosmotic** [SS11c]. **electrophoresis** [SS11c]. **electrophysiology** [MFM15]. **electrospinning** [LPC⁺¹⁵]. **Electrostatic** [VPM16, BBL⁺¹³, CH19, CCHL11, CB16b, FK12, GB11, HZW⁺¹⁶, KC18, KK14b, LRR⁺¹⁷, MCWJ15, MRL18, SGDS16, YLQ⁺¹⁷]. **electrostatics** [CBB14, LCHM10, LCHM13, YBK⁺¹¹]. **electroweak** [BM19]. **elegant** [YLYL17, KPA⁺¹⁹]. **Elegant** [Kas14]. **Element** [FHTO17, Hak19, BKOZ16, BLAS19, BCM⁺¹⁶, CCLL18, CMC⁺¹⁵, CKSM⁺¹⁹, CAN11, CTL15, CRA10, EKDGG15, FKS⁺¹⁹, GML15, GBP13, GLW14, Ham11, IP14, JTH14, KMD12, Koh15, KM17, LW14a, LHJZ10, LCQF18, MLS10, NMS14, Oti13, OVSI15, OT11, PS11, RS12, RVDS16, RDVS18, RTÅT15, SW14a, SDS15, Sha13b, Sha16, SBH⁺¹², TXZL15, VDAH16, WP10a, YRR13, ZOZ13, vSGB⁺¹⁸, Hak16]. **element-Fourier** [BLAS19]. **element-spectral** [LW14a]. **elemental** [HW12]. **elementary** [FBG10]. **elements** [ABB⁺¹⁶, AC13, Arb12, CPWZ18, CCHL11, CK12, CBB14, FNPMB10, HS14b, LA13, MSRL10, PO14, Sar17a, Sar17b, SD10a, UFKB19, USOA13]. **eleven** [DJW⁺¹⁹]. **eliminate** [HHT14]. **eliminating** [SCM13]. **Elimination** [MBFB13, YXD⁺¹⁵]. **ellipses** [SC14]. **elliptic**

[Boy15, GCVA14b, HVP⁺19, MCL⁺17, PS11]. **elliptical** [Hal17]. **ELMAG** [KOT12]. **ELMs** [SCB⁺19]. **ELRADGEN** [AFIS12]. **ELSI** [zYCG⁺18]. **Embedded** [BM13, RHH12, DFM⁺15, Duf16, MKL17, PS14, PP13, SVGS18]. **embedding** [QJF16]. **Emden** [CB13b, KMM13, PDRG10]. **Emergence** [dSVLP13]. **emerging** [DS14]. **emission** [AAB⁺10b, CL11, EZBA16, LSF14, LL15, ZLM12]. **emissions** [VDJ⁺11]. **empirical** [VfV19]. **Employing** [Mis13, GX15, JuIAM16]. **EMUstack** [SDL⁺16]. **enabled** [HJE⁺19, KHBS19, LYP14, VPMVH⁺17, ALA⁺19]. **Enabling** [DSW⁺15a, ECD⁺10, GBC⁺18, ESM17]. **encapsulation** [DRUE12]. **enclosure** [CAN11]. **encoding** [CMSV14]. **encounters** [HLS12]. **end** [PPY14]. **end-point** [PPY14]. **ENDGame** [MW19]. **energetic** [PCGM14, TJH17]. **energies** [DT11b, Gen10, GFJ⁺14, GBJ⁺15, Kol15, Pos18, RJ12, TKP15, ZMCT12].

Energy
 [AAA⁺16, AK15, BG19a, BvH15, CMR17, GHMB⁺19, MGL13, NJ18, RtV16, XYZX19, AG14, AHH⁺19, AKV18, BMC⁺11a, BT17a, BDKS10, BH14a, BH14b, BUJ15, BKA⁺14, BIT12, Buc19, CLH⁺17, CDTV10, CHDCJA17, CC14, CC15, CXG⁺19, DCC⁺10, DGPW11, Den10, DR12, DFM⁺15, Duf16, Eme11, ECSH16, EFK⁺19, FTI18, FGGM11, FS17, FZY13, GBD10, Gio18, GZW17, GCVA14a, Hah12, Hoh14b, HEPW13, HS16, JPCG15, KTB17, Ker17, KAR⁺15, KK14a, KCA⁺15, Kra11, LAA⁺10, LCY⁺11, LL19, MD10a, MDHD18, MSPD12, MMT⁺11, Miy15, NRSVW12, PB13, QZ19, QZWU19, RPL⁺14, RFPM⁺17, Rom15, SSF⁺14, SA14, TAFD19, TM14, TVGB15, TS10, UA17, WRFS15, WS11a, WXL13, WX14, WZHE18, WP10a, WYH19, Wie15, Wil15, YZ16, ZPH⁺15, ZZD15, ZKS⁺18, GHBL18]. **energy-** [CC14, CC15]. **energy-based** [WP10a]. **energy-conserving** [DCC⁺10]. **energy-dependent** [Ker17]. **energy-invariant** [MDHD18]. **energy-preserving** [Miy15, WXL13, YZ16]. **energy-stable** [WYH19]. **engagement** [Che11]. **Engine** [GBJ⁺13, CJJ⁺17, DRI⁺16, GBFJ14, HDF⁺19, KRM⁺19, WGG⁺19, GBJ⁺15, GBJ⁺19]. **engineering** [Zhe15]. **Enhanced** [BHNS17, CHDCJA17, Rap11, JTP15, KGFS18, PLD15]. **Enhancement** [VCMS⁺13, CLY11, EEGW12]. **enhancements** [LOK⁺18]. **ENO** [AAD14]. **ENO-flux** [AAD14]. **Ensemble** [TDL⁺14, BALV16, BG13a, GA15, MMO⁺17, MHR⁺13, PA13, ZKW⁺15]. **ensembles** [CRNK12, FD13, Kra18b, MJB11]. **entangled** [JWC18]. **entanglement** [RLL12]. **enthalpies** [ZZH⁺16, ZMCT12]. **entire** [Wei11a]. **entropies** [ZMCT12]. **Entropy** [TW11, CHDF10, Les16, LLG17, PE17, VB19]. **entry** [JXTS16]. **enumeration** [CS16]. **envelope** [TL19]. **environment** [CPW17, Gio14b, JVR12, RTT⁺18, SUS⁺17a, WP10a]. **environmental** [GMPFC⁺14, KKS18]. **EnvironmentalWaveletTool** [GMPFC⁺14]. **environments** [FS17, GBC⁺18, NMCR15]. **EPAW** [SHW18]. **EPAW-1.0** [SHW18]. **EPCM** [PS14]. **ePDF** [SLW19b]. **epidemic** [CF17]. **epitaxy** [CZZ⁺19]. **epsilon** [GM17, GS14, HL13, Pra17]. **Epstein** [Ram10, Yan09].

EPW [NGM⁺¹⁰, PMVG16]. **eqtools** [CFW17]. **equality** [ON11]. **Equation** [LB10b, AL17, Asi10, BB15, BALV16, BK16a, BAR12b, Bot12, BMBC⁺¹⁷, BB13b, CWS14, Cap13, CVK⁺¹⁷, CYN19, CZS10, CC10b, CC12, CHZ18, DG10a, DS11b, DZ13, DGST17, DSP15, DM12, Eba13, Exl17, FTI18, Fil13, FGLB12, FGG11, GS15, GVS⁺¹⁵, GA10, GG16, GBSY18, GTG⁺¹¹, GCVA14b, HLS⁺¹⁷, HP14, HC16, HC17, HWS16, HM12a, HAK⁺¹⁴, HJ14, HS14b, HH11a, HDZ14, HCSW10, IKS19, Ixa10, Ixa12, JC16, JL10, Jiw12, Jiw15a, KL17, KH12, KN13, KBSP12, KP14, KR14, KYSV⁺¹⁵, LD10a, LD10b, LV14, LZL10, LS12a, LCKM14, LLXK16, Lin13, LBB⁺¹⁶, LYSS⁺¹⁶, LY16, MC16, MGL13, MGL16, MC12, MLS10, ML14, MN18, MA11, MM10, MM12, MJKB18, ÓN12, OILK17, ORS⁺¹⁴, OAKS11, OK14, PSB11, PSBT12, PAS11, PR13, PM16, Pla16, QSC14, RM10a, RHBH15a]. **equation** [RHBH15b, STK10, SVS19, iSYS12, SSB⁺¹⁶, SP16, SP18a, SSH⁺¹³, SD10b, SA15b, SB11, SLEF17, SGSG19, TKS10, TT14, Ter17, TY10, TH17, TKZ18, TKS19, UNK12, Ume18, Ume19, VDAH16, VMGP⁺¹⁹, VS19b, VVB⁺¹², Wil19, XHLUF⁺¹⁸, XZ12, YZ16, YZ19, YK18, YSVM⁺¹⁶, YSMA⁺¹⁷, ZFH14, ZSW^{+17b}, ZDWM17, ZST11, ZCG17, dB14, dlHV12, ATW⁺¹⁹]. **Equations** [QSB19, AAD13, ACCB13, APV10, ABB13, AD14, AD15, ABDR17, AG12a, ABH⁺¹⁹, ADdM12a, ACDdM15, ADdM15, ACDdM19, BSM13, Bar11b, BKOZ16, BLAS19, BCT17, BK11b, BB10, BB13b, BAK⁺¹⁵, BAK⁺¹⁶, BAK⁺¹⁷, BHW⁺¹², CZD15, CR13, CDTV10, CB13b, CSJ⁺¹⁷, CKK⁺¹³, CBB⁺¹⁰, CM14a, CEF16, DT10, DT11a, DN13, DM17, DJ12, Dem13, DHJ13, DJ14, DSP15, ENEO15, EW14a, FDZ17, FBHB17, FF11, FSC13, Fon12, GML15, GJ14, GJLB12, GM17, GX15, GMHZ19, HVP⁺¹⁹, HLLH16, HK12, HHC⁺¹⁰, HB12, HM12b, HCHW11, IH11, JPSS10, JK10, JC13, JC14, JYPA18, JCL⁺¹⁸, Jiw15b, JSLM16, Kan14, KMM13, KD17, KO14a, KZC⁺¹⁰, Kra10, LK12, Lev19, LWZ14, LLP15, LST15, LKPH19, lLSZ14, LLL12, LLL13, sL10, LRSS19, LSSW14, MDHD18, MJB⁺¹⁰, MHWH19, MWCY14, MZE13, Moh14, ICD13, MNOØ11, NO14, NO12]. **equations** [PKT15, PDRG10, PTS12, PSL⁺¹⁷, PE15, QYM11, QA13a, Ras09, Ras17, RBB15, SFV19, SAW18, SDM⁺¹², SDS⁺¹⁷, SK15, SW14c, SP18b, SCLW16, SMdONF14, Sta11, SSK⁺¹³, SL14, TD14, Tia11, TYH⁺¹⁵, VSO⁺¹³, VBC⁺¹², VJC12, Wan10a, WZ13, WYSW10, WT15, XWF18, XYK12, YWX11, YTYA17, YQM12, YQM14, ZWC⁺¹⁹, Zou18, dlHV10, dTOV18]. **equiangular** [ME18]. **equidistant** [LS15b]. **equidistributed** [GN14]. **equidistribution** [DF11a]. **equilibration** [iNSK⁺¹⁵]. **equilibria** [CFW17, LC15, MZE13]. **Equilibrium** [ALC18, Buc19, BDBV12, BPS⁺¹⁶, DMC⁺¹⁵, FBHB17, Hon10, JBKM15, KSL⁺¹¹, PLF⁺¹⁷, PBD⁺¹⁵, SC15, Sin11, Sin12a, ZXZ⁺¹⁹, mZfXL15, dSFdFF13, LZ17]. **equipment** [MGFRG12, RBG⁺¹⁹]. **Equivalence** [FD13, Che17, Mel19, Ram10]. **ERKN** [CYSL12, WYSW10]. **ERMES** [Oti13]. **ERO** [MGA⁺¹³]. **erosion** [LNSD15, LSD18]. **Erratum** [ERS10c, Nat10, SGM11a, SJY20, Wei11a, Wu10]. **Error**

[BPMM14, PEMS19, WS11b, ABH⁺19, BKV16, CLL16, Cip13, ÇÖSÜ11, Exl17, FMW10, JCL10, Kra17, Kra18a, LS15b, MLS10, MBFB13, Ram19].
error-controlled [Exl17]. **ES2MS** [XNK⁺16]. **escape** [DS15]. **ESI** [LZ17].
ESP [SGDS16]. **especially** [SHW18]. **ESPRESSO**
[BKC⁺17, MMSF⁺15, CGJ14, GTK⁺19b, HBL⁺13, JP10, GSZ13, KST14a].
essentially [AAD13]. **ESTEST** [YG12]. **estimates**
[BKV16, KKK⁺15, LS15b]. **Estimating**
[Asc10, AM17, GFB⁺10, GGF⁺13, JCL10]. **Estimation** [DS15, KTA12,
ABH⁺19, BBB17b, DMP18, EVB14, IBB18, SM14, Sha18, TW15].
Estimator [Asc10, SAA⁺10]. **etched** [VSG17]. **etching** [MFG⁺13].
eTextBooks [LPBH11]. **Eucb** [TS11]. **Euclidean** [TGUvS19]. **Euler**
[SBvD13, QYM11, QSB19, SP18b, YWX11]. **Eulerian**
[JBG⁺16, JBG⁺17, PUO14]. **European** [AGL11]. **EUTERPE** [SSS⁺11].
Ev8 [RHBH15a, RHBH15b]. **evaluate** [MNV13]. **evaluating**
[LHJ⁺15, RLL12, SZC⁺13, UA17, WDR16]. **Evaluation**
[AHK⁺12, ACD⁺14a, AC13, ADT⁺19, AG12b, BBUY13, BDJS18, BCH13,
BHJ⁺15, BHJ⁺18, BvH15, CZ17, CSRV13, Deg15, FSH13, GBRB11, HJL⁺14,
KZ14, KHN19, LAA⁺10, LSYZ12, MGB18, MSR10, MR13, MN16, MFG⁺13,
PZL⁺19, PVK⁺14a, PVK⁺14b, Str15, TO10b, Yi11, ZC12, vH11].
evaporation [TB14, XLX⁺15]. **Event**
[DDM14, GGGH14, KBT⁺14, MM11, TMD11, VRV15, VRV18, BPSS18,
BABC19, CKS10, CK19, DIR⁺19, De 11, dAFdSVM12, Gin10, GTL11,
Kas14, KRW13, RHHF12, Sha16, YWW13, vH18]. **Event-based**
[TMD11, BABC19]. **Event-by-event** [DDM14, VRV15]. **event-driven**
[De 11, GTL11, RHHF12]. **Events**
[EFG⁺10, AFIS12, BDC⁺14, Bin13, HWT10, WW12]. **everyone** [Kap16].
EVO [BK13a]. **EvolFMC** [JPSS10]. **Evolution** [Cho11, HLS12, ABH⁺19,
BCR14, BCT17, Bot11, Brá15, CJJ⁺17, FSJ⁺16, GM16, HK12, Hon10,
HWCH11, JPSS10, JMG⁺17, MBRV⁺13, SW11, VPM12, XLX⁺15].
Evolutionary [BK13a, AFZ17, AFZ18, ATCZ19, FLA⁺16, LZ11a, LZ11b,
LOSZ13, SHW18, Wie18, dASJC⁺19]. **Evolver** [Ore19]. **evolving**
[FGC⁺11, PHA18, US16]. **EW** [BS13b]. **Ewald** [KR16, LHZ11]. **Exact**
[CS16, ID18, JP11, MP11, MTO15, PMMW15, SH12b, SH16, BKC⁺17, CL10,
HCH16, HW12, LKL11, Lee18, Pla16, QLN14, SA15a, Wei99, Wei11a].
exact-exchange [HW12]. **EXAFS** [PCVZ11, TKP12]. **Examining**
[WAHL13]. **exascale** [AGL11, DdJC⁺19, KY14]. **excellent** [DSW⁺15a].
Exchange [NHD16, ABC⁺18, AAB⁺10b, BKC⁺17, Boe18, DG10c, GXF⁺15,
GJB11, HW12, IIO16, IFOI18, JL19, JJ15, LK15, LKT⁺16, MOB12, RZ19,
UO15b, UO15a, WISA11]. **excitation** [BP12, CM15, GVS⁺15]. **excitations**
[MC17]. **excited** [BP12, CWW15, Er14, GH11, LH11, LMAB16]. **exciting**
[PGD17]. **exciton** [VBMS17]. **exciton-polariton** [VBMS17]. **excluded**
[BHW⁺12, CHNS18]. **exclusion** [BBH⁺10, BBH⁺11a, LTL⁺12]. **executing**
[LYJH19]. **exemplar** [JTP15]. **exhaustive** [TC11a]. **ExoData** [Var16].
exoplanet [Var16]. **expanding** [HM12c, LP15]. **Expansion**

[JDG12, PEMS19, AQJ10, AK13b, CSPAD10, Deu16, FLW17, GS14, HWG13, HvWT17, HK15, HL13, IKS19, IUM13, KZ14, Per14, Pit12, Pre18, Ros16, SKFP16, SGW17]. **expansions** [Eks11, GB11, TKR13]. **experiment** [Ano11a, CKhN11, DDM14, DMH16]. **experiment-computing-theory** [CKhN11]. **experimental** [CRNK12, KSH14, OBM19]. **experiments** [CHC⁺11, GSB⁺14, KD16, DMH16, VLD⁺12, WJCZ18]. **explained** [JKG⁺18]. **Explicit** [Bla15, VEB⁺18, XQ19, AH13, Ber16a, Ber16b, CW16, DBMR18, DM17, DJ14, FG13, FGR14, KZC⁺10, KAS12, LCE⁺13, QSC14, RL10, SCLW16, SS10b]. **explicitly** [LV14, PZY16]. **Exploiting** [ASPW13, BBV⁺16, RDN⁺17, RFSF18, YRR13]. **Exploring** [CDS⁺13b, GTS14, Yan11, MG10a, Müll11a]. **explosions** [BNAB11]. **exponent** [XZF12]. **Exponential** [Ert15, PTMDPK14, ZNT15, AQJ10, BCT17, CCK23, CEP18, GDB10, GH11, Ike18, MHWH19, Moh14, PZY16, Pat12, PH11, Ram12]. **Exponential-time** [PTMDPK14]. **exponentially** [Bla15, CFMR10, FG13, Miy15]. **exponentially-fitted** [Miy15]. **exponents** [MH18, dSFdFF13]. **expressions** [Dua12, MBGK11, WRBL19, Zit11]. **Extended** [FLW10, FMW10, GS17a, KSL⁺11, KR16, LS15a, PPY14, WC15, Wu10, YWYF09, BSM13, BM19, Bla15, BDGM⁺17, DDH17, DGST17, LWYW11, LW13, Müll11b, Müll14b, iNSK⁺15, PBL⁺18, RLM13, XW15, YZWR14]. **extended-Lagrangian** [iNSK⁺15]. **extendible** [SCM14]. **Extending** [KK16b, FHA17]. **extensible** [CFW17, RBG⁺19]. **Extension** [AM11, CXL19, GHvSF14, KAH18, Maï12, NBW16, GYW⁺10]. **Extensions** [ABH⁺18, BCPS11, PS12]. **extensive** [BG14b]. **exterior** [BH14b, BH16]. **eXtra** [BBB⁺15, BDDM18, CD12, EGPS10, PR13]. **extra-high-order** [CD12]. **Extracting** [SAS11, CTT17]. **extraction** [CKCS13, MSPD12, OG14, OO15b, OO15a, RJ12]. **extragalactic** [KOT12]. **extrapolation** [MC12, dDYK⁺18]. **extrasolar** [HTT13, HTT14]. **extreme** [BY17, DKOS14, NOR15, VV18, WSH⁺12]. **extreme-scale** [BY17, WSH⁺12]. **extrinsic** [DMC⁺15]. **extruded** [NCB18].

F [NDSH18]. **F-t-Pj-RG** [NDSH18]. **FabSim** [GBS⁺16a]. **Facilitating** [GBS⁺16a]. **factor** [CCK23, GDB10, MSZW11, TZG12, XHLUF⁺18, dlHV10, XHLUF⁺18]. **Factorization** [BvH15, JOK13, Gar19, KK14a, LHJZ10, RW11]. **factors** [AHK⁺12, Pál12, YFAT17]. **Faddeev** [DVB11]. **Faddeeva** [Cha16]. **failure** [Pra11]. **Falkner** [RL10]. **family** [ACDdM15, ADdM15, DZ13, rJmYT11, NCHN15, WCT11]. **FAPT** [BK13b]. **far** [CZF18]. **far-field** [CZF18]. **FAST** [Ruf13, ABRS12, BG13a, BKM11, Bot11, BGL⁺14, BSW12, CZ17, CdLOL19, CC10b, CC12, DHJ13, GRZ10, HC16, HS16, JK19, JL19, KAK12, KME⁺11, KHN19, Lut15, Maz13, MSS⁺14, PKRS16, RK19, TO10a, VLPPM14, WISA11, WSO⁺12, AGB⁺15, BT17b, BMBC⁺17, Bru13, CJJ⁺17, CRLS18,

CB15d, CCN17, Dat13, Fow18, GMF⁺¹⁷, GJHF14, GCH⁺¹⁸, Ham11, HDF⁺¹⁹, HP11, JLW13, KL17, KKL⁺¹⁸, LC15, LCQF18, LL15, LCHM10, LCHM13, LLX14a, MRZ10, OL12, OYK⁺¹⁴, Qia10, Qia17, RMW13, Ser17, Ste17, Sza16, iT11, TSIM16, TL19, XW15, XAPK14, YBK⁺¹¹, YBNY13, ZHPS10, ZC12, ZPvR16, vWB10, EBDM17, FCC15, JLW13]. **Fast-NPS** [EBDM17]. **Faster** [Nie18]. **favourite** [DDK⁺¹⁵]. **FCNC** [CRC⁺¹³, RCD⁺¹⁰, Ros15]. **FD** [DM17]. **FDCHQHP** [WW14]. **FDTD** [Ram10, BAR12b, CKK⁺¹³, Fan19, FBN⁺¹³, FOB⁺¹⁵, Jia18, KKP11, KP12b, KO14a, KRB15, LL19, LJD⁺¹⁹, ORI⁺¹⁰, PYW⁺¹⁴, Ram10, Ram12, RHW⁺¹², SSH⁺¹³, VEB⁺¹⁸, WWHW14, WGG⁺¹⁹, Yan09]. **FDTD-based** [BAR12b]. **Fe** [LQZ⁺¹³, BTM⁺¹⁷, LS17a, TG11]. **Fe-3** [LS17a]. **FEAST** [LZP12]. **feathers** [TBB⁺¹⁴]. **features** [CDSG11, DZ15, EW16, dIRAPL11]. **featuring** [EBCB⁺¹⁴]. **FeCo** [PEMS19]. **Fedosov** [Tos10]. **feed** [KSYY13]. **feed-back** [KSYY13]. **feedback** [CDL⁺¹², OCF10, mZfXL15]. **Feenberg** [MBGV15]. **FELIX** [RVDS16, RDVS18]. **FELIX-1.0** [RVDS16]. **FELIX-2.0** [RDVS18]. **Feltor** [WEH⁺¹⁹]. **FEM** [LHC⁺¹³, LWP⁺¹⁷, MGL16]. **FEM-based** [MGL16]. **FEM/MOM** [LHC⁺¹³]. **FEMSIM** [MHV17]. **femto** [LJSW11]. **femto-second** [LJSW11]. **femtosecond** [IB11, REtVH12]. **FEOS** [FTI18]. **Fermi** [MN16, BDP16, Buc19, CCL18, KCT15, Kaw19, SLK19]. **Fermi-surface** [Kaw19]. **FermiFab** [Men11]. **fermion** [AHK⁺¹², BNO17, FGLB12, WRB11]. **fermion-doubling** [FGLB12]. **fermionic** [Men11, ÖKC11]. **Fermions** [FKL13, BG11, BCDI12, CZ19, CvW12a, CvW12b, CL16, GM18, LSR⁺¹⁷, UKKB19]. **FermiSurfer** [Kaw19]. **ferrimagnetic** [CJH11]. **ferroelectric** [Gen10]. **ferrofluid** [PLD⁺¹³]. **ferromagnetic** [CAGL13]. **FESTR** [Hak16, Hak19]. **few** [CKS10, FE11, PKRS16, RAV11, RC11]. **few-body** [CKS10, PKRS16, RC11]. **few-level** [FE11]. **few-particle** [RAV11]. **FEWZ** [GLPQ11, QGLP13]. **FeynArts** [FHH⁺¹⁴, Sta10, SV12]. **FeynCalc** [SMO16a, Sht17]. **FeynDyn** [Dat13]. **FeynHelpers** [Sht17]. **FeynHiggs** [HP17]. **Feynman** [Bor14, Dat13, Ell17b, Fri14b, GM17, Kan18, MUU18, Nog17a, Nog17b, Pan15, Sem16, Smi15, Smi16, Stu10, XWhZ13, XW15, dALM⁺¹²]. **FeynRules** [DDF⁺¹², ACD^{+14b}, ADF⁺¹⁵, DF11b, REBS16]. **FFT** [BC11, JKIS16, KVV19, LYX⁺¹⁷, MHW19, TIM⁺¹⁶, YKK⁺¹⁹, YXT⁺¹⁵]. **FFT-based** [BC11, KVV19]. **FFTs** [DO14a]. **FFTW** [KT10]. **FGT** [CLB11]. **FHI** [JGAL⁺¹³]. **FHI-gap** [JGAL⁺¹³]. **fiber** [CS17]. **fibers** [APRG11]. **fibre** [BF16]. **fibril** [SBB⁺¹⁷]. **FibrilJ** [SBB⁺¹⁷]. **fidelity** [HZW⁺¹⁶, MMO⁺¹⁷, TTS11]. **Field** [NHD16, RLMGM⁺¹¹, ABB⁺¹⁹, BW16, BG11, BMS⁺¹⁶, CZD15, CLHL19, CHDCJA17, CSJ⁺¹⁷, CZF18, CCHL11, CPHL14, Cri18, CHZ18, DXY⁺¹⁹, DF13, DPB16, DBP19, EPB⁺¹⁶, EEGW12, Erm18, ESM17, Fuk17, GTK^{+19a}, GA15, GZW17, GLW14, GX15, HO13, HEF⁺¹¹, JHH⁺¹⁹, JTT11, KB15a, KKCC19, KH12, LPRPR17, LDR⁺¹⁷, LLSK17, LFG14, LXR⁺¹⁸, ME18, McM17, MEG12, NPVR14, NVW⁺¹³, Nut14, PC11, PCGM14, Pit12,

QL10, QJF16, RS12, RK11, SEW12, SEW14, SZM⁺14, SCM⁺16, SW11, TSK⁺17, TKP15, WHG⁺19, WYH19, Wie18, XHLM12, XLX⁺15, YLK10, YZ19, ZKG⁺18, ZY19a, ZY19b, ZKS⁺18, dB14, vdSM16, Asc10, HL19b]. **field-aligned** [DXY⁺19, HO13, LDR⁺17]. **field-particle** [CSJ⁺17]. **field-theory** [DF13, Nut14]. **fields** [Asc10, BMW14, CFSK14, CSP⁺19, DOP17, Dua12, GH15, GBSY18, HSD17, JPK⁺12, KOT12, Ki10, LS19, LSJ13, LR13, LR16, ÓN14, PQTGS17, PM13, SW14a, SW14b, SAHP15, Tau10, TC11b, Wai12, ZYZ15]. **FIESTA** [SST11, Smi14]. **FIESTA4** [Smi16]. **FiEstAS** [Asc10]. **fifth** [DSW⁺15a, NS15]. **file** [iSYS12, SMCB⁺15, SV12, dBCH14]. **file/Mif** [CF16]. **files** [CF16, Hir15, Sta10]. **filled** [CBB14]. **films** [BL14, BKN⁺17]. **Filon** [SBvD13]. **filter** [BALV16, LFG14, TdAdSS11, ZLFM11]. **filtered** [AKS17, Er14, KP12a]. **filtering** [GMRHRCME13, GMPFC⁺14, HKZN17, MGR16, PCVZ11]. **filtration** [Ray10]. **financial** [CLKK11]. **find** [ADdM14, ACDdM19, MLGVE14, Pra17, TMS19, ZAHA10]. **Finding** [ABB⁺19, ACDdM15, DdMN16, Kan14, SS13a, VJC12, BUJ15, GLZ17, Ike18, MST⁺18, MWCY14, RC18]. **Fine** [MEM⁺11, BDL⁺19, Bru13, CYD11, Faw10]. **fine-grain** [BDL⁺19]. **fine-grained** [Bru13]. **Fine-sorting** [MEM⁺11]. **fine-structure** [CYD11]. **FinFET** [LCH11]. **Finite** [ALA⁺19, DJ12, DSPJ10, FHTO17, Hak19, HZW⁺16, KST14a, MAIVAH14, OBH10, OOGP19, SBvD13, TMA⁺15, Wil19, Zag14, AAD13, AS11a, ACTP15, BKOZ16, BM16, BMNS14, CCLL18, CKSM⁺19, CAN11, CTL15, CW16, CCHL11, CRA10, Cor14, DT10, DM17, Den10, EKDGG15, Evs14, FNPMB10, Fu19a, FKS⁺19, GML15, GBP13, GS17b, GS17a, GB14, GLW14, GMHZ19, HE13, Has11, Hsu11b, HZ11, IP14, JK19, JLM18, KCT15, Kob13, KMD12, Koh15, KM17, KVW11, LOL⁺18, LD10a, LA13, LW14a, LV15, LHJZ10, LLXK16, LYX⁺17, LHH⁺12b, LOK⁺18, LNP⁺17, Maź19, MB12, MSS⁺16, MMA15, MJB11, MLK⁺17, MLK⁺19, MBFD12, ICD13, Naz12, ÓN14, OWS⁺14, Oti13, OVSI15, OT11, PVK⁺17, PB16, QLN14, Ram14, RS12, RVDS16, RDVS18, RC13, RC16, SW14a, SP16, SLK19, SC15, SHL⁺11, SBH⁺12, SAN18, SCG11, TT14, Ter17]. **finite** [TYH⁺15, TXZL15, VLPPM14, VDB14, VDAH16, VV16, WZ13, WFZG19, WP10a, Wit14, XGH⁺19, YRR13, YXT⁺15, YQM12, YQM14, dDYK⁺18, Hak16, HKF⁺12, LYP14, MCM⁺12]. **Finite-Difference** [Wil19, DSPJ10, TMA⁺15, ACTP15, CW16, FNPMB10, GS17b, GS17a, GB14, HE13, MSS⁺16, MBFD12, ICD13, RC13, TT14, VDB14, VV16, Wit14, MCM⁺12]. **finite-dimensional** [Naz12]. **Finite-Element** [Hak19, CKSM⁺19, VDAH16, Hak16]. **finite-range** [Cor14]. **finite-rate** [SAN18]. **Finite-size** [OBH10, Evs14]. **Finite-temperature** [KST14a, BM16, KCT15, SLK19]. **finite-time** [Has11]. **finite-volume** [Fu19a, LHH⁺12b, SHL⁺11]. **finite-volume-particle** [LOK⁺18]. **finite/infinite** [SBH⁺12]. **Finsler** [YE14b]. **FIRE** [Sht17]. **FIRE4** [SS13c].

FIRE5 [Smi15]. **First** [BKV16, EY11, FWZ⁺12, PBMAD12, SQL⁺10, ADdM12a, ACDdM14, ADdM14, ACDdM15, BP12, Boy15, CSL⁺13, DdMN16, ELL⁺17a, GPS⁺13, GM18, GCVA14b, HL19a, JLA⁺14, LZL11, LS17a, NS15, SS13b, SWL11, VDF15, ZZ17a, ZFZ19]. **First-** [BKV16]. **first-order** [VDF15]. **First-principles** [EY11, FWZ⁺12, PBMAD12, CSL⁺13, LZL11, SWL11, ZZ17a, ZFZ19]. **Fission** [VRV18, Rom15, VRV15, VRV15]. **FIST** [VS19b]. **fit** [Gag12b, GH18, Gor19, SGDS16]. **fits** [DS15, AKKK16]. **fitted** [CFMR10, DMP18, FG13, KMS14, KV10b, Miy15, PS14, RVA14, WT15, YZZ11]. **fitter** [BGH⁺18]. **Fitting** [GD14, BW16, Ber16a, Ber16b, BPMM14, Bla15, Bru13, DFM⁺15, Duf16, DSPJ10, Eme11, KRB19, LFG14, LAS⁺17, Pat12, PDL⁺18, PBD⁺15, RFPM⁺17]. **five** [SMGK19, XMLC16]. **five-body** [XMLC16]. **fixed** [Ano20, BMW14, CNMC10a, CNMC10b, FGGM11, KK16a, LP15]. **fixed-memory** [LP15]. **fixed-phase** [BMW14]. **fixed-point** [Ano20, KK16a]. **fixing** [CSBO13, HbotRC15, SV13]. **Flame** [DGJH19, WLM14]. **flames** [EZL⁺16]. **FLAPW** [MBFB13, DPHB17]. **Flash** [Dim14]. **flat** [Sha18]. **flat-histogram** [Sha18]. **FLAVOR** [Ros15, EFG⁺10, AM10, CDS⁺13b, CGV13, Mur14]. **flavors** [GM18]. **flavour** [AM11, AMR19, HKZN19, MHA⁺12, PS12, MHA⁺12]. **Flexible** [TCK⁺15, CSRV13, DLGP10, FCCTFR18, HvAS⁺13, JK14, KPA13, KBSP19, LDR⁺17, ORI⁺10, PH13, SGM11a, SGM11b, SC16a, KBT⁺14]. **FlexibleSUSY** [AhPSV15, ABH⁺18]. **flight** [Deu16, YZZ⁺17]. **flip** [KO14b, Kom15a, Kom15c, KO16]. **floating** [CH11b]. **floating-point** [CH11b]. **floor** [PC11]. **Floquet** [LKM⁺16]. **Flow** [San11, BBB⁺17a, Beu11, CC16, CLW11, CRA10, CL13, DMC10, FHA17, FKS⁺19, FM15, GRLS18, HSF⁺15, HCT11, JU17, KK13, Kra18b, LCC13, LLSK17, LHH⁺12a, LTL⁺12, LOK⁺18, LSD18, MSI⁺10, MMC10, MPM14, MBS⁺10, MNPF17, NFA⁺16, NB17, NHSY15, OILK17, OP12, PBF⁺16, PC11, PG17, RF15, Sie16, SS11c, SQA⁺15, SDJ⁺12, SJW10, SSM⁺17, TFBW14, TKL⁺12, TPC16, VSO⁺13, Van15, VK16, Yua19, ZY19b, ZNT15]. **Flow-induced** [San11]. **Flowchart** [KLV15]. **Flowchart-based** [KLV15]. **Flowgen** [KLV15]. **flowing** [Sza16]. **FlowPy** [FSC13]. **flows** [ACMM10, BL19, BHNS17, BBF⁺13, BOGL17, BCM⁺16, BTC⁺17, CCD⁺16, CPR12, CdLOL19, DBMR18, FDZ17, GZZ19, GSC⁺16, HKPF19, HZW⁺19, HJGL18, HJGL19, JvOK17, JPK⁺12, Ki10, Koh15, KPPC13, LSK⁺13, LH18, MTE17, MRVF13, ML16, NCB18, PBD⁺15, PE15, RJLL16, SYD17, SCM⁺18, Sza13b, Sza13a, TKJ19, TIMM13, TCP13, VL19, WZS⁺11, WG16b, WMI19, XD16, YSLY19, YS17, ZOZ13, ZXZ⁺19, ZPS⁺18, ZBN⁺19, vdS10]. **fluctuated** [LCH11]. **fluctuating** [KFF⁺16]. **fluctuation** [MHV17, Voy13, ZC12]. **fluctuations** [HBP14, SGDS16]. **Fluent** [LNSD15]. **Fluid** [OBPL19, WWR⁺16, ALA⁺19, BHNS17, BHS18, CCD⁺16, CXL19, CGJ14, CL13, DOP17, DF11a, DCU⁺19, DMC10, GZW17, GLW14, HWCdM19, HMR⁺19, HF16, HCHW11, JHH⁺19, KK13, KCN18, KGFS18, KTE⁺12, Koh15, LOL⁺18, LHH⁺12b, LH18, LSD18, LHGF18, LDF⁺16,

MOD13, ML17, MJKB18, OP12, PVK⁺17, SH12a, Sch14a, SLR⁺11, SHL⁺11, SQA⁺15, TD17, sX14, ZZG⁺16, ZFR18, Zag14]. **fluid-elastic** [KGFS18]. **fluid-particle** [Sch14a]. **fluid-structure** [DCU⁺19, HMR⁺19, LH18]. **fluid-type** [HF16]. **fluids** [BOPL17, CZ18a, DS11b, GAHP15, JPK⁺12, MRZ10, SGNL17, SSF⁺17, SA14, WLU11, XD16]. **fluorescence** [CDSG11, MD11b, ZLM12, RMW13]. **flux** [AAD14, GAB⁺16, HO13, HF16, HHC⁺10, LHJ⁺15, QM10, SMC⁺17, TCP13, VL19, WFV14, HSD17]. **flux-coordinate** [HO13, SMC⁺17, HSD17]. **flux-difference** [TCP13]. **flux-driven** [GAB⁺16]. **flux-vector** [QM10]. **fluxes** [BHN⁺16, ORS⁺14]. **fly** [GGG16, Ray10]. **FMFT** [Pik18]. **FMM** [CLB11, ZHPS10]. **foams** [KDM17]. **Fock** [BMW14, PSL⁺17, SEW12, SEW14, SW14b, SDM⁺12, SDS⁺17, SSK⁺13, BM16, DG10c, Fro11, GBD10, JZZ⁺19, KAK12, Kob13, KS12, OT11, ZF16, ZYZ15]. **FOCUS** [CFF19]. **Fokker** [BMBC⁺17, JSLM16, KBSP12, PG17, SLEF17]. **folded** [DPB16, DBP19, YKK⁺19]. **folded-Yukawa** [DBP19]. **folding** [GC10, GC13, GC16, GC18, GCK19, LWL11]. **following** [HSK⁺12, KYKN15a, KYKN15b, Nis11, XGH⁺19]. **food** [PCEH15]. **forbidden** [MD10a]. **forbids** [DG16]. **Force** [BPS⁺16, SEGP15, YK12, AK15, BW16, BJ11, BMDP19, BDGM⁺17, CSP⁺19, DFM⁺15, Duf16, ESM17, FSH13, KRM⁺19, KKCC19, LS16, RK11, SGM11a, SGM11b, Ume18, Ume19, ZYL⁺19]. **Force-based** [BPS⁺16]. **force-field** [RK11]. **force-fitting** [DFM⁺15, Duf16]. **Force-gradient** [SEGP15]. **forces** [ASGLK10, BTM⁺17, BWPT11, GAHP15, GD14, KK17, MOD13, RC15, RU12]. **forecast** [ADdM16a, ADdM16b, CDdM14]. **forensic** [SUS⁺17a]. **form** [AHK⁺12, GM17, KO14a, Pál12, Zhe15, CMS17, KUVV13, KUV15, TV10, CKJR11]. **formalism** [FWZ⁺12, KCA⁺15, MBF⁺10, THJ⁺10, VKP14, Voy13]. **format** [ABC⁺18, BDKS10, BABC19, CMSV14, DKOS14, GVPJ18, JTH14, dBCH14, RSSH⁺10]. **Formation** [NJ18, BRL12, BSWC14, CGSB18, CHDF10, GTL11, HKF⁺12, IBKK11, MTS⁺16, MLEM19, UIY11, ZZH⁺16, ZDD⁺13]. **FormCalc** [FHH⁺14]. **formed** [MFLY19]. **forms** [MWCY14]. **FormTracer** [CMS17]. **formula** [ACC17, CMN12, TO10a]. **formulas** [BCMS10]. **formulation** [CKT17, CLJ12, CB15b, GS17b, GS17a, HRC11, JL19, Kap12a, Kap12b, MMA15, VEB⁺18, YSLY19, ZDWY10]. **formulations** [Ram12, Ram14, WLU11]. **FORTTRAN** [MCA17, AC16, BS13a, BW12a, BV13, BD14, DET12, DDH17, FGJB19, GH18, GHN19, GST12, HE13, HM12a, JCL10, KS12, KYSV⁺15, KLM⁺19, LZL11, MBGK11, NS11a, PZY16, PG10, SFV19, Sar17b, iSYS12, SSG⁺10, SSG⁺18, SHZ13, STY15, STY18, SS10a, SF10, WW14, YSVM⁺16, YSMA⁺17, YB13, Zag14, ZZSW19, vH10]. **Fortran-77** [GH18, GHN19]. **Fortran-based** [DDH17]. **Fortran2003** [DLW⁺18]. **forward** [MAC12, VEM12]. **Four** [Boy15, dSF18, ARAB⁺17, BH13, GKM10, GSMK17, KMA⁺12, MBGK11, MGK13, Müll14a, Pik18, SMGK14]. **four-dimensional** [KMA⁺12, Müll14a]. **four-loop** [Pik18]. **four-particle**

[GKM10, GSMK17, MBGK11, MGK13, SMGK14]. **four-point** [BH13].
four-quark [ARAB⁺17]. **Fourier**
[FCC15, JLW13, RJW⁺19, AQJ10, AH13, BNPPD19, BK11a, BLAS19,
BCM⁺16, CZ17, CZ18a, GMF⁺17, HbotRC15, KZC⁺10, LDF⁺16, MJB⁺10,
PCGM14, RJW⁺19, RWKS15, SS11b, SBvD13, TO10a, Trö11, WLM14, YZ16].
Fourth [BK16a, MC16, XYK12, BIT12, DZ13, HZ11, KMS14, LLXK16,
ILsSZ14, NS15, PZZL19, SB11, SS10b, UNK12]. **fourth-degree** [UNK12].
Fourth-order
[BK16a, XYK12, BIT12, DZ13, HZ11, LLXK16, ILsSZ14, PZZL19].
FOXTAIL [TJH17]. **FP** [FWZ⁺12]. **FPGA** [KHZ⁺18]. **FPGA-based**
[KHZ⁺18]. **FracSym** [JC14]. **fractal** [ADdM⁺12b, EBCBG17, GTL11,
GFB⁺10, GGF⁺13, MFLY19, RU13, GGF⁺13, GES13]. **fraction**
[BMS⁺16, LHG⁺19, ZTG13, ZTG14]. **fractional**
[CYN19, CZZ⁺19, Dev12, DS15, GMHZ19, HZ11, JC14, JL10, LLL13,
MDHD18, PSB11, PSBT12, SW12b, SMGK19, YQM12, YQM14, BK13b].
fracture [RTÅT15, VLM11, VKLM11, VLM11]. **FracVAL** [MFLY19].
fragment [JWCW17]. **fragmentation** [BG14a, DG16, HK12, MST⁺18].
frame [LV19]. **frames** [MFS⁺10a, SS11b]. **framework**
[AKH⁺18, Ano11o, BL19, CMC⁺15, CEZ16, CPWZ18, CFS13, CFFR15,
DMC⁺15, ESM17, DRI⁺16, GVR19, GBFJ14, HMR⁺19, HMR14, HM12b,
ILZ⁺19, JEC⁺12, JNN12, JNN13, KEH12, KSTR15, KSH14, KPOR18,
LFKD18, LSDD14, LS14, LS15a, LRW⁺15, LZP12, LHB⁺19, MLR10,
MGFRG12, NBM⁺15, NPVR14, PGO17, RBG⁺19, RM14, SV14, SSX14,
Sit18, SJ11, SPS18, Sva12, TOB⁺14, TE18, TVT⁺16, VEB⁺18, WFV14,
ZZH⁺16, ZHL11, CF16, FCC15]. **FRAPCON** [YLL⁺19]. **Free**
[ACMM10, Gen10, VS19a, AK15, ACTP15, BCT17, CCD⁺16, CGM17, CP15a,
CPCDdM18, CXH⁺15, CZF18, CPR12, Deu16, DFM⁺15, Duf16, DGG13,
FYK18, FS17, FLE19, FBHB17, FM15, Gio18, GZZ19, Hon10, HS16, HHS⁺10,
JPCG15, JCL⁺18, KT12, KST14a, KH12, LKA⁺16, LF12, LWES18, MRL18,
McM17, MSS⁺16, ORI⁺10, PIH11, QZWU19, DMH16, RJLL16, SA14, TKJ19,
UA17, Wil15, WPAV14, XD16, Zag14, ZOZ13, ZPH⁺15, Zhe15, ZMCT12].
free-boundary [FBHB17, Hon10]. **free-form** [Zhe15]. **free-software**
[ORI⁺10]. **free-standing** [ACTP15]. **Free-surface**
[ACMM10, CPR12, GZZ19]. **free-surfaces** [TKJ19]. **freedom** [Er14].
Freeze [BBG⁺18]. **Freeze-in** [BBG⁺18]. **Frenkel** [AMM11]. **frequencies**
[KMD12, RVA14, RJ12, YFAT17]. **Frequency**
[HC17, BDGM⁺17, GLAC13, GB14, Hsu11b, KMD12, KM17, KSY17, LY16,
LAG⁺17, MCP⁺11, Oti13, PP13, Ram10, SVG10, TSIM16, TIM⁺16, TUY15,
WCT11, YZWR14, MCM⁺12]. **Frequency-domain** [HC17, MCM⁺12].
fresh [Fri19]. **FRESHS** [KBT⁺14]. **Fresnel** [JTP15, VLZ17]. **FRET**
[EBDM17, HG13]. **FREYA** [VRV15, VRV18]. **fRG** [Roh16]. **FRIB**
[HDF⁺19]. **friction** [AMM11, HST⁺11, RU12]. **frictionless** [LDW13].
Friedel [TW11]. **friendly** [CFS13, RFPM⁺17]. **fringe** [MB12, MB12].
FRODO [AC13]. **frog** [AZM14, HP14]. **front** [Ano16m]. **fronts** [KR14].

Frozen [LY16, RCGT16]. **frozen-core** [RCGT16]. **frustrated** [IUM13, KGNS10, Leó12]. **frustration** [HML11]. **fs** [REtVH12]. **FSAL** [FLW10]. **FSI** [FHTO17]. **FTS** [Ruf13]. **Fuchsia** [GM17]. **fuel** [AZM14, BCP⁺16, NGCI⁺12, SKK⁺19, VS19a]. **fuel-performance** [YLL⁺19]. **Full** [DNPS13, AM14b, AM19, BMU11, CL15a, CGRB14, CFF19, Dan11, DGS⁺19, FYK18, FEH11, GAB⁺16, HEF12, JBG⁺17, KGG⁺16, Liu15a, LWES18, PBMAD12, PCGM14, RE19, Wie18, YTYA17, ZYZ15, RSSH⁺10]. **full-** [GAB⁺16, DGS⁺19]. **full-field** [Wie18]. **Full-Metadata** [RSSH⁺10]. **full-orbit** [CFF19, PCGM14]. **full-potential** [LWES18, PBMAD12]. **full-torus** [KGG⁺16]. **full-wave** [AM19, FYK18]. **fullerenes** [RM14]. **Fully** [LOL⁺18, LWES18, FVH18, HHS⁺10, KRB15, PN15, Pik18, SSB⁺16, VVB⁺12, YSLY19]. **Fully-implicit** [LOL⁺18]. **Fully-relativistic** [LWES18]. **FUMILI** [Sit14a, Sit14b]. **FUMILIM** [Sit16]. **function** [AQJ10, AKR15, Ano20, AK13b, ACDdM19, BH11, BSGG10, BK16b, Cha16, CDL⁺12, CYOS19, DCC⁺10, DN18, DM17, DdMN16, Fen12a, Fen16, FM12, GST12, GGG⁺19, Jab12, Jab13, Jab15, Jab19, JLM18, KDM11, KV19, LSF14, LKL11, Lee18, LHSL14, MR13, OKP10, PLF⁺17, Pla16, PM13, Raw15, RMC16, SLW19b, SS11a, SGSG19, TTT16, Veb12, XD13, XHD15, YOM⁺19, YTYA17, ZF15, ZDWM17]. **function-velocity-magnetic** [YTYA17]. **function/orbital** [SGSG19]. **Functional** [BC10, DBB12, GS17b, GS17a, LT15, VCMS⁺13, ASA18, AKZ⁺13, BBH11b, CDTV10, CXH⁺15, FSC13, GWL⁺17, GBR⁺14, GSZ13, HB12, HHS⁺10, JCW⁺13, JL19, KT12, KCT15, KKL⁺18, KBSP19, LSR⁺17, LS11, MGRB11, MOB12, MSS⁺16, MC17, OOK⁺12, OT11, RHC15, RCH16, Roh16, RWKS15, SCRS17, SBH⁺12, SA14, TVGB15, VBS⁺17, WX14, WLG18, YKK⁺19, YLYL17, YRR13]. **functionality** [BC19, CB15a, CB17, LHG⁺19]. **Functionally** [WT15]. **Functionally-fitted** [WT15]. **functionals** [GBR⁺14, LRW⁺15, MOB12, NPAD11, RCH19]. **Functions** [CGO17, ARAB⁺17, ATA⁺19, AWK⁺16, BCC⁺18, BDBV12, BMW14, BKK13, BKM14, BK15, BK16b, CM10a, Cai11, CMSN18, CD15, CCWL11, CLJ12, CCK23, CYOS19, CSRV13, CEPI10, Cou13a, Cou13b, DRR15, DGST17, EUT⁺15, Ert15, ERP⁺12, Fow18, FP14, GDB10, GST15, GTS14, GS14, GYW⁺10, GCVA14a, HK12, HCH16, HL13, HM12c, JL12, KK16a, Kap12a, KH11, KCL11, Kir10, KAW⁺10, LD10b, LM12, Liu11, Liu13, MK10, MYP⁺14, NGM⁺10, OWS⁺14, PPY14, PDRG10, PG10, PVK⁺14a, PVK⁺14b, PMVG16, PGMU19, PB16, RA13, RE12, Sar17a, Sar17b, SSG⁺10, SSG⁺18, SPM11, SD10b, WWS10, WAHL13, WPD⁺15, ZDWY10, ZMCT12, vH11]. **fundamental** [LZP12, MK10]. **Fusion** [RtV16, AGB⁺15, DDKM15, ECSV16, FK12, FR15, HLM13, Hon18, HJL⁺14, KRK16, LLQX19, LHJ⁺15, LHB⁺19, Maz13, MN18, PBL⁺18, SKK⁺19, Shi16]. **fuzzy** [GES13]. **FV** [dIRM18].

G [GJHF14]. **G-JF** [GJHF14]. **g_contacts** [BG13a]. **Ga** [TMA⁺15, TW11].

GaAs [CAGL13, TMA⁺15]. **GADGET** [Cro16]. **GADGET-2** [Cro16].
Gafchromic [ACdS13]. **GAFit** [RFPM⁺17]. **GAIA** [Yi11]. **GAIN**
 [ARYT17]. **GAIN-MPI** [ARYT17]. **galactic** [JH11, VDJ⁺11]. **Galerkin**
 [BK12, CC16, EW14a, Ein16a, GML15, GMHZ19, HLLH16, HWS16, LLP15,
 LLMW17, Maz13, MC12, QWZW18, SVS19, WP10b, XWF18, YWX11,
 ZOZ13]. **gallery** [ALSW14, Bal19]. **GALPROP** [VDJ⁺11]. **game**
 [QHC⁺10]. **GAMESS** [IFOI18]. **gamma** [GST15, RLS16, Tic10].
gamma-ray [Tic10]. **GammaCHI** [GST15]. **GaN** [Dan16, Dan17, Dan19].
Ganga [HKK11]. **gap**
 [BDK11, CKCS13, JGAL⁺13, LOK⁺16, LHSL14, MD10a, SI11, SW13a]. **gas**
 [DS13a, Fu19b, GM11, HZW⁺19, HCHW11, JHH⁺19, JvOK17, KR14,
 LHH⁺12a, LSK⁺13, PZZL19, PBF⁺16, PG17, PE15, RC15, Sza16, UBRT10,
 WZS⁺11, WG16b, ZWC⁺19]. **gas-kinetic** [PZZL19, WG16b, ZWC⁺19].
gas-liquid [JHH⁺19]. **gas-particle** [WZS⁺11]. **gaseous** [Sza13b, Sza13a].
gases [BDP16, CGSB18, CND11, Gre18, SÓÓN11]. **GASPRNG** [GP13].
gate [MNW⁺17]. **gate-based** [MNW⁺17]. **gateway** [VK16]. **gather**
 [MTO15]. **gauge** [BB13a, BW12a, CB13a, CSBO13, Fri14a, HbotRC15, JL19,
 LSSW14, PVK⁺18, SV13, XQ19, YW17, MGS13]. **gauge-independent**
 [XQ19]. **gauged** [Fis12]. **gauginos** [Sta13]. **Gauss** [MSR10, MS15].
Gaussian [BCC⁺18, EKDGG15, Er14, FM12, JBKM15, LY16, Odr11,
 PPY14, Ray10, RVDS16, RDVS18, TZK16]. **Gaussian-inspired** [JBKM15].
Gaussian-type [BCC⁺18]. **GBS** [JHL⁺15]. **GCforce** [ZYL⁺19]. **Gd**
 [LQZ⁺13]. **GDB** [ZFR18]. **GDML** [PG19]. **Ge** [MTS⁺16]. **Geant** [Gri10].
Geant4 [DPK⁺15, KB15b, MVI⁺16, PG19, PCEH15]. **Geant4-DNA**
 [DPK⁺15, MVI⁺16]. **Gebremariam** [CCK23]. **gen.parRep** [HL19a].
GenASiS [BC19, CB15a, CB17, CB18]. **Gene** [BW15, CRA10]. **Gene/P**
 [CRA10]. **gener** [CKFB12]. **General**
 [Bot12, ASPDL⁺16, AABC⁺13, AC15, AC18, CWJ19, CH11a, CPV13,
 CvW12a, CvW12b, EKO16, Fer15, Fuk17, GTPWL12, GJ14, GNA⁺15,
 GBRB11, Gri11, HRC11, JKG⁺18, KAK12, KMA⁺12, LS14, LS15a, Liu11,
 LW14b, LHGF18, LHG⁺19, LSSW14, MKV11, NMCR15, RFPM⁺17, Sal16,
 SS10a, TdAdSS11, sX14, YLTS16, Bre10, FGJB19, GLMG12].
general-purpose
 [ASPDL⁺16, AABC⁺13, Fer15, GNA⁺15, RFPM⁺17, TdAdSS11].
general-relativistic [KMA⁺12]. **generalised** [BBC⁺13a, Fuh15, TKJ19].
Generalized
 [ATW⁺19, JPH⁺14, NLSJ17, SVGS18, BDV11, Brá15, BKK13, BKM14, BK15,
 BK16b, CC16, DBB12, Ert15, Fen12a, Fen16, GV15, GS14, GTG⁺11, KVV19,
 KMM13, KMJS16, LJE11, LS12a, lLsSZ14, MBFD12, ICD13, PH11, PA13,
 RJLL16, RLM13, TC11b, VMGP⁺19, BD12, HL19a, MCGR11, MN16, Wil19].
generate [AM14a, ZLLP17]. **generated**
 [BD10, MVI⁺16, MSH11, MSS⁺14, VKS16, WSO⁺12]. **Generating**
 [Bjö11, CB13a, MMT⁺11, Mis12, WWR⁺16, AZ17a, AZ17b, KFF⁺16, Mis13,
 RM14, Rom15, SGDS16, WW12]. **Generation**

[CC10a, JTH14, ADT⁺19, BJBC⁺14, BS11, BS13a, BS14a, BJCW13, BL18b, Bor14, BGL⁺14, CF16, DCM⁺12, FMRP16, Fer15, Gio18, GB17, GBS16b, HBP⁺15, HMU10, MFLY19, MV11, DPHB17, PLF⁺17, Rei10, RJW⁺19, SG15, Sem16, VDA⁺19, XWhZ13, YFAT17, ZS13, vH18]. **GEnerator** [CF16, GAGW16, HS19, AFIS12, AOK15, AhPSV15, BCMS10, BCJW13, BBO19, CWW10, CUL⁺17, CK18, CI11, CK19, DIR⁺19, DKT14, GP13, Gin10, HLD13, Kas14, KRW13, KYKN15a, KYKN15b, MO14, NCS17, ÖY13, PHT⁺19, RVDS16, RDVS18, Sav15, Sha13b, Sha16, TU14, Tom16, XW15, YWW13]. **generators** [ASPW13, BS13a, CKS10, Dem11, MZ14, Mis13, SS13a, Sib17, SAE⁺16, TC11a]. **generic** [Ano10n, HL18, JJ15]. **genes** [SCW⁺11]. **Genetic** [SKH⁺10, SKK11, Bru13, Hon18, TTT16]. **Gennes** [SP18a]. **genuinely** [QSB19]. **genus** [Bog16]. **GENXICC** [WW13]. **GENXICC2.0** [CWW10]. **GENXICC2.1** [WW13]. **geodesics** [MG10a, Müll11a]. **GeodesicViewer** [MG10a, Müll11a]. **Geom** [CPCDdM18]. **Geometric** [KRK16, Bot13, Gwi12, KU10, MTO15, SKK11, TE18, TK19, VBMP15]. **geometrical** [BSC⁺13, HML11, QLE16]. **geometries** [Bjö11, CCD⁺16, EKK14, HC17, MJB⁺10, MVI⁺16, NCB18, PG19, RHH12, TS19]. **geometry** [ASPDL⁺16, BMU11, DXY⁺19, DPK⁺15, GLZ17, GSB⁺14, KAH18, KH12, KQYH17, LJZ⁺18, SR12, WWVB11]. **geophysical** [VKS16]. **George** [Sco19]. **GeoViS** [Müll14a]. **germanium** [OPSR13, OPR14]. **GetDDM** [TVT⁺16]. **GFM** [Jia18]. **GGA** [GSZ13]. **GGRESRC** [DKT14]. **ghost** [HAH13]. **ghost-gluon** [HAH13]. **GIANT** [JBKM15]. **Gibbs** [MHR⁺13, dIRL11, dIRAPL11, TKP15]. **Gillespie** [CF17]. **GiMMiK** [WWR⁺16]. **Ginzburg** [SA15b, Wan10a, WZ13]. **GISAXS** [BKN⁺17]. **glacial** [RTÅT15]. **Glass** [LRC⁺11, BL14, BPP11, LBP15, Yam16]. **glasses** [BW11, IZRT15, Krö19]. **Glasstone** [TZG12]. **glassy** [CH11b, Has11]. **GLauber** [BBRS19, RSBB14]. **GLISSANDO** [BBRS19, RSBB14]. **Global** [MTS⁺16, PPS10, WWM14, ADdM16a, ADdM16b, BY17, CDdM14, CJJ⁺17, DGS⁺19, FKL13, GAB⁺16, KTE⁺12, KHKR14, KTA12, KSY13, LLQX19, LYP14, SK10, TBZ12, TMS19, VPP⁺12, VHP⁺15, WLH⁺12, WLS13, ZFR18]. **globally** [RC18]. **globular** [RV10]. **glsim** [Gri11]. **gluino** [AMRdA17]. **gluodynamics** [Fri10]. **gluon** [BBU11, BvH15, HLM13, HAH13]. **Gmat** [CNMC10a]. **GMES** [CKK⁺13]. **GMXPBSA** [PSMS14, PSMS15]. **GNU** [YSMA⁺17]. **GO** [BD12]. **Godunov** [KPPC13]. **gold** [TM19, YLYL17, ZDD⁺13]. **Golem95C** [CGH⁺11, GHvSF14]. **good** [MA11, TC11a, YZ16]. **goodness** [Gag12b, GH18]. **Gordan** [HR11]. **Gordon** [DN13, KZC⁺10, AH13, DG10a, DG10b, Eba13, GMHZ19, JPM12, LD10a, MD10a, Pál12, PTS12, RM10a, SW14c, dHV12]. **GPELab** [AD14, AD15]. **GPGPU** [LYZ13, ÓN14, PQTGS17]. **GPGPU-accelerated** [PQTGS17]. **gprMax** [WGG16, WGG⁺19]. **GPScan.VI** [Fer15]. **GPU** [ALA⁺19, AKS17, BS14a, BWB⁺17, BKOZ16, BPP11, BFPP12, BBF⁺13, BBS14, BLS17, BD10, BVP10, BTL⁺17, Boe14, BTC⁺17, BHJ⁺19, CCLL18, Cap13, CMVRB⁺14, CMRVVR16, CHNS18, CCL18, CSSB15, CRLS18,

CBYG18, CRB⁺17, CLB11, DRR16, DS13a, DCVB⁺13, DCGG13, DGG13, ELDS14, ELL⁺17a, Exl17, FFT⁺14, FGC⁺11, FDWC12, Fil13, FBN⁺13, FOB⁺15, FKS⁺19, Gai17, GP13, GJ13, GLHG12, GZZ19, GHR⁺16, GB17, GCC⁺18, GJ18b, Ham11, HXW⁺13, HPN18, HLTW19, HW12, Ihn12, JK14, JPCG15, JXTS16, JCW⁺13, JWCW17, KKP11, KP12b, KPA⁺19, KO12, KO13, KO14b, Kom15a, Kom15b, KO16, KMA⁺12, LYP14, LCC13, LGW13, LSYZ12, LBP15, LWRQ16, Lut15, Lya15, MDW16, MÅWK18, MPM14, MFM15, MHR⁺13, MTM13, NHD16, Ngu17, OP12, PR14, PLD15, PBS⁺17, PKRS16, RD10, Sai10, SGNL17, iSYS12, Sie16, Smi16]. **GPU** [SKM15, TL17, TS19, TCCV18, TDL⁺14, TPC16, WXW14, WFZG19, WGG⁺19, Wei11b, WSH⁺14, Wil19, WC13, WAW14, XLX13, YHL11, ZSW⁺17b, ZPS⁺18, ZWC⁺19, ARYT17]. **GPU-accelerated** [ELDS14, GHR⁺16, TL17, WXW14, BTL⁺17, Cap13, CRB⁺17, DS13a, GJ13, Ham11, HXW⁺13, MHR⁺13, Ngu17, PBS⁺17, XLX13]. **GPU-acceleration** [GCC⁺18]. **GPU-based** [Boe14, CMVRB⁺14, FDWC12, JPCG15, KO12, Kom15a, KMA⁺12, LCC13, PKRS16]. **GPU-centric** [Sie16]. **GPU-code** [EZBA16]. **GPU-enabled** [ALA⁺19, LYP14]. **GPUQT** [FVH18]. **GPUs** [BL18a, Boe18, ACD⁺14a, AAT17, AEKO18, BS14a, BCDI12, CMRVVR⁺14, CB13a, CSBO13, CWY⁺17, CBB⁺10, CSV⁺18, CH11b, CBB14, Dat13, Dem13, DSP15, ECD⁺10, FGG11, GNA⁺15, GNP19, GJB11, GM18, HTJ⁺16, HAH13, HLZ⁺13, LQ18, sLqSqL⁺13, MR14, Maz13, MRSD15, MKB⁺11, ÓN12, PVK⁺17, RK19, SV13, SÓÓN11, SAN18, TK14a, TCP13, WXW13, WAHL13, WRR18, WWM14, YL12, YBK⁺11, YBNY13, ZBN⁺19, dJBIM16]. **GPUs-The** [HLZ⁺13]. **gpuSPHASE** [WMRR17, WRMR19]. **GR** [OK12, OK18]. **Grad** [HS14b, SVS19]. **GRADE** [MD19]. **gradient** [AG12a, CR12, EFK⁺19, HbotRC15, HKVR10, JHL⁺15, KN13, SEGP15, WX14, ZY19b, ZYL⁺19]. **gradient-based** [HKVR10]. **grading** [vSGB⁺18]. **GRADSPMHD** [VKP14]. **grain** [BDL⁺19, LFKD18]. **grained** [AGVP10, AMJ18, Bru13, ESM17, FPY⁺17, NLB⁺19, PA13, SM19]. **graining** [GB11, HJE⁺19, MNL19]. **Grand** [AS16, PLCC12, Sit18]. **Grand-Canonical** [AS16]. **grand-canonical-like** [PLCC12]. **granular** [CNS⁺18, GTPWL12, KPCC13, RU12, San11]. **graph** [ÁSTT16, AOK15, Bor14, SSBS15, TMS19, ZLLP17]. **graph-theoretic** [SSBS15]. **graphene** [CW16, FUSH14, GZL14, Ihn12, KLKR11, LHSL14, OCL⁺13, RE19, RFSF18, STT11, SPY11, SWL11, TMA⁺15, WQ18]. **graphic** [Fil14, GLB13, RPL⁺14, RLMGM⁺11]. **graphical** [CF16, DS11a, GWM13, GLR17, LAS⁺17, TUY15, Zlo13]. **Graphics** [Dem11, APRG11, BdVGS11, BK11a, BHS18, BJCW13, CDS13a, Col14, DBDP12, DF13, FSH13, FUSH14, FCVH17, FVH18, FZY13, HAN⁺16, MED11, MEM⁺11, NPAG11, PLD⁺13, Rap11, SH12b, TD11, Tic10, TB14, WDL11, WWFT11, Boe18, MSML10, YLO13]. **graphics-processing** [MED11, Tic10]. **graphite** [CCL15, WWL11]. **graphs** [BBW11, Bor14, FRW17, Kan18, MKMK10, MKV11, SI11]. **Grasp** [JGB⁺13]. **GRASP2018** [FGJB19]. **gratings** [CZL⁺11, FBN⁺13].

gravitating [MT13]. **gravitational** [Cro16, GCC⁺18, KM10, PMS⁺15].
GravitinoPack [ES16]. **gravitons** [AAB⁺10b]. **gravity** [ACML11, BL19].
Grazing [MPSV15]. **Grazing-incidence** [MPSV15]. **greedy** [SJ17]. **Green**
 [Ano20, AKK13b, CYOS19, JLM18, KK16a, KDM11, Liu13, PLF⁺17, Pla16,
 SGSG19, WAHL13, XD13, XHD15, YOM⁺19]. **Greenwood** [CKT17]. **Grid**
 [KK14b, ACMM19, BH17, BPSS18, BAR12b, BOGL17, CBGY17, CB16b,
 DF11a, DCU⁺19, FZY17, GBN17, GXF⁺15, GLHG12, HP14, HvAS⁺13,
 HZW⁺16, HKK11, KDP⁺14, KK14a, KKL⁺18, KV10a, KRB19, LWRQ16,
 ME18, NVW⁺13, PHT⁺19, RC11, Ser17, TH17, TIMM13, WRFS15, WQ18,
 YRR13, ZS13, BCJ⁺11, LHL11, MLR10, MWL⁺10]. **Grid-based**
 [KK14b, KK14a]. **grid-computing** [KDP⁺14]. **grid-convergence** [CB16b].
grid-resolution [CBGY17]. **Gridless** [BCDP18, OCF10]. **gridlock** [wH15].
GridMD [MV11]. **grids** [ALA⁺19, BHS15, Cha19, DJ11, DHS14, FRFH10,
 GN14, GSKM14, HWS16, JBG⁺16, JBG⁺17, LYP14, LHGF18, MTO15,
 Sch18, SC15, SHL⁺11, TK19, YJK11, ZNT15]. **GriF** [MLR10]. **GRLW**
 [MM10]. **GROMACS** [PSMS14, PSMS15]. **GROMOS** [SCC⁺12]. **Gross**
 [ABB13, AD14, AD15, ABDR17, CR13, JCL⁺18, KYSV⁺15, LBB⁺16,
 LYSS⁺16, MGL13, MGL16, SSB⁺16, VDAH16, VVB⁺12, YSVM⁺16,
 YSMA⁺17]. **ground** [CR13, ELL⁺17a, JW13, MH11, WX14, WGG16].
group [CLKK11, FSC13, Fon12, HB12, JC16, KK16b, LSSW14, MK19,
 MSHLS15, MSHL17, NBN⁺14, PO14, RGH10, Roh16, Sta11, Trö11, Ver16,
 WPAV14, ZAHA10, LSR⁺17]. **group-correlations** [CLKK11].
group-theory [ZAHA10]. **groups** [Nik12b, SK10]. **Grover** [LYZ13].
GROW [HKVR10]. **grown** [RDP14]. **growth** [FBG10, JEF14, JK19,
 LLSK17, LRSS19, MÁWK18, MS11, RH11, SÓÓN11, ZKG⁺18]. **GSGPEs**
 [CR13]. **GTROTA** [BSM13]. **Guadua** [VLM11]. **GUI** [Gio14b, Nov17].
guide [Hah12]. **guiding** [Nis11, PCGM14]. **guiding-centre** [PCGM14].
GUIMesh [PG19]. **guise** [ZF15]. **Gummel** [PFFK19]. **GW**
 [DdJC⁺19, DSLP11, KMM⁺19, KOK17]. **gyro** [SKK17]. **gyro-kinetic**
 [SKK17]. **Gyrokinetic**
 [DXY⁺19, KGG⁺16, DJ14, GAB⁺16, HKJ⁺12, JBG⁺16, JBG⁺17, KS16b,
 KH12, MIW⁺12, MIW⁺13, MWI⁺19, MKR⁺12, PDJ10, SISW10].
gyrokinetics [DGS⁺19, ZW15]. **GYSELA** [DGS⁺19].

H [BL18a, KKS18, PCEH15]. **H-COUP** [KKS18]. **H1** [GRZ10].
H2SOLV [PZY16]. **H5MD** [dBCH14]. **Haar** [Jiw12, KMM13]. **Haas** [RJ12].
Hadron
 [BSW12, ACD⁺14a, AHH⁺19, BDC⁺14, BHZ13, CCN17, CM14b, DDKM15,
 Gao13a, GLS⁺13, Gri10, OK12, OK18, SZY⁺12, SZY⁺13, ZYL⁺15, Tom16].
hadronic
 [CWW10, CWW15, CPWZ18, GLPQ11, KKK⁺15, VS19b, WW13, ALL⁺11].
hadrons [Kol15]. **hadroproduction** [WW14]. **haggies** [Rei10]. **Haldane**
 [BDK11]. **half** [HM12c]. **half-integer** [HM12c]. **Hall** [VPM12]. **Hall-driven**
 [VPM12]. **halo** [JH11]. **HAM** [ZLL13]. **Hamiltonian** [ART17, Alv12,

CWJ19, CYSL12, CSJ⁺17, Chr18, CKCS13, DPB16, Gar19, LV14, MBFD12, DPHB17, SP16, SEGP15, SLR16, USOA13, Vit19, WXL13, YZ16].
Hamiltonians [BM16, CNMC10b, HHC16, LJB⁺16]. **hand** [STK10, TKS10].
Handheld [CDSG11]. **handle** [CBB14, Var16]. **handling** [HL18]. **Hankel** [JL12, SPS10]. **Hard** [BDP16, AIG16, CND11, FBP⁺14, LDW13]. **hard-core** [CND11]. **hard-spherocylinder** [FBP⁺14]. **Hard-wall** [BDP16]. **hardware** [BdVGS11, RLMGM⁺11]. **Harmonic** [BD14, ABR19, BDP16, BDV11, GKM10, GSMK17, GBSY18, HLLH16, LLP15, sLqSqL⁺13, ME18, MBGK11, MGK13, dIRL11, PSL⁺17, SDM⁺12, SDS⁺17, SS11a, SMGK14, SSK⁺13, TVT⁺16, VB19]. **harmonic-oscillator** [GKM10, MBGK11, MGK13, SDM⁺12, SDS⁺17]. **harmonics** [ASS13].
Harness [KBT⁺14]. **Hartmann** [ZOZ13, ZNT15]. **Hartree** [PSL⁺17, SW14b, SDM⁺12, SDS⁺17, SSK⁺13, ZF16, BM16, BMW14, DG10c, Fro11, GBD10, JZZ⁺19, Kob13, KS12, OT11, SEW12, SEW14, ZYZ15]. **hase** [SKB10]. **HASEonGPU** [EZBA16]. **hashing** [JWM⁺18]. **Hastings** [GM14, MP11]. **Hastings-class** [MP11]. **HATHOR** [ALL⁺11, KKK⁺15].
HAWK [DDKM15]. **HDECAY** [CGG⁺14, DKMS19]. **HDMR** [LLX14b, LWL12]. **heart** [ZBMM11]. **heat** [CB15b, CZF18, DBMR18, Fri10, Gor19, HWS16, JYPA18, LWZ14, MLS10, MK10, iSYS12, SR12, SN16, XZF12, ZMCT12]. **heat-bath-inspired** [Fri10].
heating [BB13b, JGC⁺11, MTM14]. **Heavy** [ALL⁺11, LCL⁺11, BKMP16, BG14b, CWW10, CKFB12, CCN17, HLM17, JuIAM16, KHB14, MMT⁺11, SKK⁺19, Sha13b, Sha16, SQS⁺16, VS19b, WW14, WW13]. **Heavy-baryon** [LCL⁺11]. **heavy-ion** [SQS⁺16, VS19b]. **heavy-quark** [CCN17]. **heavy-top** [HLM17]. **Heine** [GLX⁺14]. **Heisenberg** [BPP11, HvWT17, KGNS10]. **HEJ** [AHH⁺19]. **HELAC** [BCG⁺13, Sha13b, Sha16]. **HELAC-NLO** [BCG⁺13].
HELAC-Onia [Sha13b, Sha16]. **helical** [LFG14]. **helices** [HFSK12].
helicity [CKJR11, dALM⁺12]. **helicon** [ML14]. **helium** [CHH⁺11, LB11, LB12, Miu11, SQA⁺15, WFM14]. **helium-4** [Miu11].
helium-like [LB11, LB12]. **Helmholtz** [CC10b, CC12, OK14]. **helper** [WMK11]. **hemodynamics** [GVR19]. **HEP** [CMSV14]. **HEPMath** [Wie15].
HepML [BDKS10]. **Hermite** [CDBM16, GMHZ19, LDF⁺16, PDRG10].
Hermitian [BW12b, CDMCN11, JK13, LWW10]. **HERWIG** [KRW13].
heteroepitaxial [Dan14, Dan16, Dan17, Dan19]. **heterogeneous** [CF17, DCVB⁺13, FKS⁺19, GXF⁺15, LSG⁺12, LSYZ12, MPM14, San11, SCJH19, TKP15, VLPPM14, XLX⁺15]. **heteropolymer** [Fri17].
heteroscedasticity [ICPD16]. **heterotic** [NRSVW12]. **Heuristic** [CNMC10a]. **hex** [BH16]. **hex-ecs** [BH16]. **hexagonal** [CCL15, KLO⁺19, TMA⁺15, VLM11]. **hexahedral** [FXZ⁺14]. **HF** [RHBH15a, RHBH15b]. **hfbtho** [PSL⁺17, SSK⁺13]. **hfodd** [SDS⁺17, SDM⁺12]. **HFOLD** [FEH11]. **HIBRA** [JuIAM16]. **hidden** [KZ11]. **HidSecSOFTSUSY** [KZ11]. **hierarchic** [CHDF10]. **Hierarchical** [Hoh18, Roh16, CB15c, DAW⁺19, KN13, MCWJ15, OKM12, QJF16, ZMvE⁺13]. **hierarchical-gradient** [KN13]. **Hierarchies** [JJB11].

hierarchy [GGG⁺19]. **Higgs** [EMW19, ERS10c, Ore19, AC17, BGM⁺14, BM19, BBH⁺10, BBH⁺11a, BHZ13, CGG⁺14, DDKM15, DLM18, ERS10a, ERS10b, FEH11, HP17, HLM13, KKSJ18, MGS13, SAE⁺16]. **Higgs-mass** [HP17]. **HiggsBounds** [BBH⁺10, BBH⁺11a]. **High** [AAA⁺16, AQJ10, AHH⁺19, Ano19m, BG19a, BCT17, BvH15, CLHL19, Ein16a, GS15, Gai17, GBFJ14, HS19, HvWT17, JTW⁺17, LWL12, LSR⁺17, MF17, MD10b, ML16, DPHB17, NS15, NO12, PHA18, RHW⁺12, SSH⁺13, SA15b, SBPD19, SMGK14, TY10, WGVPL17, ZBN⁺19, AAD13, AAD14, Ara14a, Ara14b, AH13, BDT15, BL19, BDKS10, BH14a, BCH17, BCDP18, BWPT11, BKPT12, BY13, BMG⁺15, BDGM⁺17, CFMR10, Cap13, CNS⁺18, CZ18b, CMJ⁺11, CD12, CL15b, CR12, CBGY17, CBYG18, DBMR18, DGPW11, DRR16, DJ11, DM17, EZBA16, ECD⁺10, EGT⁺18, FTI18, FG13, Fu19b, FB19, GLAC13, Gar19, GA10, Hah12, HEPW13, HYM11, JH11, JVR12, KB19, KVV19, Koh15, KSY13, LV15, LM16, LWZ14, Liu15a, LJD⁺19, LWJV18, LAG⁺17, LLX14b, MMO⁺17, MTE17, Maż19, MHWH19, Mil16, MVS15, MLK⁺17, MLK⁺19, MNOØ11, PE17]. **high** [PVK⁺17, PGO17, Qia10, RRCSCJ10, RLS16, SHW18, Sch14b, SHZ13, SLK19, SCNJ18, SCM⁺18, SPSP18, Tia11, TGH⁺16, TS10, VL19, VMGP⁺19, VV16, WWS10, WC10, WS11a, WWC⁺16, WvSL13, WLM14, Wie15, WWR⁺16, XHLUF⁺18, XQ19, YvOSM15, Zag14, ZD15, ZFH14, ZOZ13, ZZ17a, ZFZ19, ZW15, ZNT15, DBLF16, OBM19]. **high-** [CMJ⁺11]. **High-accuracy** [AQJ10, CLHL19]. **high-density** [HYM11]. **high-dimensional** [CZ18b, DM17, MHWH19, WC10, WvSL13]. **high-energy** [Hah12, WS11a]. **high-entropy** [PE17]. **high-frequency** [BDGM⁺17]. **high-intensity** [SCNJ18]. **high-level** [MVS15]. **high-level/high-performance** [MVS15]. **high-nuclearity** [DRR16, RRCSCJ10]. **High-order** [BCT17, MF17, MD10b, RHW⁺12, SSH⁺13, SA15b, TY10, ZBN⁺19, AAD13, AAD14, BL19, Cap13, DBMR18, DJ11, EGT⁺18, FG13, GA10, Koh15, LV15, LWZ14, LWJV18, Maż19, MLK⁺17, MLK⁺19, PVK⁺17, Qia10, Tia11, VL19, VV16, WWS10, WWR⁺16, XHLUF⁺18, XQ19, Zag14, ZFH14, ZNT15, DBLF16]. **High-performance** [GS15, Gai17, JTW⁺17, LSR⁺17, DPHB17, Ara14a, Ara14b, FB19, MVS15, SHZ13, VMGP⁺19]. **high-precision** [BDT15, KB19, LM16, SLK19]. **high-pressure** [SHW18]. **High-resolution** [PHA18, BMG⁺15]. **high-speed** [CNS⁺18, VL19]. **High-temperature** [HvWT17, Liu15a]. **high-throughput** [ZZ17a, ZFZ19]. **high-velocity** [JH11]. **Higher** [ABdA15, CD15, KO14a, WP10b, ACDdM15, Cha16, CLJ12, DKOS14, MK19, MO14, SR12, SC16b, SB11, VJC12]. **Higher-order** [CD15, KO14a, Cha16, MK19, SC16b, SB11]. **Highly** [CH11b, HLTW19, LBP15, MTM13, MGR16, PFFK19, dSF18, BL19, BY17, GRLS18, HBP⁺15, MSI⁺10, MLS10, SEW12, SEW14, WQ18, WDR16, YBNY13]. **highly-efficient** [WDR16]. **Hiking** [Brá15]. **Hilbert** [ERPDFLS15, SA15a]. **Hilliard** [LLXK16, XYZX19, YZ19]. **Hirshfeld** [EPP12]. **histocompatibility** [HFSK12]. **Histogram**

[FLE19, CMRVVR⁺14, CMRVVR16, GGG⁺19, Sha18, VK14].

Histogram-free [FLE19]. **histograms**

[AMR15, Gag12b, Gag12a, GH18, GHN19, RK19]. **Hitting** [KMS19]. **HMC**

[CDS⁺13b, KP12a]. **HNLS** [SB11]. **HOC** [TY10]. **hole**

[DIR⁺19, Dua12, Gin10, LZL11]. **Holm** [ZST11]. **hologram**

[BGL⁺14, JTP15, MSS⁺14, WSO⁺12]. **holograms** [BD10]. **holographic**

[FBN⁺13]. **holography** [MSI⁺10, ZSW⁺17a]. **HoMnO** [KAR⁺15].

homogeneous

[Asi10, BK11b, MSHLS15, MSHL17, PN15, SCNJ18, SLEF17, vMB14].

homology [DS13c]. **Homotopy** [CS10, PSBT12]. **honeycomb** [MHHL11].

Hooke [RGKR17]. **Hopf** [Bor14]. **hopping** [LM19]. **horizontal** [ME18].

Horn [BKM14, BK15]. **Horn-type** [BKM14, BK15]. **Horner** [KPVvdH13].

HOS [DBLF16]. **HOS-ocean** [DBLF16]. **Hoshen** [FKH15]. **hosphe**

[CDTV10]. **HOTB** [GSMK17, SMGK14]. **Houches**

[ABB⁺14, BBC⁺13a, MHA⁺12, Sta19]. **Householder** [NLSJ17]. **HP**

[LWL11, Roh16]. **hp-fRG** [Roh16]. **HPAM** [EPP12]. **HPC**

[DdJC⁺19, CCdC⁺11, GBK⁺12, HL18, OLG⁺16]. **hPIC** [KC18]. **HPL**

[Ma⁺12]. **HRMC** [MHV17]. **HRMC_1.1** [OPO⁺11]. **HRMC_2.0** [OPSR13].

HRMC_2.1 [OPR14]. **HTC** [CCdC⁺11]. **Hubbard**

[KLO⁺19, MHHL11, SA15a, SH12b, US16, WDL11]. **Huge**

[WSI13, BMC⁺11b]. **Huge-scale** [WSI13]. **Hut** [WSH⁺12]. **Huygens**

[VLZ17]. **Hybrid**

[BCTP18, GJLB12, KSS18, LRW⁺15, ML17, OPR14, SSB⁺16, SS11b, TH17,

VCMS⁺13, WDL11, WLZN17, YHL11, dIRM18, AAD14, BMC⁺11a, BD12,

BT17a, BWPT11, BKPT12, BY13, BMDP19, CW16, CL13, DCU⁺19, ES11,

FGR14, FKS⁺19, GWL⁺17, GC12, Giu19, Gwi12, HLW16, JTN⁺11, JL19,

Jiw15a, KK13, KKL⁺18, Krö19, KCS⁺15, LCY⁺11, LHC⁺13, LHH⁺12a,

LSYZ12, MIW⁺12, MM17, MKU⁺12, MSM⁺11, MJKB18, PZZL19, RTT⁺18,

SZ15, SP18b, SS13b, SPS10, SYE⁺18, SGSG19, TFBW14, WLG18, WC13,

WAW14, YvOSM15, YLQ⁺17, YXT⁺15, ZC12, ZBN⁺19, GBR⁺14, HKZN17,

HKZN19, KLO⁺19, OPO⁺11, OPSR13, Urb18]. **hybrid-node** [ZBN⁺19].

Hybrid-optimization [WLZN17]. **hybrid-stabilized** [JTN⁺11].

hybrid-symbolic [SZ15]. **hybridisation** [SKFP16]. **Hybridizable**

[SVS19, HLLH16, LLP15, LLMW17]. **hybridization**

[AK13b, HWG13, SGW17, VPP⁺12]. **hybridizations** [SGW17]. **hybridizes**

[LM19, YLYL17]. **hydrate** [MD19]. **hydraulic** [WNYP17]. **hydraulics/fuel**

[YLL⁺19]. **Hydrodynamic**

[MOD13, BOGL17, GZW17, KHB14, LCH11, LKW11, WSH⁺14, ZD15].

hydrodynamical [NAQ16, QA13b]. **hydrodynamically** [APC⁺14].

Hydrodynamics

[CDR⁺15, FHTO17, GRLS18, KS16a, DCVB⁺13, DCGG13, EKK14, GLB13,

GCH⁺18, HLS⁺17, HPN18, JXTS16, KPCC13, MRSD15, NFS15, RH17,

RTA10, SC15, SC16b, SN16, WRR18, YK19, dASJC⁺19, dIRM18].

Hydrogen [WBY11, BP12, BH14a, BH14b, BH16, BKS15, CLHL19, JTT11,

LH11, MFS10b, SW14a]. **hydrogen-like** [BP12, MFS10b]. **hydrogenic** [PG10, Sar17a, Sar17b]. **Hydrokinetic** [MBS⁺10, BBF⁺13]. **hydrothermally** [CLY11]. **Hylleraas** [JH15]. **Hyper** [GGF⁺13, GES13]. **Hyper-Fractal** [GGF⁺13, GES13]. **Hyperbolic** [AOK15, AAD14, BB10, CGM17, DJ11, Ert15, Jiw15b, PKT15, RD10]. **hypercubes** [TOB⁺14]. **HYPERDIRE** [BKM14, BKK13, BK15, BK16b]. **hyperfine** [ZE11, ZE16]. **HYPERgeometric** [BK15, BKK13, BKM14, BK16b, GS14, HL13, HM12c, BKK13, BKM14, BK16b]. **hyperlogarithms** [Pan15]. **hypersonic** [BTC⁺17, PBD⁺15, TIMM13]. **hyperspherical** [AV13]. **HypExp** [HM12c]. **hypotheses** [Zlo14].

i-PI [CMM14, KRM⁺19]. **I.V.P.s** [RL10]. **I/O** [BABC19, DRUE12, GGI⁺13]. **IAST** [SSH16]. **IBAR** [Cas12]. **IBM** [CRA10]. **ICC*** [KSH11]. **ICCG** [PYW⁺14]. **ice** [HYM11, IUM13, RTÅT15, TS10]. **ICSM** [BBL⁺13]. **Ideal** [SSH16, ZFZ19, ALA⁺19, LOL⁺18, PE15, TDL⁺14]. **IDEN2** [AKV18]. **Identification** [BGHN19, AKV18, Bin13]. **identify** [PLD15, VBMP15]. **Identifying** [Law19, LZ12, Kra10]. **identities** [LL19]. **IDSOLVER** [GJ14]. **iEBE** [SQS⁺16]. **IEQ** [XYZX19]. **IFE** [RtV16, RtV16]. **IGA** [LWP⁺17]. **iHixs** [DLM18]. **II** [RHBH15a, Ano11a, AD15, ABH⁺19, BJBC⁺14, BH14b, BMW14, BAK⁺16, Dan10b, HBS⁺11, Nog17b, dIRAPL11, RHBH15b, SH18, SAS11, SSK⁺13]. **III** [PSL⁺17]. **illustrating** [ZW15]. **illustration** [CLB11]. **Image** [DGPOR18, iSSMI11, GES13, JTP15, LAS⁺17, TW15, XD13, XHD15]. **ImageJ** [SBB⁺17]. **images** [AKKK16, CRB⁺17, GFB⁺10, PVH⁺17, WG16a]. **Imaginary** [LR13, LR16, ABDR17, CYOS19, YOM⁺19]. **imaginary-time** [CYOS19, YOM⁺19]. **imaging** [CFCB12, Fer15, GSB⁺14, SSM⁺17]. **imbalanced** [WRB11]. **imbibition** [GTSL⁺13]. **imbibition-drainage** [GTSL⁺13]. **Imeall** [LFKD18]. **IMEX** [DMP18]. **IMEX-trigonometrically** [DMP18]. **immersed** [CCHL11, CGJ14, JvOK17, NCB18, Ser10, YS17]. **impact** [CCLL18]. **impedance** [KM17]. **Impingement** [LNSD15]. **impinging** [HHT14]. **implants** [RMS⁺12]. **implement** [MRL18]. **Implementation** [AS16, Alv12, BKOZ16, BDPM15, Boe18, BF10, DPK⁺15, GSZ13, GZZ19, GGG⁺19, GES13, GFJ⁺14, GBJ⁺19, HP17, IIO16, IFOI18, KH19, LLG17, MWI⁺19, MPB10, MFG⁺13, MBGV15, NBN⁺14, RV10, REBS16, SSX14, TIM⁺16, VDB14, WP10a, ABRS19, Ara14a, Ara14b, AKS17, ADdM12a, APC⁺14, Bad11, BJCW13, BCJW13, BH16, BVSG19, BW15, BG14b, BENK⁺17, CKT17, CFCB12, CL15b, CGJ14, CGG⁺14, DEMM19, DA16, DCVB⁺13, DM12, FGC⁺11, Fow18, Fri14b, FHH⁺14, FKS⁺19, GS17b, GS17a, GVS⁺15, GHBL18, GB17, HWG13, HFOPF15, HL19a, HLZ⁺13, HDM⁺12, JWJL12, JK14, JWCW17, JJ15, JKIS16, JP10, KFS17, Kap12a, KKG⁺15, KBSP19, LKM⁺16, LBM⁺14, LHZ11, LK15, MBF⁺10, MSS⁺16,

MTM13, MNPF17, MBB⁺¹⁹, MAIVAH14, NPAD11, ÓN12, dIRAPL11, PBMAD12, PM16, PMS⁺¹⁵, PIH11, QLE16, RRCSCJ10, RU12, SL16].

implementation [SCC⁺¹², SSF⁺¹⁷, SBPN15, SLK19, Smi15, TKP15, TL19, TS19, TTT16, US16, VS19a, VB19, WMRR17, WRMR19, WC15, WPAV14, ZMJ13, vRWS14].

implementations [CSV⁺¹⁸, DCGG13, HSK⁺¹², Hol19, THJ⁺¹⁰].

implemented [FVH18, MOD13, PGD17, SS18]. **Implementing** [BWPT11, BKPT12, BY13, QJF16, BF16, BCPS11, MJKB18, SOPS12].

implements [MZE13]. **implications** [PdMML19]. **Implicit** [FLSZ13, FM15, GHBL18, GHMB⁺¹⁹, Lan13, TYH⁺¹⁵, VL19, ALA⁺¹⁹, BB12, BF10, CZD15, CDBM16, CC14, CC15, CW16, DBMR18, FZR19, GZZ19, HCHW11, IBP⁺¹⁵, JCL⁺¹⁸, KKG⁺¹⁵, LOL⁺¹⁸, LST15, LHH^{+12b}, MIW⁺¹², MWI⁺¹⁹, NFD⁺¹⁹, NLSJ17, RC15, SS13b, SC15, SHL⁺¹¹, TT14, WG16b, XWF18, XYK12, XZ12, YSLY19, YLKN17, ZSW^{+17b}].

implicit-explicit [CW16]. **implicitly** [WWS10]. **implosion** [SKK⁺¹⁹].

import [PG19]. **importance** [HLL13, KTB17, LLX14a, SK10, dHGCS11].

important [rJmYT11]. **Imposition** [MDPTTC17]. **improve** [FZ16, SCM13, WW12]. **Improved** [AK13b, BKC⁺¹⁷, CZL⁺¹¹, GV15, Jab13, KCT15, KO16, LRK13, NNWS15, RGH10, SSF⁺¹⁴, WMK11, WPD⁺¹⁵, ADdM16b, BW15, CKLM10, CDdM14, GCF⁺¹⁷, GST12, KHK⁺¹¹, KDM11, KPPC13, LJD⁺¹⁹, MGO13, MS14, MBFB13, MFLY19, Nat09, Nat10, RLS16, RJLL16, SWL⁺¹⁵, SD10b, TD17, WZS⁺¹¹, WW13, War16, XD16, vdSM16]. **Improvement** [ADdM16a].

Improvements [PLF⁺¹⁷, SSS⁺¹¹, DSS⁺¹⁹, Tan19]. **Improving** [AKK⁺¹⁸, ADdM15, HHC16, KPVvdH13, SGM11a, SGM11b, CMRVVR16, KK17, Pit10]. **impurity** [BHT19, FLSZ13, GWF⁺¹¹, HWG13, HWM⁺¹⁵, Hua17, SKFP16, SGW17, YWOD19]. **IMT** [MN10]. **in-core** [AZM14].

in-situ [KY14]. **InAs** [BMNS14]. **incidence** [BMF⁺¹⁹, MPSV15, VDB14].

Including [AB10, EFG⁺¹⁰, DXY⁺¹⁹, PS12, WT12, XGH⁺¹⁹, ZMCT12, dTOV18].

Inclusion [RU12, AMRdA17, TKJ19, UIY11]. **inclusions** [Bot13]. **Inclusive** [DLM18, GLS⁺¹³]. **incomplete** [LHJZ10]. **incompressible** [BLAS19, BCM⁺¹⁶, CC16, DBMR18, EW14a, GZW17, KGFS18, Ki10, Koh15, Kra18b, LOK⁺¹⁸, LH18, LWJV18, NHSY15, RH17, TKJ19, YTYA17, ZBN⁺¹⁹, CRLS18, GRLS18]. **incorporated** [AM14b]. **Incorporating** [KZ11, NLB⁺¹⁹, LYZ13, TKP15, WN10]. **incorporation** [CL11].

independent [EGT⁺¹⁸, Ein16a, HO13, Les16, LLX14a, SMC⁺¹⁷, XQ19, ZKS13, HSD17].

index [ICPD16, SAA⁺¹⁰]. **India** [BPMM14]. **India-based** [BPMM14].

indices [KTA12, SK10]. **Indirect** [BBB⁺¹¹, Ham11]. **individual** [HFOPF15]. **individual-based** [HFOPF15]. **induced** [Gao13a, HYM11, LS17a, San11, SJY18, SJY20, Van15, WL11b, ZLM12].

induction [VMGP⁺¹⁹, YTYA17]. **inelastic** [ASEA14, TVGB15, WFDK19].

inertia [DBP19]. **Inertial**

[JFHA19, HJL⁺14, LHJ⁺15, MJKB18, SKK⁺19, SS11b, RtV16]. **inexact** [RLM13]. **Inference** [dCD19, CRB⁺17, KD16, KRB19]. **Inference-Aware** [dCD19]. **INFERNO** [dCD19]. **INFFTM** [CZ17]. **InfiniCharges** [SGDS16]. **infinite** [SBH⁺12, ZLL13]. **infinitely** [BAF18]. **infinity** [SS10b]. **inflation** [HCC14]. **Influence** [BL14, OML11, ZHCR18]. **Information** [CLKK11, CDL⁺12, EBDM17, Fri14b, HFSK12, LTL⁺12, OG14, OO15a, Sai13, mZfXL15]. **infrared** [Gar19, SC16a]. **infrastructures** [GBS⁺16a, VPMVH⁺17]. **InGaN** [YSN⁺14]. **InGaN/AlGaN** [YSN⁺14]. **Ingólfsson** [BL18a]. **inhomogeneities** [PP13]. **inhomogeneous** [MCM⁺12]. **Initial** [BBRS19, OK12, RSBB14, FBG10, GN14, Jan10, KAS12, LLL12, LW14b, SS13b, SS10b, VSG18, ZX10, vH18]. **initial-boundary-value** [GN14]. **Initial-State** [BBRS19, RSBB14, OK12]. **initialization** [BDBV12]. **initialize** [BMS⁺16, LHG⁺19]. **initio** [APS⁺16, BW16, BKS15, CMM14, CJJ⁺17, DA16, DML⁺16, LOK⁺16, Maż19, MLK⁺17, MLK⁺19, NSH⁺19, QZ19, RH11, SXW⁺18, WJCZ18, WQ18, Wil15, Wit14, WPAV14, ZFBR11, OBH10, TG11]. **ink** [BLV⁺19]. **innovative** [PNL13]. **inpainting** [JTP15]. **Input** [CMSV14, RJW⁺19, Rut18, SOJ14]. **Input-output** [CMSV14]. **inputs** [CSRV13, HLL13, ZKS13]. **Insertion** [Ros16]. **insightful** [SDL⁺16]. **inspired** [DS13c, Fri10, JBKM15, Nut14]. **instabilities** [ML17, PHT⁺19, sX19]. **instability** [CHA11, Dua10, GV15, HZW⁺16, LYX⁺17, LKW11, SCM⁺18, WG12, XYM⁺13, YXD⁺15, YXT⁺15]. **instance** [NB17]. **instructions** [WN19]. **Instructive** [Nem16]. **Instrumentino** [KSH14]. **instruments** [KSH14]. **insulator** [CJH11]. **insulators** [BMZ⁺18, PSP16]. **integer** [HM12c]. **integrability** [ACDdM14]. **Integral** [Smi15, ASEA14, Boy15, CMM14, Dat13, DG10a, GJ13, GHvSF14, KO14a, MUU18, MNV13, ML14, Miu11, Qia10, RGKR17, Smi16, Stu10, WFM14, ZBG⁺16, ZDWM17, ZWLZ17]. **integral-equation** [ML14]. **integrals** [AG12b, AM17, ACDdM14, Bog16, BBH⁺18, BH13, BCH13, BHJ⁺15, BHJ⁺18, CEZ16, CGH⁺11, GBN17, GLZ17, GM17, JH15, JZZ⁺19, Kap12b, KCT15, KK14a, Mey18, Pan15, Pat15, Pat17, PB13, Pra17, RMW13, RZ19, TO10b, WISA11, dDYK⁺18, MN16]. **integrand** [Per14]. **Integrated** [JGC⁺11, NBW16, AKH⁺18, Ano10n, GGI⁺13, GC12, MNL19, RB18]. **integrating** [Bot12, dHV10]. **Integration** [MAIVAH14, AK13a, ABH⁺19, BKV16, BE14, CH19, CCK23, End11, GDB10, GJ18b, Kan14, Kap12a, KD17, MWI⁺19, MF17, NPAD11, Odr11, Pan15, RBB15, SHT18, SS13c, SBL16, WAHL13, Wu10, YWYF09, ZF15]. **integration-by-parts** [Kan14]. **integrations** [Lan13]. **Integrator** [VBC⁺12, BBB⁺19, BHJ⁺19, CEP18, KRK16, PIH11, Tan19, Ume18]. **integrators** [AEKO18, BCT17, Cap13, KV10b, MHWH19, Miy15, MO14, SBPD19, WYSW10, YZWR14]. **Integro** [DSW15b, GJ14, MJB⁺10]. **Integro-Differential** [DSW15b, GJ14, MJB⁺10]. **Intel** [BBS14, Lya15, NBW16, RJKC16, YSMA⁺17]. **intelligent** [LWL12]. **intense** [GH15, JTT11, MiH12, ÓN14, TC11b]. **intense-laser-driven** [MiH12].

intensities

[Dan10a, Dan10b, Dan14, Dan16, Dan17, Dan19, Hei12, ARYT17]. **intensity** [Dan11, MSPD12, SCNJ18]. **intensity-energy** [MSPD12]. **inter** [HB13, KK17, PZL⁺19]. **inter-cycle** [PZL⁺19]. **inter-particle** [KK17]. **inter-polyelectrolyte** [HB13]. **Interacting** [ATW⁺19, Cas12, APC⁺14, CvW12a, CvW12b, Fil14, HL19b, LJSW11, LSR⁺17, LKT⁺16, MBFD12, PFA⁺15, RS12, SSF⁺17, TD17, TKZ18, UKKB19]. **Interaction** [BF16, BM13, BL14, BSC⁺13, CSJ⁺17, CL11, CUL⁺17, DCU⁺19, Gai17, GC12, Gar19, GBD10, GC10, GC13, GC16, GC18, GCK19, HMR⁺19, HRC11, IKS19, ICPD16, KPST15, LB13, MPS13, NS11b, REtVH12, RE12, Sar17a, Sar17b, SS14, SAY⁺18, TJH17, Yan11, ZZ15]. **Interactions** [KC18, BBL⁺13, BCH11, CCGC13, CB16b, Cro16, ERP⁺12, Fil13, FZY17, FN17, Gao13a, GM16, GBJ⁺19, HCSW10, KMO19, KGFS18, KMD12, KM17, Kra17, Kra18a, LSDD14, LH18, dlRJL14, Ots11, PH13, Tan19, TMA⁺15, TRN16, TT11, YLQ⁺17, ZE11, ZE16, ZHPS10]. **Interactive** [KY14, Gio14b, MMC10, TL17, KST⁺14b]. **interatomic** [GD14, LYJH19]. **interchangeable** [ZMvE⁺13]. **interdiffusion** [CHDCJA17]. **interest** [OK10]. **interesting** [MN10]. **Interface** [LZ17, ABB⁺14, Ano10o, BPML12, BB13b, CMM14, CSPAD10, CF16, CCHL11, DNP⁺12, DPW16, EW14b, FLSZ13, GWM13, GLR17, HHP⁺16, KDP⁺14, MZ14, Nov17, PHA18, TM14, Uty14, WMK11, XNK⁺16, XD13, XHD15, zYCG⁺18, ZMvE⁺13]. **interfaced** [Bhj⁺19]. **interfaces** [KRW13, KMJS16, NPM16, PR10, RH11, ZFBR11]. **Interfacial** [HLS⁺17, SPTPR19]. **Interfacing** [MHA⁺12]. **interference** [FNPMB10]. **interior** [HLW16]. **interlaced** [CMdB11]. **intermediate** [CYOS19, vMB14]. **intermediate-representation** [CYOS19]. **intermetallic** [DMC⁺15]. **intermolecular** [KHKR14]. **internal** [BHH⁺10, BBH⁺15]. **International** [BCJ⁺11]. **Internet** [VDJ⁺11]. **Internet-based** [VDJ⁺11]. **interoperability** [GVPJ18]. **interoperating** [CCdC⁺11]. **interparticle** [QLN14]. **interpolated** [FZY13]. **interpolating** [MCV18]. **Interpolation** [HKJ⁺12, KMO19, Cha19, DG10b, GGG16, Jiw15b, PCGM14, RWKS15, Sok13, UNK12, XLL15]. **interpretation** [HLL13]. **Interpreter** [ÜS18]. **intersection** [PC11]. **interval** [Zlo14]. **intramolecular** [VB19]. **intranuclear** [TB14]. **intrinsic** [Dev12, DMC⁺15]. **intrinsically** [CRNK12].

Introducing [BHS15, CXH⁺15, HHS⁺10, LM16, MDGC⁺12, MCAdF14, dHGCS11].

Introduction [IBP⁺15, Bre10, SAC⁺15, TKR13]. **intrusive** [HHM⁺15].

invariant [MDHD18, QwWL⁺15, SMGK19, XYZX19]. **invariants** [ADdM14, DdMN16, FWZ⁺12, Ver16]. **inverse** [Boy15, CL15b, KL11, MW12, MK10, MD10b, WHB16]. **inversely** [KB15a].

inversion [CL15a, GWF⁺16, GCF⁺17, GST15]. **invert** [FZ16, RLM13].

inverter [CL16]. **investigate** [ABH⁺18, KFF⁺16, RDP14]. **investigated** [CSL⁺13]. **Investigating** [ARAB⁺17, BG14a, TKJ19]. **Investigation** [AM14b, CLY11, KK13, MDPTK15, MRVF13, vdS13, EEGW12, MSH11, NS11b]. **inviscid** [LSK⁺13, TFBW14]. **involving**

[Cip13, GC13, Sar17a, Sar17b]. **ion** [BT17b, BB13b, BKN⁺17, CCL18, Gai17, GAB⁺16, JuIAM16, JGC⁺11, KHB14, KMD12, PCR17, PR14, SKK⁺19, SK12, SQS⁺16, SVG10, TXZL15, VS19b]. **ion-ion** [SVG10]. **ion-surface** [Gai17]. **ionic** [GR19]. **IONIS** [Hei12]. **Ionization** [JTT11, BPC12, BH17, Fri12]. **ionospheric** [KST⁺14b]. **ions** [BP12, HH11a, JTT11, KNS⁺17, Lit13, LB11, LB12, MCA17, MFS10b, NNWS15]. **IPEC** [HB13]. **i}QIST** [Hua17]. **IR** [War16]. **IR-improved** [War16]. **irbasis** [CYOS19]. **iron** [ALC18, BPMM14]. **irradiation** [MBRV⁺13, PCR17]. **irregular** [BS15b, RHH12, SSG⁺10, SSG⁺18, VHP⁺15, vdS13]. **ISDEP** [VBC⁺12]. **ISICS** [Cip11, Cip13]. **ISICS2011** [Cip11]. **ISICSoo** [BPC12, BPC13]. **Ising** [LWL11, BVP10, CB15d, IZRT15, KO14b, KO16, LBP15, MH11, NHD16, SMJ17, SLZ16, SW11, SSBS15, WWVB11]. **Ising-type** [SLZ16]. **islanded** [CLH⁺17]. **isobaric** [VK14]. **isochronous** [CWY⁺17]. **isoenergetic** [LBM⁺14]. **Isogeometric** [CdFDS16, LWP⁺17]. **Isolated** [GS17b, BC11]. **isothermal** [BO12, LBM⁺14, PBF⁺16, VK14]. **isothermal-isobaric** [VK14]. **isotope** [EJG⁺19, NGG⁺13]. **isotropic** [Asi10, BMBC⁺17, DRR16, LN16]. **ISPH** [CRLS18, GRLS18, KGFS18]. **issue** [SZY⁺13, ZYL⁺15]. **Issues** [KT12]. **ITER** [FBHB17, SCB⁺19]. **iterated** [Bog16, BB10, FR15]. **iteration** [CM10b, Kom15a, ZX10]. **iterations** [Ano20, KK16a]. **Iterative** [FN17, GB14, Kau13, TC12, BHVMH15, Bis15, DB13, Dua10, GWF⁺16, Hoh18, MCP⁺11, NLSJ17, RC18, SAY⁺18, Sza16, TVZ⁺15, VDB14, ZSW⁺17b, ZLL13, ZCC19, ZWC⁺19]. **ITG** [DXY⁺19, KQYH17]. **itinerant** [IUM13]. **IVPs** [PAS11, PS14]. **Ixaru** [Pat12].

J [BL18a, GBSY18]. **Jacobi** [HLW16, HM18, ZHC16]. **Jacobian** [CGM17, NCS17]. **Jacobian-free** [CGM17]. **jam** [MTS11]. **Jamming** [CB15c]. **Janus** [BJBC⁺14]. **Jarzynski** [ON11]. **JaSTA** [HD17]. **JaSTA-2** [HD17]. **Jastrow** [MBGV15]. **JAVA** [PQTGS17, FLZ⁺18, HCRD14, HD17, JEC⁺12, Mar19, MB12, MCNRC16, Pos19, VSG17, ZXL16, ZZD⁺16]. **Java-based** [MB12]. **Java/Scala** [Pos19]. **Jaynes** [KAvdL11]. **JColloids** [DGPOR18]. **JDiffraction** [PQTGS17]. **Jeans** [BHN⁺16]. **Jet** [LNSD15, BJ14, BBUY13, Gao13a, GLS⁺13, GGGH14, LHH⁺12a, LWJV18, OK12, Wei12]. **JETSPIN** [LPC⁺15]. **JF** [GJHF14]. **Job** [LHL11]. **Johnson** [GSZ13]. **Joint** [GWF⁺16, ATA⁺19, AMJ18, BR13]. **Jones** [FPY⁺17, WN19]. **Jonesium** [MHR⁺13]. **Jong** [BL18a]. **Jonker** [BGHN19]. **JOSEPHINE** [CPR12]. **JOZSO** [BNV18]. **Julia** [GMO19, KPOR18]. **Jülich** [LAA⁺10]. **junctions** [CAGL13, KKS18]. **JuNoLo** [LAA⁺10].

K- [Cip11]. **K-doped** [NS11b]. **Kadomtsev** [LS12a]. **Kalman** [BALV16, LFG14]. **Kalman-filter-based** [LFG14]. **Kansa** [PR13]. **KANTBP** [GCVA14a]. **kappa** [AM14a, COK19]. **KAS** [RPB⁺15]. **KaTie** [vH18]. **KdV** [MWCY14]. **KdV-type** [MWCY14]. **Kepler** [BBS14, MR14]. **Kernel** [ALS16, HWL⁺17, CB15b, GBN17, GBSY18, rJmYT11, LLX14b,

Maz13, Qia10, WC13, XLL15, YE14a]. **kernels**
 [BK12, CLB11, WC15, WWR⁺16]. **Kerov** [JWJL12]. **Kerr** [WN10].
KEWPIE2 [LMAB16]. **key** [CTL15]. **key-node** [CTL15]. **Kh** [Maž19]. **kilo**
 [NBN⁺14]. **kilo-processor** [NBN⁺14]. **kind** [Boy15, Kir10]. **kinematical**
 [WS11a]. **kinematics** [BCH13]. **Kinetic**
 [COK19, JA17, MBRV⁺13, ÁSTT16, ÁSS18, ACCB13, BDBV12, BB13b,
 BENK⁺17, CEP18, CFFR15, DSHS17, EPB⁺16, Evs14, GAGW16, GBSY18,
 HAK⁺14, HMR14, KQYH17, LS14, LS15a, LS15b, Les16, LDF⁺16, NNWS15,
 NDSH18, NM14, PZZL19, QM10, SISW10, SS14, SK12, SKK17, Sza13a,
 VEM12, WG16b, ZWC⁺19, GBSY18, WLZN17, ZCC19]. **Kinetic-j**
 [GBSY18]. **kinetics**
 [BTC⁺17, LCC13, NCS17, RDP14, SAN18, TPC16, ZBMM11]. **KIPP**
 [ZCC19]. **Kira** [MUU18]. **Kirillov** [JWJL12]. **kit** [WZHE18]. **Klauder**
 [Kri12]. **Klein**
 [DG10a, DN13, Eba13, KZC⁺10, LD10a, PTS12, RM10a, SW14c]. **KMC**
 [LS14]. **KMCLib** [LS14, LS15a]. **kmos** [HMR14]. **Knot** [SD10b].
knowledge [CMdB11, ZLLP17, Cho11]. **Knowledge-based** [Cho11].
Knudsen [DS13a]. **Kohn** [KKL⁺18, SCS12, SCB17b, SPSP18, zYCG⁺18].
Kondo [IUM13, YWOD19]. **Kontorova** [AMM11]. **Kontorova-Tomlinson**
 [AMM11]. **Kopelman** [FKH15]. **Korean** [CLKK11, KCL11]. **Kosterlitz**
 [RMC16]. **Krasilnikov** [Maž19]. **Kriging** [RPB⁺15]. **Krylov**
 [HCSW10, BB15, BBF⁺10, BH11, BVSG19, CB15d, CSV⁺18, LHJZ10,
 STK10, SPP19, YJK11, vWB10]. **Kubo** [CKT17]. **Kutta**
 [FG13, KMS14, KAS12, WW10, YZWR14, BM13, CFMR10, DBMR18,
 DIP11, DM17, Ixa12, KZC⁺10, MIW⁺12, MKS10, NS15, WXL13].

L [ADH⁺17, Cip11]. **L-** [Cip11]. **lab** [RBG⁺19, NSXZ14, RBG⁺19]. **labeling**
 [Kom15a]. **laboratory** [DMH16]. **LabVIEW** [CO11, Fer15]. **ladder**
 [ABB⁺16]. **laden** [SYD17]. **lag** [MKS10, NS15]. **Lagrange** [Jiw15b].
Lagrangian [CGG⁺14, Ein16a, FRFH10, GAB⁺16, JFHA19, KV10b, Lan13,
 MIW⁺12, MFH⁺13, iNSK⁺15, Sem16, UNK12]. **Lagrangians** [Deg15].
Laguerre [GST17, Ter17]. **Lamb** [STY15, STY18]. **Lamb-shift**
 [STY15, STY18]. **Lambda** [Eks11]. **Lambert** [Veb12]. **laminar** [EZL⁺16].
LAMMPS
 [CL13, FMRP16, FPY⁺17, LK15, MMSF⁺15, MOD13, NKS15, RU12, Sva12].
Lanczos
 [AKS17, BHT19, MGRB11, MC10, RLM13, SMUT19, TVGB15, JK13].
Landau [Wan10a, BR13, Boe18, CSBO13, CXL19, CND11, PEMS19, SW14b,
 SMJ17, SV13, SA15b, Sin12b, WZ13, WSTP15, YK10, YL12]. **Landau-fluid**
 [CXL19]. **Landau-Transition-Matrix** [BR13]. **Landweber** [KL11]. **Lane**
 [CB13b, KMM13, PDRG10]. **LANFOS** [PCEH15]. **LANFOS-H** [PCEH15].
Langevin [ATW⁺19, Tan19, THDH14]. **Langmuir** [AAJA14]. **Language**
 [ÜS18, SGM18, KST⁺14b]. **LanHEP** [Sem16]. **Laplacian** [NHS14]. **LAPW**
 [FWZ⁺12]. **Large** [BMC⁺11a, DdJC⁺19, DSW⁺15a, HKK11, JAFP14,

JXTS16, KHZ⁺¹⁸, PLD⁺¹³, SXW⁺¹⁸, SOM⁺¹³, SLZ16, TIMM13, BC10, Bis15, BH11, BC19, CB15a, CB17, CB18, Cas12, CF17, CO11, Deu16, DO14b, DML⁺¹⁶, ECD⁺¹⁰, GS15, GHvdL11, GZL14, GMC18, GJLB12, GHdF10, GBS^{+16a}, GAO13b, HLS12, HC16, HLW16, JWCW17, JLW13, JOK13, LKM⁺¹⁶, LRW⁺¹⁵, LCQF18, LSYZ12, LR13, LR16, LOV10, MBS⁺¹⁰, MAM14, MSR⁺¹⁷, MRL19, MCNRC16, NLB⁺¹⁹, PB16, Raw15, RLM13, SI11, SZC⁺¹³, Sha13a, SMUT19, SPSP18, SPP19, Tau10, THDS16, TIM⁺¹⁶, VBG⁺¹⁰, Var16, WDL11, WLZN17, BSW12]. **Large-eddy** [TIMM13, MRL19]. **Large-scale** [BMC^{+11a}, DdJC⁺¹⁹, HKK11, JEF14, KHZ⁺¹⁸, PLD⁺¹³, SXW⁺¹⁸, SLZ16, BC19, CB15a, CB17, CB18, Deu16, DO14b, DML⁺¹⁶, GS15, GHvdL11, GHdF10, GBS^{+16a}, GAO13b, HLS12, JOK13, LCQF18, LR13, LR16, MBS⁺¹⁰, MCNRC16, NLB⁺¹⁹, RLM13, SMUT19, SPSP18, Tau10, THDS16, WDL11, WLZN17]. **Larmor** [XGH⁺¹⁹]. **laser** [BT17a, BEKP19, EZBA16, FZY17, GC12, GH15, HJL⁺¹⁴, IB11, IKS19, JTT11, LJSW11, LV19, LHJ⁺¹⁵, MiH12, MFS^{+10a}, ÓN14, REtVH12, SZM⁺¹⁴, SBE⁺¹⁶, SJY18, SJY20, TC11b, TL19, TT11, ZYZ15, ZZ15, ZLM12]. **laser-atom** [FZY17, TT11]. **laser-driven** [HJL⁺¹⁴]. **laser-induced** [SJY18, SJY20, ZLM12]. **laser-plasma** [REtVH12, TL19]. **lasers** [FYK18]. **latency** [GCC⁺¹⁸]. **later** [DJW⁺¹⁹]. **laterally** [EBCBG17]. **Lattice** [BCJ⁺¹¹, CYN19, CDS^{+13b}, CKCS13, LS13, SCRS17, TD17, dHGCS11, vdS10, AGH⁺¹⁶, BWW19, BBC⁺¹¹, BBB^{+17a}, BHNS17, BB13a, BW12a, BDP16, BO12, CB13a, CAN11, CS16, CZ19, CBB⁺¹⁰, CRA10, CND11, DCU⁺¹⁹, DE13, EPS15, FD13, Fri14a, FKH15, GM18, HLS⁺¹⁷, HFOPF15, HMR14, HCH16, HLTW19, HbotRC15, IUM13, JLA⁺¹⁴, JK14, JEF14, KP12a, KYM⁺¹⁷, KÓG17, KK14b, KAvdL11, KLO⁺¹⁹, KdMvO14, Law19, LKL11, Lee18, LS14, LQZ⁺¹³, LCL⁺¹¹, MHH11, MDW16, MOD13, MR14, MRZ10, Maz13, MGS13, NIK^{+12a}, Ots11, RV10, Sai10, STK10, STA18, SD15, Sch14a, SV13, SLZ16, Sin12b, SH16, TKS10, TS19, UA17, WLG⁺¹³, Wan16, WLU11, XLCW14, ZKG⁺¹⁸, BLPP13, BCS10, GTSL⁺¹³, MWL⁺¹⁰, SSF⁺¹⁷, vdS13, vdSM16]. **lattice-Boltzmann** [CRA10, FKH15, MOD13, Maz13, TS19, SSF⁺¹⁷]. **lattice-Boltzmann/finite** [CRA10]. **lattice-switch** [UA17]. **lattices** [BG11, CCW10, FLP10, HML11, LCCC11, MKV11, SÓÓN11]. **launched** [sLqSqL⁺¹³]. **Laura** [BGH⁺¹⁸]. **Laurent** [Per14]. **Lauricella** [BK16b]. **law** [JAS17, SB11, UW12, WCT11]. **laws** [AAD14, DJ11, MWCY14, SW12b]. **Lax** [MWCY14]. **Layer** [LV15, GGI⁺¹³, GLW14, JHL⁺¹⁵, Ras09, Ras17, SVV19, WTH15]. **layered** [Bot12, CZF18, CL15b, DV11, LF12, MPSV15, PP13, SVGS18, VCD16]. **LayerOptics** [VCD16]. **layers** [CBB14]. **LB3D** [SSF⁺¹⁷]. **LDA** [PGD17, SW13a]. **LDA-1** [PGD17]. **LDA-1/2** [PGD17]. **leading** [GLPQ11]. **leagues** [dSVLP13]. **leap** [HP14]. **leap-frog** [HP14]. **leaping** [AZM14]. **learning** [BG19a, BSW12, CSP⁺¹⁹, HJE⁺¹⁹, KP16, Law19, WZHE18, YZZ⁺¹⁷]. **Least** [Ber16a, Ber16b, LSCZ11, Liu13, AG12a, DSPJ10, Gor19, Kra11,

LWW10, Wan10b]. **least-square** [DSPJ10]. **least-squares** [AG12a, Kra11]. **left** [REBS16]. **left-right** [REBS16]. **legacy** [BCG⁺15]. **Legendre** [MSR10, MS15, SSG⁺10, SSG⁺18, SPS10]. **Lemon** [DRUE12]. **length** [KMS19, SBB⁺17, UIY11]. **Lennard** [FPY⁺17, MHR⁺13, WN19]. **Lennard-Jones** [FPY⁺17, WN19]. **Lennard-Jonesium** [MHR⁺13]. **LEOrbit** [MPS13]. **LEP** [BBH⁺10, BBH⁺11a]. **lepton** [CGV13, CPWZ18, DSS⁺19, Mur14]. **leptons** [KFS⁺13]. **less** [Ber16a, Ber16b, Pos18]. **Level** [Ano19m, Ki10, NHSY15, ACD⁺14b, BR14, BKS15, Fen12b, FE11, FEH11, FHA17, FN17, HEF12, HZW⁺19, KN13, LW14a, LCQF18, LY16, MNPY14, OK10, SHZ13, WL11b, XHLM12, XLX⁺15, YS17, ZHC16, vH18, IBP⁺15, MFG⁺13]. **level-of-detail** [OK10]. **Level-Set** [NHSY15, FHA17]. **level/high** [MVS15]. **levels** [AKV18, GCVA14a, Kra11, TRM⁺12, ZW15]. **LEVIS** [PCGM14]. **Levy** [YZZ⁺17]. **LHC** [Ano19m, BDDM18, CUL⁺17, DDK⁺15, KSTR15, QGLP13]. **libCreme** [RLL12]. **LIBERI** [TO10b]. **libraries** [BV13, GAC⁺17, dALM⁺12]. **Library** [TO10b, Asl14, BS11, BS13a, BS14a, BDJS18, BCPS11, BCR14, BBB⁺19, BMS⁺16, BFD⁺11, COK19, CECGS16, ÇÖSÜ11, Cri18, CGH⁺11, CKJR11, DBD⁺17, DDH17, DRUE12, DLW⁺18, Ein16b, GGI⁺13, GP13, GVPJ18, Gri11, GHvSF14, GBS16b, HAV⁺14, HM12a, HvAS⁺13, Ike18, ID18, JCL10, KvdO11, KPV16, LS16, MW12, MOB12, MD11b, MCAdF14, MV11, MRL19, MG10b, Mü11b, Mü14b, MGR16, NGCI⁺12, PQTGS17, Pos19, RDC⁺18, RLL12, Sai13, Sch18, SWS⁺12, SPAW17, SJHS19, TM14, TK19, WEH⁺19, ZE11, ZE16]. **LibreGrowth** [LRSS19]. **Libxc** [MOB12]. **lidar** [SSP16]. **Lie** [ACDdM19, FK15, HR11, JC14, Naz12]. **LieART** [FK15]. **life** [GMH11]. **lifted** [XWF18]. **ligands** [PDC14]. **Light** [NSH⁺19, SKML11, BF16, CKLM10, EW14b, EW16, HHT14, KOT12, LN16, TMD11, WL11b, ZSW⁺17a, Zió14]. **Light-Matter** [NSH⁺19]. **light-wave** [BF16]. **lightest** [DML⁺16]. **lights** [SJW10]. **like** [BP12, Fri17, HSD17, HH11a, LBM⁺14, LB11, LB12, MFS10b, NVW⁺13, PLCC12, SQA⁺15, WJCZ18, XLL15, ZRS12]. **LikeDM** [HTY17]. **Likelihood** [HTY17]. **LIMAO** [SJY20, SJY18]. **LIME** [DRUE12]. **limit** [CM14a, CEF16, DDK⁺17, HLM17, MMO⁺17]. **limitations** [CSV⁺18]. **Limited** [BR11, CH11b, KdMvO14]. **limiter** [AAD14, KGG⁺16]. **Limits** [BCTP18, LCRL10, BBB⁺18]. **line** [MKMK10, Ruf13, SCM⁺16, Zlo13]. **Linear** [AG12a, BMU11, MW12, OOK⁺12, YÇÖ15, AS11b, ABF19, BMC⁺11a, BMC⁺11b, BCT17, BGHN19, CFSK14, FUSH14, FVH18, FR15, GBP13, Gor19, GCHL15, HDF⁺19, HRC11, HHS⁺10, Jan10, JYPA18, JWCW17, Kan14, Kap12a, Kap12b, KBB⁺17, KBSP19, MJB⁺10, MBGV15, PHT⁺19, PR14, RWKS15, SK12, SLEF17, SS10b, SPP19, SJY18, SJY20, TC11a, VBS⁺17, VDA⁺19, XYZX19, YZ19]. **linear-** [SJY18, SJY20]. **linear-scaling** [FUSH14, FVH18, KBB⁺17, RWKS15]. **linearization** [CLF18, MBFB13]. **Linearized** [KOK17, AM14b, CSPAD10, DKSG16, GBSY18, IH11, KAW⁺10, ILsSZ14, PBMA12]. **linearly** [ÁSTT16]. **lines**

[AKV18, McM17, SVGS18]. **link** [SK10]. **linked**
 [LYJY10, TKR13, WG11, MRZ10]. **linked-cell** [LYJY10]. **linked-cluster**
 [TKR13]. **LINPRO** [MW12]. **Linux** [GBC⁺18]. **Liouville**
 [LV10, MGRB11, TVGB15]. **Liouvillian** [ADdM12a, ACDdM14]. **lipid**
 [FPY⁺17]. **liquid**
 [FBP⁺14, JHH⁺19, LHG⁺19, MSH11, Sin12b, SA14, TW11, WJCZ18].
liquid-like [WJCZ18]. **LiquidLib** [WJCZ18]. **liquids** [WJCZ18]. **List**
 [Ano10a, Ano11b, Ano12a, Ano13a, Ano15a, Ano16a, MRZ10, HAN⁺16,
 KHN19, LYJY10, ZZHG18]. **Lists** [KKK⁺17, ABRS12, WRR18]. **LiteRed**
 [SS13c]. **Liviu** [Pat12]. **LNL** [MRZ10]. **load** [BS15b, EZBA16, EDPZ19,
 ER19, FRG12, FN17, GMF⁺17, JFHA19, OCF10, SKSK13]. **load-balanced**
 [EZBA16, OCF10]. **load-balancing** [BS15b, FN17]. **loaded** [Pra11]. **Local**
 [CWJ19, CHDF10, LWZ14, PR12, WHG⁺19, AMJ18, ABH⁺19, DG10b,
 DKG⁺14, GWL⁺17, GTK⁺19a, KTB17, KL14, LYX⁺17, LJWK11, LKT⁺16,
 MS14, NKS15, QWZW18, TKJ19, VPP⁺12, Wit14, XWF18, YXT⁺15].
localised [MYP⁺14, SPM11]. **Localization** [dSFdFF13, HW11, OCM⁺19].
localization-delocalization [HW11]. **localized**
 [BAF18, KAW⁺10, NGM⁺10, PVK⁺14a, PVK⁺14b, PMVG16, RCGT16].
locally [CZD15, LLP15, RC18, ELL⁺17a]. **location** [CS17, PP13]. **Loewner**
 [SW11]. **logarithmic** [PPY14]. **LONE** [CB16a]. **Long**
 [DV11, Boe14, BAF18, BENK⁺17, CHZ18, DS11b, ERPDFLS15, Fil13, Fil14,
 HL19a, HM17, Sza16, iT11, WWVB11]. **long-range**
 [Boe14, Fil14, HM17, iT11]. **Long-time** [DV11, BENK⁺17, CHZ18].
long-wave [DS11b]. **longitudinal** [KB15a, Qia17]. **look** [JLA⁺14]. **lookup**
 [CXG⁺19]. **Loop** [ADH⁺17, DLU18, ABB⁺16, ABB⁺14, AMRdA17, Ano10o,
 BBU11, BGM⁺14, BWWM19, BBH⁺18, BDGG19, BH13, BCH13, BHJ⁺15,
 CEZ16, CGH⁺11, DDH17, DNPS13, Fen12b, FEH11, GLZ17, HEF12,
 KKS18, LS17b, MCWJ15, Mey18, Pat15, Pat17, Per14, Pik18, Sta11,
 TMS19, YdDH⁺12, dDYK⁺18, vH11]. **loop-corrected** [BGM⁺14].
Loopedia [BBH⁺18]. **Loophole** [DMH16]. **Loophole-free** [DMH16]. **loops**
 [AHK⁺12, ACD⁺14a, BCS10, Pre18]. **LOPT** [Kra11]. **Lorentz**
 [CdFDS16, LV19, LL19, MFS⁺10a, Ume18, Ume19]. **Lorentz-boosted**
 [LV19]. **Lorenz** [BDT15]. **loss** [Hoh14b, Lit13, TVGB15]. **losses** [Eme11].
lossless [HLW16, TMD11]. **lossy** [WWHW14]. **Low** [BK12, KGNS10,
 LCY⁺11, AGH⁺16, BDBV12, BT17b, Fu19a, GCC⁺18, HYM11, Kol15,
 LO14, MSPD12, MCP⁺11, NRSVW12, PTMDPK14, RF16, RHC15, TSIM16,
 TKJ19, TIM⁺16, VSG18, Wei12, Zlo14, vRWS14, BH14b, MPS13, MNPF17].
low-amplitude [BT17b]. **low-density** [HYM11]. **low-dimensional**
 [vRWS14]. **low-dissipation** [Fu19a]. **low-dissipative** [TKJ19]. **Low-energy**
 [LCY⁺11, MSPD12, NRSVW12, BH14b]. **low-frequency**
 [MCP⁺11, TSIM16]. **low-latency** [GCC⁺18]. **low-mass** [PTMDPK14].
low-noise [BDBV12]. **low-order** [AGH⁺16]. **Low-rank** [BK12].
Low-temperature [KGNS10]. **lower** [RTT⁺18].
lower-hybrid-wave-driven [RTT⁺18]. **lowest** [Kol14]. **LS** [NCB18].

LS-STAG [NCB18]. **LSQR** [Wan10b]. **LU** [San15, WM13, ZSW⁺17b].
Lugovskoy [Maž19]. **luminescence** [PVH⁺17, Str15]. **Lyapunov** [MH18].
M [CF16, Maž19, Pre18, Cip11]. **M-file** [CF16]. **M-file/Mif** [CF16].
M-shell [Cip11]. **M.** [MLK⁺19]. **M2L** [TSIM16]. **M3** [Cip13]. **M3D** [BF10].
Ma [San15]. **machine**
 [BG19a, BSW12, CFW17, CSP⁺19, JCW⁺13, KP16, Law19]. **machines**
 [NOR15, SSS⁺11]. **Maclaurin** [SBvD13]. **macromolecular**
 [CRNK12, Gio14a]. **macroscopic** [BS12]. **MadAnalysis** [CFS13]. **made**
 [YZY10]. **MadGraph** [ADF⁺15]. **Madland** [Rom15]. **MAGE** [CF16].
Magic [MNL19]. **Magnetic**
 [MHHL11, VCMS⁺13, BDK11, BUJ15, BMW14, CLHL19, CHW⁺15, CFW17,
 CZL⁺11, CHZ18, DXY⁺19, DOP17, DA16, Dua12, HSD17, HEF⁺11, KB15a,
 KOT12, Ki10, LLQX19, LFG14, LZ17, LR13, LR16, MDW16, MJB⁺10,
 MEG12, PBE14, PCGM14, RS12, SEW12, SW14a, SEW14, SW14b, SBPD19,
 SZM⁺14, SHNM11, Tau10, TG11, VPM12, YTYA17, YJK11]. **magnetically**
 [Ram12, SCM⁺16]. **magnetisation** [ALC18]. **magnetised** [AM19].
magnetization [CZGC19]. **magnetized** [BOPL17, BEKP19, CFF19,
 LJD⁺19, LDF⁺16, MF17, MCM⁺12, MMA15, Ram10, sX14, Yan09].
Magneto [LKW11, CCL15, KAH18, OCL⁺13]. **Magneto-hydrodynamic**
 [LKW11]. **magneto-optical** [CCL15, OCL⁺13]. **magneto-optics** [KAH18].
magnetocrystalline [QZ19]. **magnetogasdynamics** [Yua19].
magnetohydrodynamic
 [MKL17, SNB11, TYH⁺15, WWFT11, WAW14, WWM14, YTYA17, ZD15].
magnetohydrodynamics
 [CGM17, Ein16b, QM10, QA13a, WFZG19, dlRM18].
magnetohydrodynamics-based [WFZG19]. **magneto-resistance** [Dua12].
magnetospheric [LYP14]. **magnetostatic** [CCHL11].
magnetostatic/electrostatic [CCHL11]. **Magnetotransport**
 [TTG11, GTG⁺11]. **magnets** [Rei11, Rei12, TMS19]. **Magnus**
 [AEKO18, BCT17, IKS19]. **MAGPACK** [RRCSCJ10]. **major** [HFSK12].
Making [Hoh18, LPBH11]. **MaMiCo** [NFA⁺16, NB17]. **MaMR** [JTW⁺17].
manage [GHdF10]. **management**
 [AABC⁺13, AZM14, Kro16, SBL16, TdAdSS11]. **Manager** [LHL11].
ManeParse [CGO17]. **manifest** [REBS16]. **manifolds** [CB18, DS13c].
manipulating [Hir15]. **manipulation** [BD10]. **Manna** [CCWL11]. **Manual**
 [DIR⁺19, AKK⁺18, BBG⁺13]. **Many**
 [BRH⁺16, GBJ⁺13, GBJ⁺15, GBJ⁺19, RB18, ADT⁺19, BBC⁺13b, FCVH17,
 FLW17, GBJ⁺10, GBJ⁺12, GBFJ14, HLZ⁺13, JWC18, JWM⁺18, JOK13,
 JDG12, KPST15, KHN19, Men11, MMY⁺19, Müll14c, PMMW15, PBS⁺17,
 RJKC16, WZHE18, ZC12, ZBN⁺19, NBW16]. **Many-Body**
 [GBJ⁺13, GBJ⁺15, GBJ⁺19, BRH⁺16, ADT⁺19, BBC⁺13b, FCVH17,
 GBJ⁺10, GBJ⁺12, GBFJ14, HLZ⁺13, JWC18, JWM⁺18, JOK13, JDG12,
 KPST15, KHN19, PMMW15, WZHE18, ZC12]. **many-core** [RJKC16].

Many-integrated [RB18]. **many-particle** [FLW17, Men11, Müll14c, PBS⁺17]. **many-variable** [MMY⁺19]. **manycore** [HdM16, HWCdM19]. **map** [RMC16, SCM⁺16, TRM⁺12]. **MAPLE** [GLHR19, ADdM12a, ADdM14, CDdM14, FF11, MWCY14, SD10a, VJC12]. **mapped** [LL15]. **Mapping** [GBK⁺12, ADdM16b, BAR12b, CDdM14]. **mappings** [Str15]. **MapReduce** [JTW⁺17, TOB⁺14]. **maps** [AKK⁺18, ES11]. **Marangoni** [GLW14]. **marching** [ZY19a, MGO13]. **marker** [DF14]. **market** [CLKK11, KCL11]. **Markov** [EBDM17, KSW15, LN16]. **Markovian** [CF17, JPSS10, JMG⁺17, ZF15, dSVLP13]. **marriage** [WCT11]. **Marrink** [BL18a]. **Martini** [BL18a, dJBIM16]. **mass** [AHK⁺12, ABF19, BBC⁺11, BG19a, BO12, CWY⁺17, CGV13, CKCS13, CZ19, DBP19, HKZN17, HP17, HHC16, LS13, NGCI⁺12, PTMDPK14, Sal16, SVG10, SAE⁺16, ZY19b, Ros16]. **mass-preserving** [Sal16]. **mass-transfer** [NGCI⁺12]. **masses** [AKH12, AMRdA17, BGM⁺14, BBC⁺11, CGH⁺11, SS12, YdDH⁺12].

Massive [BH13, Tan19, WAHL13, ABB⁺16, BBF⁺13, BDGG19, OLG⁺16, Pik18].

massive-particle [BDGG19]. **Massively** [BPB⁺17, BHS18, BVSG19, DBDP12, DN18, DJW⁺19, GJB11, GZWJ18, KHBS19, KBB⁺17, Sus17b, SSM⁺17, YL12, CSK⁺19, DSS⁺12, ER19, GRLS18, HPN18, HBH⁺17, KVV19, KÓG17, KHZ⁺18, LS12b, NPAG11, Ngu17, ORS⁺14, WSH⁺12, WC15]. **massively-parallel** [NPAG11].

massless [BBUY13, CKCS13, GBJ⁺15]. **MassToMI** [Ros16]. **master** [GM17, GTG⁺11, Mey18, Pra17]. **Matched** [LV15, SVV19]. **matching** [BJ14, KPV16, OK12, OK18, SGM11a, SGM11b]. **MatchingTools** [Cri18].

Material [CLH⁺17, KC18, ASPDL⁺16, BSWC14, Buc19, FM15, JTW⁺17, Pra11, San11, SNG⁺11, SC16b]. **Materials** [MCY⁺16, APS⁺16, CVK⁺17, CTL15, DSS⁺12, ELL⁺17a, GTPWL12, JVR12, KAR⁺15, LOK⁺16, LSG⁺12, MHV17, NVAFO18, PLD15, Ram12, Ram14, SM19, Sol11, TKP12, VCD16, WWHW14, WCL14, WGVPL17, WZS⁺18, ZLLP17, ZZD15, ZZ17b].

maternal [ZBMM11]. **MathemaTB** [Jac19]. **MATHEMATICA** [BKM14, AC13, AC15, AC18, Aza13, BK13b, BKK13, BK15, BK16b, CGO17, CMS17, Dep17, Eks11, FRW17, FMRP16, FK15, Fen12a, Fen16, GLMG12, HHP⁺14, Jac19, LR18a, LR18b, MZ14, Mis12, Mis13, Naz12, Nov17, Nut14, Pat15, Pat17, Pre18, Ros16, SBQ14, Sta19, TJD11, Tab16, TM14, Tos10, WL11a, Wie15, XMLC16, Zit11]. **Mathematica-based** [BKK13, BK15, BK16b]. **Mathematical** [TN11, CD15]. **Mathematica(R)** [SÜ18]. **Mathematics** [CB18, TN11]. **MathLink** [Hah12]. **MathQCDSR** [WL11a]. **Matlab** [RC16, CR13, CZ17, Dat13, RDP14, SZM⁺14, UW12, ZSW⁺17a, AD14, AD15, Asi10, Bal19, Cap13, CATK11, CF16, HT12, Hoh14a, NSXZ14, OAKS11, RC13, SL17, SH18, TACA15, VPM16, VK16].

Matlab-based [RC16, SZM⁺14, UW12, Cap13, OAKS11, RC13]. **matrices** [BH11, CDMCN11, GSMK17, GBRB11, GCVA14a, Hoh18, HM18, JK13,

LW13, DPHB17, NCHN15, NLSJ17, PB16, TC12, dIHV12]. **Matrix** [BK11b, DBK⁺14, JWC18, ZLL18, ABB⁺16, ACMM19, ART17, APV10, AC13, BG19b, Bot12, CNMC10a, CLJ12, CPWZ18, CK12, DN18, Des16, GZL14, GJ18a, HCRD14, HD17, IH11, JZJ18, KK16b, KH12, Lee18, Lev19, LJB⁺16, MiH12, MGK13, Mil16, MSRL10, NBN⁺14, NPM16, PO14, QJF16, Ram12, RGH10, Sai13, Sar17a, Sar17b, SDS15, Sha13b, Sha16, SD10a, SAS11, SDL⁺16, TK14b, UFKB19, USOA13, VvAV⁺11b, VvAV⁺11a, WPAV14, WWR⁺16, BD12, BR13]. **matrix-element** [Sha16]. **matrix-exponential** [Ram12]. **matrix-free** [KH12]. **Matter** [NSH⁺19, AMR19, BBB⁺11, BBPS14, BBPS15, BHN⁺16, CCM12, FTI18, GT19, HBL⁺13, HTY17, HCM19, IKS19, Jab17, LRC⁺11, MKB⁺11, ONS⁺15, SBH⁺14, WJCZ18]. **maximal** [Maz13]. **maximally** [KAW⁺10, MYP⁺14, NGM⁺10, PVK⁺14a, PVK⁺14b, PMVG16, SV13, SPMM11]. **maximally-localised** [MYP⁺14, SPMM11]. **maximally-localized** [PVK⁺14a, PVK⁺14b]. **maximum** [LLG17]. **Maxis** [LJZ⁺18]. **Maxwell** [BSK⁺18, BB13b, CSJ⁺17, CKK⁺13, CEF16, Dem13, FE11, HLLH16, KVV19, KO14a, LV15, LLP15, LYX⁺17, SCLW16, VV16, VV18, YXT⁺15]. **Maździarz** [MLK⁺19]. **MBE** [AH13]. **MBPT** [KPST15]. **MC** [FK12, JOR⁺12, SM19, DGPW11, LRC⁺11, WS11b]. **MC-TESTER** [DGPW11]. **MCC** [SBL16]. **McCormack** [Sza13a]. **MCdevelop** [SJ11]. **MCgrid** [BHS15, DHS14]. **MCMC** [BG13b, BLG14, Bon15, Bon16, VPMVH⁺17]. **MCNP** [Car10a, Car10b]. **MCNP5** [SMCB⁺15]. **MCNPX** [LL15]. **MCPL** [KKK⁺17]. **MCS** [LLE⁺18, YLL⁺19]. **mcsanc** [BS13b]. **mcsanc-v1.01** [BS13b]. **MD** [FMRP16, HBH⁺17, TCCV18]. **mdFoam** [LBR⁺18]. **MDMC** [BG14a]. **MEAM** [DFM⁺15, Duf16]. **MEAMfit** [DFM⁺15, Duf16]. **Mean** [LS15b, BG11, DPB16, DBP19, EPB⁺16, GTK⁺19a, NPVR14, QJF16, UW12, WHG⁺19, dB14]. **mean-field** [BG11, DPB16, DBP19, GTK⁺19a, NPVR14, QJF16, dB14]. **mean-square** [UW12]. **means** [ACMM10, DAW⁺19, dASJC⁺19]. **measure** [ABC14, LLX14a]. **measured** [Kon11, Sco13]. **measurement** [AK13b, BJM15, CDSG11, LLQX19, PR13, RBG⁺19]. **measurements** [EBDM17, ERPDFLS15, FBHB17, RF10, RBG⁺19, SW12b, WLM14]. **measures** [HLL13, RLL12]. **measuring** [ICPD16]. **Mechanical** [Voy13, AMM11, AYDY11, DGMZ15, LV13, RC11, SZ15, Sin11, Sin12a]. **Mechanics** [LSJ13, JZJ18, KV10a, OML11, ORCR17, PGO17, RK11, RU12, STT11, SÜ18, ZF15]. **Mechanism** [GAGW16, BUJ15, BNAB11, CHDF10, CGV13, ÇÖSÜ11, JHJG14, YZZ⁺17]. **mechanisms** [CFFR15, GAGW16]. **Mechanistic** [ORS⁺14]. **media** [BJ11, CNS⁺18, EZBA16, FKS⁺19, HZW⁺19, HSF⁺15, JA17, MPM14, MAIVAH14, OP12, RNdB19, SVGS18, SGNL17, Ser10, TMD11, Zió14, vMB14]. **mediated** [HLS12]. **medium** [IB11, PP13, SM14]. **Meep** [ORI⁺10]. **MEKS** [GLS⁺13]. **melting** [YK18]. **melts** [Krö19]. **membrane** [CZN14, FPY⁺17]. **membranes** [PDC14]. **memetic** [VHP⁺15]. **Memory** [MR14, BKS15,

CL15b, CSV⁺¹⁸, DGMZ15, DKG⁺¹⁴, IW15, LP15, LL15, LRSS19, MD11a, NS11b, NFS15, OLG⁺¹⁶, TE18, WMRR17, WRMR19, ZWC⁺¹⁹. **memory-mapped** [LL15]. **MEMPSODE** [VPP⁺¹², VHP⁺¹⁵]. **Mercedes** [HDM⁺¹², SBPN15]. **merge** [PMMF15]. **merging** [LTP16, VGM⁺¹⁵, XLX13]. **MESA** [GWM13]. **MESAFace** [GWM13]. **Mesh** [HS14a, ACMM19, AWK⁺¹⁶, BCH11, BKPT12, EGT⁺¹⁸, FXZ⁺¹⁴, GX15, HCC14, ILZ⁺¹⁹, JG16, JFC12, JCL⁺¹⁸, KC14, KYKN15a, KYKN15b, LJWK11, LH18, LWRQ16, McM17, PZZL19, RHBH15a, RHBH15b, UBRT10, VLM11, ZD15, CZF18]. **mesh-free** [JCL⁺¹⁸, McM17]. **meshes** [ASGLK10, AK15, FXZ⁺¹⁴, LA13, OCM⁺¹⁹, SP18b, YWX11]. **meshing** [ZPH⁺¹⁵]. **meshless** [DG10b, MM12, QLN14, SW14c, SD10b, XLL15]. **meson** [BBC⁺¹¹, CWW15, YWW13]. **mesoscale** [HPN18, WSH⁺¹⁴]. **Mesosopic** [SS11c, BLV⁺¹⁹, WJHW14]. **message** [TSTT13]. **message-passing** [TSTT13]. **messages** [BABC19]. **meta** [GSZ13]. **meta-GGA** [GSZ13]. **Metadata** [RSSH⁺¹⁰]. **Metadyn** [HS16]. **metadynamics** [BPML12, HS16]. **METAGUI** [BPML12, GLR17]. **metaheuristic** [CNMC10b]. **metaheuristics** [dASJC⁺¹⁹]. **metal** [FSJ⁺¹⁶, HBH⁺¹⁷]. **metallic** [HKF⁺¹², HLW16, LLHC11, ZHCR18, ZLLP17]. **metals** [BT17a, KOK17, PSP16]. **metamagnetic** [dSFdFF13]. **metamaterial** [LL19]. **metamaterials** [RHW⁺¹²]. **Metamodelling** [ZKS13]. **metaphor** [DMH16]. **metastability** [FDWC12, JHJG14]. **metastable** [BVC13, ES16, HL19a]. **METATOY** [LHC⁺¹²]. **METHES** [RF16]. **Method** [BUJ15, EW16, GHBL18, Les16, RNdB19, TGH⁺¹⁶, ZLL18, AM14a, AM14b, ARYT17, AS11b, ADdM16b, ASS13, ABDR17, AG12a, ACDdM19, AAJA14, BOPL17, BBL⁺¹³, BM13, BF16, BBB^{+17a}, BK11a, BH14b, BH16, BW12b, BR14, BHT19, BT17b, BL18b, Bis15, BH11, BMW14, BCM⁺¹⁶, BMNS14, BPMS16, BIT12, BHND16, BENK⁺¹⁷, CZ18a, CL15a, CB13b, CKSM⁺¹⁹, CAN11, CSPAD10, CZS10, CL10, CLJ12, CW13, CTL15, CW16, CS17, CSL⁺¹³, CKK⁺¹³, CB15d, CvW12a, CvW12b, Cor14, Cou13a, Cou13b, CNS⁺¹⁴, DZ15, DEMM19, DT10, DG10b, DT11a, DM17, Den10, DKSG16, DCU⁺¹⁹, DA16, DMC10, DCGG13, DBLF16, DFM⁺¹⁵, Duf16, DO14a, DO14b, EBCB⁺¹⁴, ELDS14, EKK14, EFK⁺¹⁹, FGGM11, FS17, Fen12b, FK12, FNPMB10, FBN⁺¹³, FPY⁺¹⁷, Fu19a, FJ19, FKS⁺¹⁹, FN17, GC12, GZL14, GML15, GBP13, GA15, GA10, GZZ19, GGG⁺¹⁹]. **method** [GCH⁺¹⁸, GYW⁺¹⁰, GB17, GMHZ19, HE13, HV15, Ham11, HC16, HLLH16, HKPF19, HSD17, HKvH16, HDZ14, HJGL18, HJGL19, HHC⁺¹⁰, HWW12, HLW16, HM18, IH11, Ixa10, Ixa12, Jal10, Jan10, JK14, JK19, JFHA19, JWCW17, JLM18, rJmYT11, JOR⁺¹², JGAL⁺¹³, JLW13, JCL⁺¹⁸, JPM12, JK13, JU17, KMS14, KK13, KU10, Kap12a, Kap12b, KCN18, KKG⁺¹⁵, KGFS18, Ki10, KL17, KO14a, KL11, KN13, Koh15, KDM11, KA17, KV19, KAS12, KPST15, Kra10, KZ14, KH19, KMJS16, KR14, KSW12, KOK17, KSY17, LOL⁺¹⁸, LLHC11, LM19, LLQX19, LX12, LM16, LLG17, LHJZ10, LSCZ11, LCCC11, LHC⁺¹³, LST15, LLMW17, LCQF18, LJWK11, LHH^{+12b},

Lin13, LSK⁺¹³, LTP⁺¹⁷, Liu11, Liu13, LLZ⁺¹⁷, LOK⁺¹⁸, LJD⁺¹⁹, LLX14a, MCWJ15, MD11a, MDHD18, MiH12, MIW⁺¹², MRL18, MST⁺¹⁸, MSPD12, MRZ10, MC12, MH18, MBFB13, MK10, MNPF17, MMY⁺¹⁹, MM10].

method

[MM12, MFG⁺¹³, MSR⁺¹⁷, MBGV15, MBFD12, NDSH18, NPM16, NHSY15, NZQL14, NCB18, NS15, NAQ16, Nis11, NMS14, OYK⁺¹⁴, OPO⁺¹¹, OPSR13, OPR14, ORI⁺¹⁰, OT11, PHA18, PSBT12, PAS11, PS14, PDRG10, PR13, PBMAD12, PEMS19, PGD17, Pit12, PS11, PSP16, PB16, QM10, QYM11, QA13a, QWZW18, QDZ⁺¹³, Qia10, QwWL⁺¹⁵, QLN14, Ram10, RVA14, RCGT16, Ras09, Ras17, Raw15, Raw16, RVDS16, RLS16, RDVS18, RMS⁺¹², RH17, RTA10, Sal16, San15, SW13a, Sch14a, SEW12, SEW14, SW14b, SSF⁺¹⁷, SNB11, SCS12, SDS15, SD14, Ser10, SW14c, SMUT19, SD10b, SS13b, SA15b, Sie16, SMdONF14, SHL⁺¹¹, SBvD13, SS10b, SCG11, SDL⁺¹⁶, SKSK13, SL14, SPSP18, SPP19, Sza13b, Sza13a, Sza16, TSIM16, TD14, TZM17, TT14, TFBW14, TC11b, TKP15, TY10, Tia11, TT11, TW15].

method

[TKZ18, TDL⁺¹⁴, UO15b, UO15a, UFKB19, VdLF14, VK14, Wan10a, WX11, WLZM12, WZ13, WM13, WX14, WLG18, WN10, Wil19, WP10b, XHLUF⁺¹⁸, XWF18, XZ12, XLL15, XLX⁺¹⁵, XD16, XGH⁺¹⁹, Yam16, YLO13, YBNY13, YS17, YTYA17, YQM12, YQM14, ZAHA10, ZFH14, ZHPS10, ZOZ13, ZSW^{+17b}, ZWLZ17, ZKG⁺¹⁸, ZXZ⁺¹⁹, ZX10, ZS13, ZC12, ZST11, dASJC⁺¹⁹, vdSM16, CC10b, CC12, EW14b, EEGW12, SVGS18].

Method- [Les16]. **Methods**

[EVB14, EBCBG17, PVK⁺¹⁷, ARAB⁺¹⁷, ACCB13, ABB13, ABCM14, AH13, ABH⁺¹⁹, ADdM15, BCH11, BWWM19, BB15, BH17, Bla15, BBF⁺¹⁰, BB10, CFMR10, CDBM16, CH19, CYSL12, CS10, Col14, CHZ18, DIP11, DMP18, DN13, DF11a, DLW⁺¹⁸, FLW10, FMW10, FHTO17, FG13, FGR14, Fri14a, GBN17, GSKM14, GSKM15, GTK^{+19b}, HVP⁺¹⁹, JLA⁺¹⁴, Jiw15b, KFS17, KKL⁺¹⁸, LMRC15, LD10a, LV10, LWYW11, LLP15, LW14b, LHGF18, LY16, LAG⁺¹⁷, LL12, MCP⁺¹¹, MCGR11, MKS10, MM11, DPHB17, PMMW15, PMMF15, RL10, RHH12, SZ15, SVV19, SEGP15, SW12a, SW13b, SO19, SC16b, SBH⁺¹², SS18, SAN18, SPP19, TBZ12, TE18, TVT⁺¹⁶, TXZL15, WC10, WXL13, WWC⁺¹⁶, WLH⁺¹², WYH19, Wu10, WW10, WT15, XJS16, XHLM12, YZ16, YWYF09, YZZ11, YWX11, YJK11, ZW15, ZTG13, ZTG14].

metric [WN10]. **Metropolis** [AIG16, GM14, MP11, PM14, ZDD⁺¹³]. **MeV** [Pos18]. **MFIE** [ZDWY10]. **Mg** [HH11a]. **Mg-like** [HH11a]. **MH** [HFSK12].

MHD [Ras17, BT17b, FDZ17, FXZ⁺¹⁴, JFC12, LC15, ML17, PHT⁺¹⁹, PE15, Ras09, VKP14, WRBL19, ZOZ13, ZNT15]. **MIC**

[NBW16, RB18, BBS14]. **micro** [Bal19, BD10, HLS⁺¹⁷]. **micro-currents** [HLS⁺¹⁷]. **micro-manipulation** [BD10]. **micro-resonators** [Bal19].

Microcanonical [AMR15, FD13]. **microcavity** [VBMS17].

microengineering [MFG⁺¹³]. **microfluidic** [JHH⁺¹⁹]. **micrographs**

[Nov17]. **microgrid** [CLH⁺¹⁷]. **Micromagnetic**

[CF16, FCC15, EFK⁺¹⁹, RJW⁺¹⁹]. **micromagnetics** [TIM⁺¹⁶].

micrOMEGAs4.1 [BBPS15]. **micrOMEGAs5.0** [BBG⁺18].
micrOMEGAs_2.4 [BBB⁺11]. **micrOMEGAs_3** [BBPS14].
micrOMEGAs_4.3 [BBB⁺18]. **micromotors** [AD11]. **micron** [BHNS17].
micron- [BHNS17]. **microquasar** [Lan13]. **microrheology**
[BDGM⁺17, OOGP19]. **microscope** [TCK⁺15]. **Microscopic**
[VCD16, AMM11, BPB⁺17, Gen10, RU12, VSO⁺13]. **Microscopy**
[MAC12, BDGM⁺17, CRB⁺17, DGPOR18, MHV17, SSM⁺17, ZSW⁺17a].
microturbulence [PDJ10]. **microwave**
[CGSB18, HKF⁺12, KRB15, WWC⁺16]. **MICs** [SAN18]. **Mie**
[ESM17, LPRPR17]. **Miedema** [ZZH⁺16]. **Mif** [CF16]. **Migpore** [SM14].
migration [SM14]. **Milestone** [SV14]. **million** [RZ19]. **millions**
[CUL⁺17, GJ18a]. **Mills** [CJ12, HAH13, SD15]. **Milne** [RM10b]. **mine**
[BBV10]. **Minghui** [San15]. **mini** [SCJH19]. **mini-application** [SCJH19].
minima [ATA⁺19]. **Minimal**
[AAT⁺20, Asi10, AAT⁺14, ABdA15, AC17, AMRdA17, BDDM18, FMW10,
KKS18, Laz15, MKS10, Ray10, AB10, DET12]. **minimization**
[CB13b, Cor14, EFK⁺19, Sit14a, Sit14b, Sit16, WX14]. **Minimizing**
[LM12, CM10a, Wal11, YLK10]. **minimum** [DO14a, TW15]. **minisweep**
[SCJH19]. **minor** [Cip13]. **minority** [HAK⁺14]. **misalignments** [SM11].
MIST [BBB⁺19]. **MITHRA** [FYK18]. **Mitigation** [YXT⁺15, SKH⁺10].
mix [WG12]. **Mixed** [AG12b, MW19, CBB⁺10, FKS⁺19, JOR⁺12, LX12,
LGW13, ONS⁺15, RC13, RC16, RHC15, RCH16, RCH19, TC12, dTOV18].
mixed-basis [ONS⁺15]. **mixed-hybrid** [FKS⁺19]. **Mixed-precision**
[AG12b, MW19]. **Mixing** [PM13, CBGY17, CBYG18]. **MIXMAX** [Sav15].
mixture [SLK19]. **mixtures** [GZW17, SD10a, Sza13a, Sza16]. **mKdV**
[MM12]. **MLFMA** [GMC18]. **MLMD** [IBP⁺15]. **MM**
[MMSF⁺15, PSMS14, PSMS15]. **MM/PBSA** [PSMS14, PSMS15].
mm_par2.0 [OKM12]. **MMAPDNG** [LL15]. **MMKG** [ZLLP17].
MMonCa [MBRV⁺13]. **MMTK** [BCFR15]. **MNPBEM**
[HT12, Hoh14b, Hoh18, WTH15]. **Mobile** [Sal12]. **mobility** [LZL11].
Möbius [BNO17]. **MOC** [TGH⁺16]. **modalities** [Che11]. **MODAR**
[Car10a, Car10b]. **Mode**
[TZK16, DKT14, Hsu11b, LRK13, SVGS18, SDL⁺16, TKZ18]. **Model**
[BM19, Dan10a, Dan10b, Deg15, KPA13, NHD16, Ore19, TD11, VKLM11,
AMM11, ABdA15, AMRdA17, AGVP10, AKK⁺18, ALC18, ALA⁺19,
AGB⁺15, BLV⁺19, BDT15, BHNS17, BT17a, BCP⁺16, BSC⁺13, BM16,
BPMM14, BVP10, Boe14, BB12, BS12, CCD⁺16, Cas12, CPCDdM18,
CLC14, CM15, CL10, CCWL11, CCXC15, CZZ⁺19, CKCS13, CB16b, CL13,
CEP18, DCC⁺10, DS10, DDK⁺17, DT11b, DT18, DDK⁺15, EGT⁺18,
EPB⁺16, ERS10c, ERS10a, ERS10b, FLZ⁺18, FFT⁺14, FXZ⁺14, FLP10,
FDWC12, Fon12, GTSL⁺13, GZW17, Gor19, Gri10, GFJ⁺14, GCHL15,
GLW14, GRTZ10, Ham11, HFOPF15, HDF⁺19, HDM⁺12, IUM13, JEF14,
JTW⁺17, KYM⁺17, Ker17, KKP11, KKCC19, KAvdL11, KM17, KV10a,
KO13, KS12, KKO19, KLO⁺19, KRB19, LOL⁺18, LGW13, Le612, LWL11,

LWL12, LFG14, LX14, LBP15, LLX14b, MHHL11, MD11a, MW19, MH11]. **model** [MEG12, MNC15, MSM⁺11, MFH⁺13, NCHN15, NFI17, dIRL11, dIRAPL11, Ots11, Pál12, PBE14, RTÁT15, REBS16, SZY⁺12, SZY⁺13, SGM11a, SGM11b, STA18, SAA⁺10, SFP11, SH18, SJ17, SMJ17, SBPN15, SK12, STY15, STY18, SA15a, SLK19, SYD17, SMUT19, SO19, SLR⁺11, Sin12b, SH12b, SVG10, SS10a, SQA⁺15, SCB17b, Sta10, Sta14, SW11, SV12, SSBS15, Sza13a, TL19, TU14, TIMM13, TW11, US16, VS19a, VLM11, WR16, WDL11, WSTP15, WWVB11, WCT11, XZF12, XLCW14, XLL15, XYZX19, Yam16, YK10, YFAT17, ZZ15, ZXL16, ZZG⁺16, ZZD⁺16, ZXZ⁺19, ZY19a, ZY19b, ZLM12, ZYL⁺15, ZCG17, ZKS⁺18, ZFR18, ZWC⁺19, dSdO12, dSFdFF13, dSLF13, dSVLP13, dSF18, vMB14, ABC⁺18, AB10, BCPS11, BCP13, DET12, DG16, HLM13, KPV16, MW19]. **Model-Driven** [Dan10a, Dan10b]. **Modeling** [CLW11, wH15, TJH17, AD11, BOPL17, Bar11b, BMNS14, BMZ⁺18, CSJ⁺17, CL11, CFFR15, Dan12, EZL⁺16, EDPZ19, EKK14, FZY17, Gai17, GGI⁺13, HV15, Hak16, Hak19, HDF⁺19, HCHW11, IP14, Jab19, JGC⁺11, KEH12, KPA13, KM10, KRB15, KMJS16, KGNS10, Lan13, LV19, LZL10, LHH⁺12b, LTL⁺12, MPS13, MN18, NGCI⁺12, OBPL19, OP12, PBF⁺16, PE17, Ram10, Ram12, RAV11, RTA10, SGNL17, SLC11, SN16, SHL⁺11, Sol11, SCG11, Sva12, TKP12, Uty14, VBMS17, VCD16, WGVPL17, XHLM12, YOM⁺19, ZE11, ZE16]. **modelings** [Hon18]. **modelled** [MRL19]. **Modelling** [AGB⁺15, CC16, HdM16, IBKK11, Ano10n, AMR⁺18, CdLOL19, DBD⁺17, HKF⁺12, Kra18b, MDPTK15, MRSD15, MSML10, OBH10, ORS⁺14, Org15, RF15, RLMGM⁺11, TN11, Van15]. **Models** [Rei11, Rei12, AS11a, AC17, AABC⁺13, AG12a, AH13, AhPSV15, ABH⁺18, AC15, AC16, AC18, BW16, BBC⁺13a, BR13, BHT19, BKM11, CECGS16, CZ18b, Che17, DCM⁺12, DNPS13, ELDS14, FW11, Fil13, FD13, Fuh15, HLL13, HvWT17, HCH16, HVMR10, HKVR10, ID18, KÓG17, KO14b, KO16, KST⁺14b, KTA12, LLMW17, MLGVE14, MST⁺18, Mur14, NEW⁺18, NHS14, NP19, NAQ16, PdMML19, PS12, QA13b, RK11, RDN⁺17, SLZ16, SH16, SOPS12, Sus17b, TAFD19, TSTT13, TVZ⁺15, WG12, Wan16, Wei11b, XLX⁺15, YZ19, dIRAPL11, Mel19]. **Modern** [HdM16, BS14a, CDSG11, Ein16b, HBL⁺13, RK11]. **modes** [AM19, ALSW14, Bal19, CS17, HSK⁺12]. **modifications** [RL10]. **Modified** [LYL⁺17, NIK⁺12a, ZLL18, BKN⁺17, DFM⁺15, Duf16, FZY13, GSZ13, Jiw15b, KMS14, LM19, LCQF18, MS15, Ras09, Ras17, SMJ17, SBvD13, XHLUF⁺18, ZY19a]. **Modular** [CFW17, Giu19, Sin11, Sin12a, DLGP10, FWS⁺17, KP16, KSH14, Kro16, TCK⁺15, Zag14]. **modulated** [TTG11]. **modulation** [Kap16, OCL⁺13]. **module** [DF11b, DGST17, GST12, LRK13, SK12]. **modules** [AAB⁺10a]. **moduli** [Bog16]. **MOLDY** [ADD⁺11]. **Molecular** [AS16, DLGP10, Fil14, FFIH11, GM11, HLZ⁺13, LS17a, MTSI11, MKB⁺11, Ngu17, NLB⁺19, SBPN15, SYE⁺18, TD17, ZS13, Zhe15, ADD⁺11, Bar11a, Bar12a, BBH11b, BBB⁺19, BPML12, BKS15, Bin13, BG13a, BG14a,

BGHN19, BWPT11, BKPT12, BY13, BCG⁺¹⁵, BBV⁺¹⁶, BMDP19, CTT17, CMM14, CXH⁺¹⁵, CZZ⁺¹⁹, CSP⁺¹⁹, Col14, DEW16, DES⁺¹¹, DRR15, ESM17, FSH13, FCVH17, FRG12, FP14, Gar19, Gio14b, GLR17, GNA⁺¹⁵, GRR⁺¹⁴, GJHF14, GTK^{+19b}, HST⁺¹¹, HYM11, HXW⁺¹³, HAN⁺¹⁶, HBH⁺¹⁷, HWL⁺¹⁷, HVMR10, HKVR10, HM17, HL19c, HDM⁺¹², JWL13, JPH⁺¹⁴, JTT11, JKIS16, KRM⁺¹⁹, KST14a, KPA13, KKCC19, KDM11, Kon11, KKS18, KS15, KHN19, LGW13, LS12b, LHZ11, LK15, LLZ⁺¹⁷, LBR⁺¹⁸, LRR⁺¹⁷, MDW16, MGRB11, MM17, Miu11, MSH11, NBW16, NFA⁺¹⁶, NB17, NPAG11, NP19, iNSK⁺¹⁵, OKM12, OYK⁺¹⁴, PLCC12].

molecular

[Rap11, Rei11, Rei12, RKGK⁺¹⁷, SMOB19, SGM18, Sco13, SOM⁺¹³, SC16a, SMO16b, SCM14, SCM13, SAG13, SA14, TM19, TS11, VBG⁺¹⁰, VK14, WJCZ18, WZHE18, WSI13, YK12, ZBG⁺¹⁶, ZPH⁺¹⁵, ZZHG18, dBCH14].

molecular-continuum [NFA⁺¹⁶, NB17]. **molecular-dynamics**

[HYM11, MSH11]. **molecular-hydrogen** [BKS15]. **molecule**

[ART17, CNMC10a, CNMC10b, EY11, EBDM17, Faw10, LJSW11, WG16a].

molecule-fixed [CNMC10a, CNMC10b]. **molecules**

[AKV18, BGHN19, BRH⁺¹⁶, CRNK12, DVB11, FS17, FCCTFR18, GNT17, HL19b, Kob13, LRR⁺¹⁵, MGB18, PZY16, Sit18, TC11b, WFM14, Yan11, YLTS16, ZY15, ZZ15, ZMCT12]. **molgw** [BRH⁺¹⁶]. **Møller**

[KK14a, KBB⁺¹⁷]. **molscat** [HL19c]. **MoISOC** [CL14]. **MOM** [LHC⁺¹³].

moment [HKPF19, KKG⁺¹⁵, LLX14a, MMA15]. **moment-independent** [LLX14a]. **momenta** [AC16]. **moments**

[DBP19, MSR⁺¹⁷, MK19, RE12, SVGS18]. **Momentum**

[HHC⁺¹⁰, BAK⁺¹⁵, BAK⁺¹⁶, BAK⁺¹⁷, CC19, DSM⁺¹¹, EUT⁺¹⁵, HKJ⁺¹², MGB18, MMT⁺¹¹, Trö11, Wei99, YK18]. **Momentum-time** [HHC⁺¹⁰].

monolayer [OCL⁺¹³]. **monopolar** [ZDWY10]. **monosized** [AYDY11].

monotonic [SC15]. **monotonically** [HRC11]. **Monte**

[AIG16, CK19, HKZN17, HKZN19, JPSS10, KLO⁺¹⁹, MBRV⁺¹³, NSXZ14, OPO⁺¹¹, OPSR13, TDL⁺¹⁴, Urb18, WLZN17, ZTG14, ZDD⁺¹³, AFIS12, ASGLK10, AK15, ABB⁺¹⁴, ASPDL⁺¹⁶, Ano10o, AK13a, AK13b, AMJ18, BKV16, Bar11a, Bar12a, BDP16, BVP10, BG11, BMW14, BG13b, BLG14, Bon15, Bon16, BHJ⁺¹⁹, BMDP19, BENK⁺¹⁷, CXG⁺¹⁹, CL11, CZGC19, CL15b, CKS10, CNS⁺¹⁴, CI11, DSHS17, DGPW11, DEMM19, DPK⁺¹⁵, Dem11, DDKM15, DKT14, EBDM17, ES11, FGGM11, FLE19, FW11, FDWC12, GTPS19, GA15, Gin10, GSB⁺¹⁴, GWF⁺¹¹, GB17, HBE10, HMR14, HP11, HWM⁺¹⁵, Hua17, IUM13, JLA⁺¹⁴, JA17, KOT12, KMO19, KEH12, Kan14, KRW13, KC14, KKK⁺¹⁷, KNS⁺¹⁷, KV19, KSW15, KPVvdH13, LS14, LS15a, LS15b, LLE⁺¹⁸, LWL11, Lut15, MP11, MRZ10, MEM⁺¹¹, MW14, MHR⁺¹³, MMY⁺¹⁹, NPAD11]. **Monte**

[NHD16, NDSH18, NBCL18, NM14, OPR14, PZL⁺¹⁹, PEMS19, PM14, RF16, Ram19, RMS⁺¹², RV10, RV11, RB18, SI11, SGNL17, SFP11, SL16, SHT18, SMJ17, SM19, SD14, SKFP16, SLZ16, SSF⁺¹⁴, SKM15, SKSK13, TZG12, TVZ⁺¹⁵, Tic10, Tic14, TKP12, TMS19, TU14, Trö11, UKKB19, UA17,

VK14, WRFS15, WDL11, WSTP15, WBS⁺18, WvSL13, WT12, WWVB11, XGH⁺19, YWOD19, ZBG⁺16, ZLM12, ZTG13, dSF18, dHGCS11].
Monte-Carlo [DPK⁺15, LS15a, NBCL18, PEMS19, SM19, UKKB19].
MonteCUBES [BFM10]. **MonteGrappa** [TVZ⁺15]. **monteswitch** [UA17].
MoRiBS [ZBG⁺16]. **MoRiBS-PIMC** [ZBG⁺16]. **morphing** [ZF15].
Morphological [MS11]. **morphologies** [Bar11b]. **morphology** [PR10].
MOSFET [SO19]. **Moshinsky** [XMLC16]. **most** [BS14a]. **Mosyagin** [Maż19]. **motile** [HPKF15]. **Motion** [KB15a, BMG⁺15, HH11a, MF17, SBPD19]. **Motion4D** [MG10b, Mü11b, Mü14b]. **Motion4D-library** [MG10b, Mü11b, Mü14b].
motors [SKM15]. **moves** [AMJ18, RV10]. **Moving** [YJK11, AKKK16, DCU⁺19, GZZ19, JvOK17, KS16a, LP15, NHSY15].
moving-grid [DCU⁺19]. **MP2** [KK14a]. **MPBEC** [VPM16]. **MPI** [ARYT17, ART17, BW12a, BCM⁺16, BTC⁺17, DRUE12, EZBA16, Hin11, LYSS⁺16, OLG⁺16, OKM12, SSB⁺16, SCJH19, TKP15, TK19, WAW14, YHL11]. **MPI-AMRVAC** [TK19]. **MPI-based** [OLG⁺16]. **MPI-driven** [Hin11]. **MPI/GPU** [EZBA16]. **MPI/GPU-code** [EZBA16]. **MPL** [Bog16]. **MPLS** [NHSY15]. **MPPPhys** [Mü14c]. **MPS** [SIMGCP14, NHS14, SIMGCP13]. **mr** [KPV16]. **MRT** [vdS10]. **ms** [DES⁺11]. **ms2** [GRR⁺14, RKG⁺17]. **MSSM** [CRC⁺13, DNPS13, FEH11, FHH⁺14, HP17, HLM13, HEF12, KZ11, LCE⁺13, PS12, RCD⁺10, Ros15, SV12]. **MsSpec** [SNG⁺11]. **MsSpec-1.0** [SNG⁺11]. **MSTor** [ZMCT12, ZMPT13]. **MT** [HHP⁺14]. **MuFA** [RJW⁺19].
muffin [LZP12]. **muffin-tin** [LZP12]. **Multi** [BFPP12, BBS14, BVP10, BMW14, CZS10, ELDS14, FBN⁺13, HDZ14, IBP⁺15, KO13, Kom15b, KSW15, Liu14, MKR⁺12, MRSD15, OP12, PP13, RJW⁺19, SW14b, SM19, SCM⁺18, TPC16, Ume19, UBRT10, YKK⁺19, ZST11, ZMvE⁺13, ASS13, AZM14, BBU11, BBUY13, BBB⁺17a, BT17a, BT17b, BAR12b, BCH13, BHJ⁺15, BHJ⁺18, BvH15, CWJ19, Cap13, CC15, CL15b, DBP⁺18, DKG⁺14, DE13, DCVB⁺13, DGS⁺19, DO14a, Er14, FSJ⁺16, FHA17, FB19, DRI⁺16, GBC⁺18, HLS⁺17, HZW⁺19, HWT10, Ike18, JK14, JXTS16, KPA13, KO12, KO14b, Kom15a, Kom15c, KO16, LLQX19, LS12a, LHZ11, LQ18, LY16, LBP15, LRK13, Mey18, MMA15, NNWS15, NHD16, NB17, NAQ16, Pál12, PR14, PC11, QSC14, QZWU19, QwWL⁺15, RZ19, Sch14a, SV13, SGW17, SLR⁺11, SC16b, TRM⁺12, TD14, TKJ19, TDL⁺14, Vuk12, WSH⁺12, WAW14, sX14, YZWR14, Yi11]. **multi** [ZAFAM16, ZMPT13, dDYK⁺18, REtVH12, RtV16, FOB⁺15, IBP⁺15, WFZG19]. **Multi-algorithm** [Liu14]. **Multi-architecture** [SM19]. **multi-array** [Vuk12]. **Multi-axis** [YKK⁺19]. **multi-baryon** [DE13]. **multi-beam** [FB19]. **multi-bunch** [FB19]. **multi-center** [BAR12b]. **Multi-Channel** [KSW15, LLQX19]. **multi-cluster** [KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16]. **multi-component** [HLS⁺17]. **multi-configuration** [QZWU19]. **Multi-core** [FBN⁺13, HWT10, LHZ11, TRM⁺12, TDL⁺14]. **Multi-core-CPU**

[ELDS14]. **multi-CPU** [FOB⁺15]. **multi-degree-of-freedom** [Er14].
Multi-dimensional
 [MKR⁺12, ASS13, BT17a, Cap13, CC15, DO14a, NAQ16, TD14].
multi-directional [TKJ19]. **multi-disciplinary** [WSH⁺12]. **Multi-Domain**
 [IBP⁺15]. **Multi-electron** [BMW14, SW14b]. **multi-exponential** [Ike18].
multi-flexible-body [KPA13]. **multi-floor** [PC11]. **multi-fluid**
 [SLR⁺11, sX14]. **Multi-frequency** [PP13, LY16, YZWR14]. **MULTI-fs**
 [REtVH12]. **multi-gluon** [BBU11, BvH15]. **Multi-GPU**
 [BFPP12, BVP10, OP12, TPC16, DCVB⁺13, JK14, JXTS16, LBP15, NHD16,
 WAW14, FOB⁺15, WFZG19]. **Multi-GPU-based** [KO13, Kom15b].
Multi-GPUs [SV13]. **multi-instance** [NB17]. **multi-Intel** [BBS14].
multi-jet [BBUY13]. **Multi-Kepler** [BBS14]. **multi-layered** [CL15b].
multi-level [HZW⁺19, IBP⁺15]. **multi-loop** [BCH13, Mey18, dDYK⁺18].
multi-material [SC16b]. **multi-million** [RZ19]. **multi-mode** [LRK13].
multi-moment [MMA15]. **multi-objective** [AZM14]. **multi-orbital**
 [QwWL⁺15, SGW17]. **multi-particle** [BBB⁺17a, LQ18, PR14].
Multi-phase [MRS15, BT17b, FHA17, ZAFAM16]. **Multi-physics**
 [ZMvE⁺13, DRI⁺16]. **multi-populations** [FSJ⁺16]. **multi-purpose**
 [DBP⁺18]. **multi-reference** [DKG⁺14]. **Multi-resolution** [SCM⁺18].
Multi-scale [UBRT10, BHJ⁺15, BHJ⁺18, Sch14a]. **multi-socket** [TRM⁺12].
multi-soliton [Pál12]. **multi-species** [DGS⁺19, NNWS15]. **multi-spin**
 [BVP10]. **Multi-step** [Ume19]. **multi-strategies** [FSJ⁺16].
multi-structural [ZMPT13]. **Multi-symplectic**
 [CZS10, HDZ14, ZST11, CWJ19, LS12a, QSC14]. **Multi-type** [RJW⁺19].
multi-user [GBC⁺18]. **multi-zone** [Yi11]. **multiband** [Bot12, HHC16].
multiblock [HdM16]. **multibubble** [WSI13]. **Multicanonical**
 [KI11, BB13a, FLE19, GZWJ18, SI11, ZMJ13]. **multicellular** [HFOPF15].
multichannel [GMRHRCME13, HBP14, NFI17]. **multicomponent**
 [YSLY19]. **Multiconfiguration** [BSGG10]. **multicore**
 [AEKO18, HdM16, HWCdM19, Lya15, MPM14, TH17, YHL11].
multicore/vectorisation [TH17]. **Multidimensional**
 [CHA11, End11, FKS⁺19, LW14b, WW10, ZF15, ZLM12, Asc10, AM17,
 GMHZ19, KBSP12, QSB19]. **multidomain** [DT11a]. **multifluid** [RC15].
multiframe [SGDS16]. **Multigrid**
 [ABF19, FZR19, BKOZ16, Bot13, FN17, HVP⁺19, TE18, TK19].
multilayered [LPRPR17]. **multilevel** [MCWJ15, OL12, ZZHG18].
multilevel-skin [ZZHG18]. **multiloop** [SST11, Smi14]. **multimode** [Brá15].
Multiparticle [HPN18, WSH⁺14]. **Multiphase**
 [ZLFM11, HSF⁺15, LOK⁺18, MPM14, NHSY15, TSK⁺17, YK19].
multiphoton [TC11b]. **multiphysics** [ZLFM11]. **Multiplatform** [GHK19].
Multiple [ELL⁺17a, Jab17, XNK⁺16, ATA⁺19, AKR15, BAF18, EBCB⁺14,
 GLAC13, GM18, HLZ⁺13, JA17, JPH⁺14, Kap12b, Kaw19, Kra18b, LWES18,
 STK10, SNG⁺11, SCM14, TKS10, TACA15, VK14, Wai12, WMK11,
 WXW13, WJHW14, WWM14, YL12, BBV10, CYN19]. **multiple-histogram**

[VK14]. **Multiple-Relaxation-Time** [CYN19]. **multiple-trapping** [JA17]. **multiplication** [GJ18a, WWR⁺16]. **multiplicities** [Wei12]. **multiplicity** [Car16]. **multiplier** [AQJ10, TC11a]. **multiply** [BG13b, BG14a, BLG14, Bon15, Bon16, WLG⁺13]. **multiply-charged** [BG13b, BLG14]. **Multipole** [CC10b, CC12, GB11, GCH⁺18, Ham11, LCQF18, LCHM10, LCHM13, OYK⁺14, TSIM16, YBK⁺11, YBNY13, ZHPS10]. **multipoles** [EPP12]. **multiprecision** [Sai13]. **multirate** [SEGP15]. **Multiresolution** [LB10b, RHH12]. **Multiscale** [BLV⁺19, AKH⁺18, CH19, CZ18b, GTK⁺19b, HBL⁺13, KFS17, KK13, LHB⁺19, RLBC⁺14, SMO16b, ZOZ13, ZZG⁺16, CHZ18]. **multispin** [FFT⁺14]. **multisymplectic** [CWS14]. **multithreaded** [TV10]. **multivariate** [CSRV13, KPVvdH13, LR18a, LR18b, vH10]. **MultivariateResidues** [LR18a, LR18b]. **multiwavelength** [SSP16]. **MuMax3** [RJW⁺19]. **muon** [NBCL18]. **muons** [BCMS10]. **MUPAGE** [BCMS10]. **Muse** [Liu14]. **mVMC** [MMY⁺19]. **mVMC-Open-source** [MMY⁺19]. **mxpfit** [Ike18]. **myFitter** [Wie13].

N [CKFB12, CDTV10, GBD10]. **N2HDECAY** [EMW19]. **N2HDM** [EMW19]. **Nabarro** [PE17, ZLZ19]. **NAMD** [BW15, JPH⁺14, JJ15, MPB10]. **NAME** [MFH⁺13]. **names** [WCT11]. **nano** [HST⁺11, HEF⁺11]. **nano-devices** [HEF⁺11]. **nano-friction** [HST⁺11]. **NanoCap** [RM14]. **nanochannels** [SS11c]. **nanoclusters** [FSJ⁺16]. **nanodevices** [CLL16]. **nanodiamond** [AZS⁺11]. **nanofiber** [LPC⁺15]. **nanographite** [AZS⁺11]. **nanomaterials** [Mar19]. **nanometric** [ZHCR18]. **nanoparticle** [Bar11b, YHCS11]. **nanoparticles** [CKLM10, HT12, Nov17, SWL⁺15]. **Nanoporous** [ZDD⁺13]. **nanoribbon** [LCY⁺11, SWL11]. **nanoribbons** [GZL14, Ihn12]. **nanoscale** [Dan14, Dan16, Dan17, Dan19, LCH11]. **Nanoscience** [NSH⁺19]. **nanoscopic** [EVB14]. **nanostuctured** [NPM16]. **nanostuctures** [BMC⁺11a, BW16, DSS⁺12, DGMZ15, GTG⁺11, GAO13b, HHC16, MCP10, RZ19, Wie18]. **nanosystems** [GS15]. **nanotube** [LCY⁺11, TM19, Yan11]. **nanotube-nanoribbon** [LCY⁺11]. **nanotubes** [Beu11, CSL⁺13, HCC14, LHSL14, RM14, ZRS12]. **nanowire** [DJ12]. **nanowires** [CM15, TG11, VB11]. **NAO** [KBSP19]. **NAPL** [PBF⁺16]. **NASAL** [CPCDdM18]. **NASAL-Geom** [CPCDdM18]. **Natural** [BHT19, OP12]. **Navier** [BKOZ16, BLAS19, EW14a, FDZ17, LWJV18, MVS15, QSB19, Sal16, SK15, SP18b, ZPS⁺18]. **NBL** [KHN19]. **Nd** [LQZ⁺13]. **NDL** [HAV⁺14]. **NDL-v2.0** [HAV⁺14]. **ndom** [SKB10]. **Ndynamics** [ADdM⁺12b]. **Near** [BKMP16, AGVP10, CZF18, DT11b, EEGW12, Faw10, JU17, LPRPR17, MZE13, TKL⁺12, Uty14, XD13, XHD15]. **near-barrier** [DT11b]. **near-continuum** [TKL⁺12]. **near-field** [CZF18, LPRPR17]. **near-rigid** [Faw10]. **Near-threshold** [BKMP16]. **near-wall** [JU17, Uty14]. **nearly** [LYL⁺17]. **nearly-analytic** [LYL⁺17].

necessary [BSWC14]. **neighbor** [ABRS12, HAN⁺16, KHN19, LYJY10, ZZHG18]. **Neighbour** [MRZ10, WRR18]. **Nektar** [CMC⁺15]. **neoclassical** [BSM13, HSK⁺12, MS14, SISW10]. **Nernst** [Fuh15]. **Nested** [BBV⁺16, BH11, SEGP15]. **Network** [VKLM11, VLM11, DLW⁺18, HH11b, LYJH19, ORCR17, YKK⁺19, dSLF13, ZHL11]. **networks** [BHVMMH15, CHDF10, CB15c, CMdB11, CF17, CLF18, HLS12, HZC19, IBKK11, Kra10, MCNRC16, NMCR15, PHA18, QHC⁺10, SOYHDD19]. **Neumann** [RC16, Jiw15b, RC13, RTA10, SP16, SN16]. **Neural** [ORCR17, ZHL11, dCD19, HZC19, LYJH19]. **neural-network** [LYJH19]. **Neutral** [BRL12, AGB⁺15, BBH⁺11a, Lit13, PE15, Tic14]. **neutral-particle** [Tic14]. **Neutrino** [BFM10, AKH12, BPMM14, BNAB11, KHBS19]. **neutrino-driving** [BNAB11]. **neutrinos** [WW15]. **NEutron** [Car16, BNV18, CXG⁺19, ECSH16, KB15b, LS12b, RLS16, SEW12, SEW14, VPM12, WJCZ18, ZTG13, ZTG14]. **neutron/gamma** [RLS16]. **Neutron_CR** [MSNI11]. **Neutron_CR-39** [MSNI11]. **neutronics** [YLL⁺19]. **neutronics/thermal** [YLL⁺19]. **neutronics/thermal-hydraulics/fuel-performance** [YLL⁺19]. **neutrons** [MSNI11]. **newly** [CWW15]. **Newton** [BK12, CB15d, HCSW10, YJK11, vWB10]. **Newton/Yukawa** [BK12]. **Newtonian** [BHNS17, NCB18, RJLL16]. **Next** [AAT⁺14, AAT⁺20, AC17, AMRdA17, GLPQ11, PLF⁺17, DET12]. **next-generation** [PLF⁺17]. **Next-to-Minimal** [AAT⁺20, AAT⁺14, AC17, AMRdA17, DET12]. **next-to-next-to-leading** [GLPQ11]. **Nexus** [Kro16]. **NF** [YE14a]. **NF-package** [YE14a]. **NGluon** [BBU11]. **ngravs** [Cro16]. **Ni** [BTM⁺17, CHW⁺15, TG11]. **nickel** [WBY11]. **Nicolson** [BB10, CWS14]. **Ninja** [Per14]. **NiTi** [NS11b]. **nitride** [Yan11]. **nitrogen** [CHC⁺11, LJSW11]. **Nix** [Rom15]. **NLO** [BDC⁺14, BCG⁺13, BS13b, GHvSF14, Pit10]. **NLS** [lLSZ14]. **NLSEmagic** [Cap13]. **NMSDECAY** [DET12]. **NMSSM** [AM11, BGM⁺14, SAE⁺16]. **NMSSMCALC** [BGM⁺14]. **NN** [LYJH19]. **NNDrone** [BG19a]. **NNLO** [HLM17, BHZ13]. **nnlo-Higgs** [BHZ13]. **nodal** [Koh15, Oti13]. **nodal-based** [Oti13]. **node** [CTL15, NZQL14, SC16b, ZBN⁺19]. **node-centered** [SC16b]. **nodes** [Sch14b, YKK⁺19]. **noise** [BCS10, BDBV12, CC10a, Er14, HH11b, KS16b, MW12, VSG18]. **noises** [iT11]. **noisy** [QHC⁺10]. **noloco** [NPAD11]. **NOMAD** [GHK19]. **Non** [FW11, GTK⁺19a, Gor19, Jal10, VDA⁺19, WL11b, AAD13, ABF19, ABH⁺18, AMJ18, BL19, BHNS17, BL14, BDP16, BW12b, Bla15, BCT17, BH13, BPS⁺16, BMG⁺15, CLW11, CdLOL19, DBJ11, DJ11, EW16, FR15, HWS16, HM17, HHM⁺15, HL19c, JBKM15, JU17, KKS18, KS15, LMRC15, LA13, LS15b, LFG14, NCB18, OILK17, PHT⁺19, PLF⁺17, PBF⁺16, PBD⁺15, SK15, SCLW16, SCNJ18, SC15, SS11b, SLEF17, TDL⁺14, UNK12, USOA13, Wit14, YQM12, YQM14, ZDWM17, ZXZ⁺19, dSFdFF13, dSVLP13]. **non-adiabatic** [HM17]. **non-aligned** [HWS16]. **non-autonomous**

[Bla15, BCT17]. **non-axisymmetric** [EW16]. **non-bonded** [BL14]. **non-Boussinesq** [BL19]. **non-circular** [OILK17]. **non-conformal** [ZDWM17]. **non-crystalline** [DBJ11]. **non-degenerated** [ABF19]. **non-equidistant** [LS15b]. **non-equilibrium** [BPS⁺16, JBKM15, PLF⁺17, PBD⁺15, SC15, ZXZ⁺19, dSFdFF13]. **non-Hermitian** [BW12b]. **non-homogeneous** [SCNJ18]. **non-ideal** [TDL⁺14]. **non-inertial** [SS11b]. **non-intrusive** [HHM⁺15]. **non-isothermal** [PBF⁺16]. **Non-linear** [Gor19, VDA⁺19, FR15, PHT⁺19, SLEF17]. **Non-local** [GTK⁺19a, AMJ18]. **non-Markovian** [dSVLP13]. **non-minimal** [KKSY18]. **non-Newtonian** [BHNS17, NCB18]. **non-orthogonal** [USOA13]. **non-oscillatory** [AAD13, DJ11, UNK12]. **non-overlapping** [JU17]. **Non-perturbative** [WL11b]. **non-planar** [BH13]. **Non-polynomial** [Jal10]. **non-reactive** [HL19c]. **non-rectangular** [SK15]. **Non-reversible** [FW11]. **non-spherical** [BMG⁺15]. **non-staggered** [DJ11, SCLW16]. **non-SUSY** [ABH⁺18]. **non-transferred** [CLW11]. **non-uniform** [BDP16, KS15, LA13, LFG14, Wit14, YQM12, YQM14]. **nonadiabatic** [SOM⁺13]. **noncentral** [GST15]. **nonclassical** [Shi16]. **nonequilibrium** [KH10, MDF11]. **Nonextensive** [Fri14a]. **nonhydrostatic** [BB12].

Nonlinear
 [Asi10, BAR12b, Cap13, AAD13, ABB13, ABH⁺19, BSM13, CWS14, CB13b, CZS10, Che17, DG10a, DT10, DS10, DT11a, DM17, Dem13, DZ13, DBLF16, Er14, EFK⁺19, GLHR19, GAO13b, GRLS18, HZC19, Jan10, JCL⁺18, KS19, Kau13, KL11, LD10a, LV19, LWL12, LST15, LLL12, Lin13, LLL13, sL10, MD11a, MHW19, Mel19, MFM15, Moh14, ICD13, PDRG10, PTS12, QSC14, RM10a, SW14c, SK14, SB11, SS10b, TD14, TJH17, WP10a, Wil19, XZ12, YÇÖ15, ZAHA10, ZWLZ17, ZY19a, ZLL13, ZW15, ZST11, Zió14, dHVV10]. **nonlinearity** [SB11, VEB⁺18]. **nonlinearly** [CC14, CC15]. **nonlocal** [LAA⁺10, LLMW17, TRN16, YZ19, ZY19b]. **nonresonant** [Shi16]. **nonuniform** [ZNT15]. **nonzero** [BBF⁺10]. **norm** [GVPJ18, LWW10, vSGB⁺18]. **norm-conserving** [GVPJ18, vSGB⁺18]. **normal** [AG12a, BCJW13, BMF⁺19]. **normalization** [MZE13]. **Normalized** [XHLUF⁺18]. **NORSE** [SLEF17]. **Not-a-Knot** [SD10b]. **note** [SW13b]. **Novel** [UW12, dSFdFF13, Ano20, EKK14, FS17, KK16a, KDM17, LDR⁺17, MSPD12, MPM14, RTA10, Ser10, WAW14, WZS⁺18, ZDWY10, ZSW⁺17b]. **NPB** [Yi11]. **NPS** [EBDM17]. **NRMC** [SGNL17]. **NSBC** [Bab14]. **Nt_STM** [MAC12]. **NTPoly** [DN18]. **Ntuples** [BDC⁺14]. **Nuclear** [DBP19, VCMS⁺13, ASA18, AANAJ12, BNV18, BBC⁺13b, CDTV10, Des16, DPB16, GG16, GFJ⁺14, GBJ⁺15, PDL⁺18, SZY⁺12, SHZ13, SAY⁺18, Shi16, SUS⁺17a, Tom16, ZSW⁺17b]. **nuclearity** [DRR16, RRCSCJ10]. **nucleation** [JJB11, RDP14]. **nuclei** [Bab14, DT11b, DML⁺16, GC10, GC13, GC16, GCK19, LMAB16, NPVR14, PUO14, WSI13]. **nucleon** [AHK⁺12, GBD10]. **nucleus** [GC18, KMO19, WR16]. **nuCraft** [WW15]. **nudged** [QDZ⁺13].

NUFFT [Giu19]. **null** [HLW16]. **null-space** [HLW16]. **nullity** [YE14a].
number [ASPW13, BS11, BS13a, BS14a, BJCW13, BCJW13, CBGY17, CBYG18, Dem11, FP14, GP13, GBS16b, Kan18, LS15a, LNP⁺17, Mis13, Sav15, SS13a, Sib17, SCM⁺18, TC11a]. **numbering** [BBC⁺13a]. **numbers** [BS13a, BCJW13, Nog17a, Nog17b, UO15b, YB13, ZOZ13, ZNT15].
Numeric [GBRB11, KCA⁺15, LRW⁺15]. **Numerical** [ABRS19, ASEA14, ACCB13, ALSW14, AD11, ACM12, AH13, ADdM⁺12b, BBUY13, BCH13, BHJ⁺15, BMNS14, BS12, BvH15, CMJ⁺11, DG10b, DGS⁺19, DR12, FGLB12, Fis12, Fuk17, GG16, GLX⁺14, HKSW10, HK12, HML11, HW11, HB13, HL13, Ixa16, JL12, JLM18, JPM12, JK13, JHL⁺15, KFS17, KM10, Kri12, LMRC15, LD10b, LSF14, lLsSZ14, MT13, MIW⁺13, MFS⁺10a, MC12, MM10, PKT15, PBF⁺16, QwWL⁺15, RC15, RAV11, RJ12, RGKR17, SW12b, TGUvS19, VBMS17, Wie13, XJS16, XYM⁺13, YdDH⁺12, ZFH14, ZDWY10, ZY19b, ZW15, dHV12, AS11b, AB10, AGH⁺16, ACMM10, ACML11, AAT17, BK16a, BSK⁺18, BCM⁺16, BDGG19, BHJ⁺18, CLHL19, CL10, CLL16, CvW12a, CvW12b, CFFR15, DMP18, DCC⁺10, DCM⁺12, Dat13, DS13a, DBD⁺17, DN13, DM17, Den10, EZL⁺16, EVB14, FSC13, Fuh15, GHvdL11]. **numerical** [GV15, GA10, GN14, Gri11, GSKM15, GM14, GMHZ19, HAV⁺14, HVMR10, HCSW10, Ixa10, JK10, JTN⁺11, JW13, JZZ⁺19, Jiw12, Jiw15a, Ker17, KZ11, KL17, KKL⁺18, KAS12, KBSP19, KST⁺14b, KP14, LV14, LK12, LYX⁺17, LHH⁺12a, MD11a, Mar15, MW19, MN16, MA11, ML16, NGCI⁺12, PAS11, PMMW15, PVK⁺18, PQTGS17, PO14, Pit10, PE15, PDJ10, PB16, RM10a, RM10b, RLS16, Sal12, SKB10, SLY18, SL17, SH18, SW14c, SS11a, SD10b, SS13b, SK14, SST11, Smi14, SAS11, SPS18, SCG11, TKR13, TZM17, TFBW14, TL19, TO10b, VLD⁺12, WX11, Wu10, WL11b, XLL15, YZ16, YWYF09, YXD⁺15, YXT⁺15, ZY19a, Zió14, dB14, dDYK⁺18, vMB14].
numerically [BMBC⁺17, DGST17]. **numerics** [TK14a]. **NumExp** [HL13].
NuSol [GG16]. **NVIDIA** [GNP19, Lya15, MR14]. **NVM** [MNV13].
NWChem [LSK⁺14, VBG⁺10]. **nX** [BFD⁺11]. **NXSG4** [KB15b]. **Nyström** [FG13, KMS14, KAS12, WW10, YZWR14]. **Nyström-tree** [YZWR14].
O [ADH⁺17, CJH11, LS11, Maž19, CKFB12, BABC19, DRUE12, GGI⁺13, SKK⁺19]. **O-SUKI** [SKK⁺19]. **Oasis** [MVS15]. **Obituary** [Sco19]. **Object** [BC19, CB15a, CB17, CB18, Asl14, BFD⁺11, CDMCN11, CJ12, CFFR15, DM12, HHP⁺16, OKM12, SL16, WP10a, Zag14, CF16, FCC15, MBRV⁺13].
Object-oriented [BC19, CB15a, CB17, CB18, Asl14, BFD⁺11, CDMCN11, CFFR15, DM12, OKM12, SL16, WP10a, Zag14]. **objective** [AZM14].
objects [AKKK16, CGJ14, GGF⁺13, GSC⁺16, JvOK17, KCS⁺15, OL12, Ser10].
oblique [ÇÖSÜ11, VDB14]. **Obreckhoff** [SS13b]. **observables** [AM10, AM11, AMR19, BBPS14, MKV11, Mur14]. **observations** [BVC13].
observatory [BPMM14]. **observed** [UIY11]. **obstacle** [OK14]. **obstacles** [KL11]. **obtain** [CLB11, EBDM17]. **obtained** [LS19]. **obtaining**

[LP15, Liu13, MNPY14, MYP⁺14]. **ocean** [DBLF16, DBLF16]. **OCTBEC** [Hoh14a]. **Octree** [FGC⁺11, TE18, TK19]. **Octree-based** [FGC⁺11]. **ODE** [HKS⁺W10]. **ODEs** [KV10a, NO12]. **off** [HFOPF15, JCL10, JTP15, JHL⁺15, KdMvO14, MRZ10, RV10, SMOB19, Zag14]. **off-axis** [JTP15]. **off-lattice** [HFOPF15, KdMvO14, MRZ10, RV10]. **offload** [BCG⁺15]. **offs** [NBN⁺14]. **ohmic** [KGG⁺16, YLKN17]. **oil** [ZAFAM16]. **OK2** [OKP10]. **OK3** [OKP10]. **old** [TBB⁺14]. **on-lattice** [XLCW14]. **on-the-fly** [GGG16]. **ONCV** [SG15]. **One** [ADH⁺17, CHC⁺11, DLU18, EGPS10, ABB⁺14, AG14, Ano10o, BBU11, Ber16a, Ber16b, BDP16, BDV11, BHJ⁺15, CZD15, CEZ16, CJH11, CR12, CvW12a, CvW12b, CGH⁺11, DDH17, Dua10, Fen12b, Fil13, FEH11, HLS12, HEF12, HHC⁺10, JWC18, KKS⁺Y18, KS12, LS19, Liu11, Liu13, LKT⁺16, MCA17, MP11, MEM⁺11, OAKS11, Pat15, Pat17, Per14, QA13a, RtV16, RVA14, Rei12, RCH16, RGKR17, TD14, Ter17, WHG⁺19, vH11]. **one-** [TD14, WHG⁺19]. **One-dimensional** [CHC⁺11, AG14, BDP16, CZD15, CR12, CvW12a, CvW12b, Dua10, Fil13, HHC⁺10, KS12, MEM⁺11, QA13a, RtV16, Rei12, RCH16]. **One-Loop** [ADH⁺17, DLU18, ABB⁺14, Ano10o, BBU11, CEZ16, CGH⁺11, DDH17, Fen12b, FEH11, HEF12, KKS⁺Y18, Pat15, Pat17, Per14, vH11]. **one-particle** [LS19, Liu11, Liu13]. **one-shot** [HLS12]. **one-valence** [MCA17]. **one-way** [OAKS11, Ter17]. **OneLOop** [vH11]. **onetep** [BDPM15]. **Onia** [Sha13b, Sha16]. **online** [HDF⁺19, Mis13, PR14, TdAdSS11]. **only** [Sta14]. **Open** [BCP⁺16, CYOS19, CDR⁺15, DSK19, DBLF16, JWC18, MMY⁺19, SH18, WGG16, WGG⁺19, AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, CMC⁺15, CLJ12, CFW17, CCHL11, Dan11, DGJH19, Dat13, DBP⁺18, FLA⁺16, Faw10, FJK⁺17, FLW17, HSF⁺15, HKvH16, HWM⁺15, Hua17, ILZ⁺19, JNN12, JNN13, JMG⁺17, KDM17, KPK⁺17, KSH14, KPOR18, LPC⁺15, LZ11a, LZ11b, LZ12, LS13, MZE13, MVS15, MGFRG12, NMS14, NGCI⁺12, ORS⁺14, PLCC12, Qia16, Qia17, STA18, SV14, SC16a, SPAW17, SAHP15, SDL⁺16, TL17, TACA15, TVT⁺16, VBG⁺10, VDA⁺19, VS19a, VB19, WFDK19, WFV14, WPAV14, WZS⁺18, XAPK14, ZCG17, Zag14]. **open-shell** [Faw10]. **Open-source** [BCP⁺16, CYOS19, CDR⁺15, DSK19, DBLF16, AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, CMC⁺15, CFW17, Dan11, DGJH19, DBP⁺18, FLA⁺16, HSF⁺15, JNN12, KDM17, KPK⁺17, KSH14, LPC⁺15, LZ11a, LZ11b, LZ12, MZE13, MGFRG12, NGCI⁺12, SC16a, SPAW17, SAHP15, TACA15, VBG⁺10, VB19, WPAV14, WZS⁺18, XAPK14]. **OpenACC** [GM18, HTJ⁺16, Kom15c, SCJH19]. **OpenAtom** [KMM⁺19]. **OpenCL** [BLPP13, BHW⁺12, BBH⁺15, CP15a, HD11, KM10, MAIVAH14, ÓN12, RBB15, TKP15]. **OpenFOAM** [Cha19, CL13, DBMR18, LBR⁺18, LNSD15, MTE17, MRL19, SSX14, WBS⁺18, ZCG17]. **OpenFOAM(R)** [JHH⁺19]. **OpenFPCI** [HMR⁺19]. **OpenFPM** [ILZ⁺19]. **Opening** [JWC18]. **OpenMM** [BCFR15]. **OPENMP** [OKM12, CBYG18, GSMK17, KT10, KLM⁺19, LYSS⁺16, SSB⁺16, YHL11, YSVM⁺16, YSMA⁺17]. **OpenMP/MPI** [LYSS⁺16, SSB⁺16]. **OpenPhase** [TSK⁺17]. **openPSTD** [HKvH16]. **OpenSMOKE** [CFFR15]. **opensource** [MGR16]. **operated**

[LM19]. **Operating** [SC14]. **operational** [dlHV12]. **operations** [CB18].
operator [ABB⁺16, ABF19, BK11a, BW12b, BBF⁺10, BF10, DGS⁺19, Eks11, GTS14, JHL⁺15, KAK12, MWI⁺19, NNWS15, PB16, Ram10, Sch14a, STY15, STY18, Zit11]. **operators** [Brá15, LYL⁺17, SD10a, Vit19]. **Opinion** [YH15, CHDF10, IBKK11]. **OptaDOS** [MNPY14]. **OpTHyLiC** [BCTP18].
optic [FNPMB10]. **Optical** [AWK⁺16, Ost10, PGMU19, AM14b, APRG11, AKV18, BF16, Bal19, BD10, BG11, BGL⁺14, BMG⁺15, CM15, CCL15, CS17, CCW10, CSL⁺13, DSS⁺12, FE11, GGG16, HCRD14, HWCH11, HHT14, LCCC11, LLMW17, MNPY14, NJS17, OCL⁺13, PM14, SSM⁺17, VEB⁺18, VCD16, WX11, WQ18, ZHCR18, ZYL⁺19]. **Optics** [NSH⁺19, Dem13, KAH18, SWS⁺12]. **Optimal** [FBHB17, KKCC19, MLEM19, CNMC10b, DJ14, FSF11, FJ19, Hoh14a, Ike18, MFS⁺10a, PSBT12, PGMU19, RC18, SH18, SJHS19, XLL15].
optimality [KL14]. **optimisation** [EGT⁺18, HdM16, dCD19].
optimisations [HKZN19, HWCdM19]. **Optimised** [IZRT15, RWKS15, Wei12, BCTP18]. **Optimising** [Rei10]. **Optimization** [BS14b, DF14, DCGG13, FGR14, MCY⁺16, SG15, ATA⁺19, ACdS13, AZM14, BS15a, BR11, BPS⁺16, CM10b, CLH⁺17, CJJ⁺17, CXG⁺19, DBJ11, FSJ⁺16, DRI⁺16, GWF⁺16, GD14, Has11, HWL⁺17, HJL⁺14, HVMR10, HKVR10, JKG⁺18, KPA13, KKP11, KHKR14, Kra11, KH19, KUV15, KL14, LM19, LHL16, LCRL10, MR14, MBGV15, PCVZ11, QwWL⁺15, RMS⁺12, RLL12, SHW18, SWL⁺15, SZM⁺14, SKH⁺10, TTT16, VvAV⁺11a, VPP⁺12, VHP⁺15, Wie18, WLZN17, XLCW14, YZZ⁺17, YLYL17, ZBMM11, ZPvR16, Zlo14, dASJC⁺19, vRWS14, PE17]. **Optimizations** [iSYS12, WRFS15, BDL⁺19]. **optimize** [TVZ⁺15]. **Optimized** [Cha16, CF17, DRR16, HLLH16, LJB⁺16, MAIVAH14, Smi16, BD10, CNMC10a, FDWC12, KD17, KAS12, LWC14, LW16, LBP15, SEW12, SEW14, TVT⁺16, vSGB⁺18]. **Optimizing** [BPSS18, BCG⁺15, De 11, GBN17, KdMvO14, RKVL14]. **Optimum** [PCVZ11]. **OptQC** [LWC14, LW16]. **OPUCEM** [ÇÖSÜ11]. **ORACLE** [WS11b]. **ORB5** [MBB⁺19]. **orbifolder** [NRSVW12]. **orbifolds** [NRSVW12]. **Orbit** [BDBV12, CL14, CFF19, HSK⁺12, Nis11, PCGM14, RE12, WX14, WLG18, XGH⁺19, MPS13]. **Orbit-based** [BDBV12].
orbit-following [HSK⁺12, XGH⁺19]. **orbital** [BHT19, CM15, CXH⁺15, Cor14, FGR14, HHS⁺10, KT12, KST14a, KAS12, MSS⁺16, PS14, PVK⁺18, QwWL⁺15, SGW17, SGSG19, SMGK19].
orbital-based [BHT19]. **orbital-free** [CXH⁺15, HHS⁺10, KT12, KST14a, MSS⁺16]. **orbitals** [BCC⁺18, Ert15, KTB17, KCA⁺15, KBSP19]. **orbits** [BRB12, BDT15, KRK16]. **orchestration** [CCdC⁺11]. **order** [AAD13, AAD14, ABdA15, AGH⁺16, AH13, ADdM12a, ADdM14, ACDdM15, ADdM15, ACDdM19, BBL⁺13, BKV16, BL19, BK16a, BCT17, BVC13, BIT12, CFMR10, Cap13, CZ18b, CD15, Cha16, CD12, CR12, DBMR18, DJ11, DZ13, DdMN16, EGT⁺18, FG13, Fu19b, GLPQ11, GGGH14, GJ14,

GA10, GPS⁺¹³, HSF⁺¹⁹, HZ11, KVV19, KMS14, KO14a, KBB⁺¹⁷, Koh15, Kol14, LX12, LV15, LWZ14, LST15, LLXK16, lLsSZ14, LW14b, LWJV18, MC16, MF17, Maž19, MD10b, MK19, MLK⁺¹⁷, MLK⁺¹⁹, MO14, NS15, NO12, PZZL19, PKT15, PVK⁺¹⁷, PM13, Qia10, RL10, RHW⁺¹², Sch14b, SR12, SVV19, SSH⁺¹³, SS13b, SA15b, SC16b, SBPD19, SB11, Sok13, SS10b, THDS16, TY10, Tia11, VDF15, VL19, VEB⁺¹⁸, VV16, VV18, WWS10, WDR16, WC13, WP10b, WWR⁺¹⁶, WYSW10, WT15, XHLUF⁺¹⁸, XQ19].

order

[XYK12, Zag14, ZD15, ZFH14, ZY19a, ZNT15, ZBN⁺¹⁹, vH10, DBLF16].

ordering [ZHSL13]. **Ordinary** [NO12, ADdM12a, ACdM15, ADdM15, ACdM19, FBHB17, MZE13, RBB15, WT15]. **ordinate** [ELDS14]. **organic** [HGCARM15]. **Organization** [SA15a]. **organized** [CGSB18]. **orientation** [SJY18, SJY20]. **orientational** [WDR16]. **Oriented** [CF16, FCC15, Asl14, BFD⁺¹¹, BC19, CB15a, CB17, CB18, CDMCN11, CJ12, CXG⁺¹⁹, CFFR15, DM12, HHP⁺¹⁶, KMJS16, OKM12, SL16, WLG⁺¹³, WP10a, Zag14].

Orthogonal [Ser17, BDJS18, ST19, USOA13]. **orthogonalization** [BC10].

ORTHOPOLY [BDJS18]. **oscillating** [PAS11, PS14, SPTPR19, THDH14].

oscillation [BFM10, WW15]. **oscillations** [CCL15, Dan11, KHBS19, TW11].

oscillator [GKM10, GSMK17, GYW⁺¹⁰, MBGK11, MGK13, MAM14, PSL⁺¹⁷, SDM⁺¹², SDS⁺¹⁷, SMGK14, SSK⁺¹³]. **oscillators**

[Bla15, FMW10, Wu10, YWYF09, YZZ11]. **oscillatory**

[AAD13, CYSL12, DJ11, FLW10, FGR14, LWYW11, LW14b, UNK12, WYSW10, WW10, YZWR14]. **other** [CS10, GH15, LP15, Rut18, SS18].

outline [BH14a]. **Output** [Car10a, Car10b, CMSV14, FCC15, GWM13, RJW⁺¹⁹, SAA⁺¹⁰, SZM⁺¹⁴, SMCB⁺¹⁵, Sta13, DDF⁺¹²]. **over-relaxation** [BSM13, BPP11]. **over-specified** [MD10b]. **overdamped** [LDW13].

Overlap [DPHB17, BBF⁺¹⁰, CL16, PB16, RVDS16, RDVS18]. **Overlapping** [KP12b, BHH⁺¹⁰, BBH⁺¹⁵, JU17, LTP⁺¹⁷, OOK⁺¹²]. **overset** [Cha19].

OWL [DT18]. **oxide** [BCP⁺¹⁶, NGCI⁺¹², Sol11]. **oxygen** [NS11b].

P [DSM⁺¹¹, SKB10, AM14b, CRA10, VHP⁺¹⁵]. **p-MEMPSODE**

[VHP⁺¹⁵]. **p53** [HH11b]. **PACIAE** [SZY⁺¹², SZY⁺¹³, YZCS18, ZYL⁺¹⁵].

Package [EFG⁺¹⁰, ADD⁺¹¹, AKZ⁺¹³, ASPDL⁺¹⁶, AG14, ADdM^{+12b}, ADdM14, AC15, AC18, Aza13, BBU11, BGM⁺¹⁴, BK13b, BB13a, BSGG10, BHH⁺¹⁰, BHW⁺¹², BBH⁺¹⁵, CDdM14, CFSK14, CSK⁺¹⁹, CKK⁺¹³, CMS17, Dep17, Des16, DSS⁺¹², DF11b, Eks11, FTI18, FRW17, FF11, FEH11, GLZ17, GLHR19, GST15, GdGB⁺¹⁸, GMO19, GLMG12, GJA⁺¹⁶, HBL⁺¹³, HEF12, HR11, HHP⁺¹⁴, HLZ⁺¹³, HM10, HM17, IIO16, Jac19, JGB⁺¹³, KPK⁺¹⁷, KST^{+14b}, KPST15, LR18a, LR18b, LM16, LYJH19, LRR⁺¹⁵, LHGF18, LL15, LSK⁺¹⁴, MB12, MWCY14, MZE13, MNL19, Müll14c, Naz12, NS10, NS11a, NSXZ14, Nut14, ORI⁺¹⁰, Pat15, Pat17, PCEH15, Pre18, QZWU19, RRCSCJ10, Ros16, SFV19, SMOB19, SS12, SL17, SH18, SNG⁺¹¹, Sem16, SM14, SQS⁺¹⁶, SLW19a, SLW19b, SSH16, Sit14a, Sit14b, Sit16, SAHP15, SLR16, SS18, SÜ18, TS10, UA17]. **package**

[Var16, VS19b, VJC12, WW14, WL11a, WCL14, WZHE18, Wie15, WZS⁺18, XNK⁺16, YE14a, YE14b, ZZ15, Zit11, vH10, BH14a, FGJB19, Pat15, Pat17, Sht17]. **Package-X** [Pat15, Pat17, Sht17]. **packages** [BKK13, BKM14, BK15, BK16b, Hol19, THJ⁺10]. **packet** [AV13, DHR14]. **packing** [CBAM12]. **Padé** [IH11, SB11, SAS11]. **page** [Gor19]. **pair** [CHA11, CM14b, DGST17, FCCTFR18, FPY⁺17, KHKR14, PH13, RK19, SLW19b]. **pair-instability** [CHA11]. **pair-potential** [FPY⁺17]. **Pairing** [WRB11, GLX⁺14]. **pairs** [HL19b, MWCY14]. **palladium** [SQL⁺10]. **Palmeras** [DLGP10]. **paper** [BLV⁺19]. **Para** [GX15, ZKG⁺18]. **Para-AMR** [GX15, ZKG⁺18]. **parabolic** [AAD13, BB10, GN14, HC16, HC17, NO14, OAKS11, PR13, RS12, TKZ18]. **Paradeisos** [JWM⁺18]. **paradigm** [CKhN11]. **Parallel** [APC⁺14, Bab14, BC11, CLH⁺17, CL15b, CRA10, EDPZ19, EKDDGG15, FFT⁺14, FB19, GGI⁺13, GMF⁺17, GSMK17, GCH⁺18, HL19a, HvAS⁺13, HCSW10, JKIS16, KPPC13, LBM⁺14, LKL11, LT15, Mau16, NCHN15, NFD⁺19, NZQL14, PIH11, QLE16, RRCSCJ10, RNdB19, RD10, SD15, SO19, TSK⁺17, TSTT13, TMS19, US16, VHP⁺15, WC10, WYH19, YSLY19, YRR13, ZPH⁺15, ZHC16, ART17, AL17, BMC⁺11b, BS13a, BS14a, BPB⁺17, BHS18, BJCW13, Boe14, BCM⁺16, BVSG19, BHND16, BENK⁺17, CCLL18, CHNS18, CPR12, CUL⁺17, CSK⁺19, CDR⁺15, DBDP12, DN18, DJW⁺19, DSS⁺12, DRUE12, ER19, Fan19, FZ16, FZY17, FKS⁺19, GS15, Gai17, GP13, GWF⁺16, GS17b, GS17a, GD14, GB14, GZWJ18, GX15, GRLS18, HAV⁺14, HFOPF15, HMR⁺19, HZW⁺19, HPN18, HBH⁺17, HCHW11, ILZ⁺19, JEFP14, JL19, JHL⁺15, KVV19, KHBS19, KÓG17, KHZ⁺18, KD17, KBB⁺17]. **parallel** [LAA⁺10, LSG⁺12, LHH⁺12b, LHH⁺12a, LS12b, LHZ11, LWC14, LW16, MDW16, MIW⁺13, MM17, MCA17, MSI⁺10, MGB18, MGR16, NOR15, NFA⁺16, NPAG11, Ngu17, NM14, NFS15, OCF10, ORS⁺14, PDC14, PGO17, QL10, Qia17, RJLL16, RK19, RFSF18, RBB15, SL16, SSF⁺17, Sch18, SDS15, Sha13a, SOM⁺13, SC16b, SOJ14, Ste17, SMGK14, Str15, SPSP18, Sus17b, SSM⁺17, TTT16, VKP14, WMK11, WEH⁺19, WAHL13, WSH⁺12, WC15, WRVdL15, YHL11, YLQ⁺17, YL12, YBNY13, Zag14, ZAFAM16, ZSW⁺17b, ZMJ13, ZBN⁺19]. **parallel-adaptive** [GX15]. **Parallelisation** [MFH⁺13, Roh16, SCC⁺12]. **Parallelised** [FKH15]. **parallelism** [BS14a, BKS15, MDGC⁺12, TGH⁺16]. **parallelizable** [Smi14]. **Parallelization** [HBE10, MiH12, ASPW13, BW12a, CWY⁺17, DKG⁺14, DO14a, GLAC13, Giu19, JFC12, KEH12, KSY17, LKM⁺16, LW14a, ML17, OLG⁺16, PMS⁺15, RGH10, SCB⁺17a, SS18, THDS16, TE18]. **Parallelizeable** [SST11]. **parallelized** [GJB11, HHS⁺10, OKM12, TKL⁺12]. **Parallelizing** [TD11]. **Parameter** [DMP18, Mau16, dASJC⁺19, Ber16a, Ber16b, BHVMH15, BFM10, Che17, GCVA14b, JWC13, LAS⁺17, LHL11, Mel19, MKR⁺12, MD10b, PM13, PIH11, Yam16]. **parameter-free** [PIH11]. **parameterization** [AANAJ12, KHKR14]. **parameterized** [KL14]. **parameters** [ÇÖSÜ11, DBP19, HM12c, KKCC19, KPV16, MDPTTC17, MPS13, OO15b, PG10, RKVL14, SZM⁺14, WDR16]. **Parametric**

[Lin13, WXL13, BCMS10, GCVA14b, Zhe15]. **parametrization** [BNPPD19, LTP⁺¹⁷]. **parareal** [SCB^{+17a}, SCB⁺¹⁹]. **paraxial** [PBL⁺¹⁸]. **PAREMD** [MGB18]. **parentage** [Dev12, SMGK19]. **Pariser** [KS12, SS10a]. **parity** [AB10, AKH12, SHZ13]. **parity-dependent** [SHZ13]. **Parker** [DSP15, LKW11]. **PARPLE** [Str15]. **parquet** [LKPH19]. **Parr** [KS12, SS10a]. **Parrinello** [VCMS⁺¹³]. **Parsek2D** [IBP⁺¹⁵]. **Parsek2D-MLMD** [IBP⁺¹⁵]. **Part** [ALS16, ABH⁺¹⁹, Dan10a, Dan10b]. **PArthENoPE** [CdSM⁺¹⁸]. **partial** [DHJ13, FBHB17, GCVA14b, HK15, Jiw15b, JK13, MJB⁺¹⁰, SGDS16]. **partially** [McM17]. **participating** [CAN11]. **ParticLE** [KDP⁺¹⁴, BOPL17, BJM15, BKPT12, CBAM12, CDR⁺¹⁵, DS11a, FHTO17, GLHG12, GRLS18, HPKF15, HZW⁺¹⁶, JBKM15, JFHA19, KS16a, KKK⁺¹⁷, LBM⁺¹⁴, MDPTK15, NHSY15, QL10, RNdB19, ÜS18, VGM⁺¹⁵, AM14a, ASPW13, AGMS15, ABCM14, AGB⁺¹⁵, ABR12, BCH11, BPB⁺¹⁷, BBB^{+17a}, BHNS17, BDL⁺¹⁹, BS15b, BE14, BTL⁺¹⁷, BCDP18, BDGG19, BY17, CH19, CATK11, CPW17, CC14, CC15, CSJ⁺¹⁷, CL11, CSSB15, CFF19, DCM⁺¹², DET12, DGPW11, DF14, DBP⁺¹⁸, Dev12, DCVB⁺¹³, DCGG13, ENEO15, EKO16, ER19, EKK14, EW14b, Evs14, FLW17, FJ19, FN17, GWF⁺¹⁶, GKM10, GSMK17, GAHP15, GHMB⁺¹⁹, GD14, GZZ19, GH15, HBE10, HKJ⁺¹², HAK⁺¹⁴, HCSW10, ILZ⁺¹⁹, JXTS16, KB15a, KRK16, KKG⁺¹⁵, KPA⁺¹⁹, KHK⁺¹¹, KvdO11, KK17, KPPC13, LJE11, LS19, Liu11, Liu13, LOK⁺¹⁸, LQ18, LTP16, Mag18, MDPTTC17, MKL17]. **particle** [MKU⁺¹², MF17, MST⁺¹⁸, MH18, Men11, MEM⁺¹¹, MBGK11, MGK13, MAM14, MTO15, MNC15, Mü14c, NFD⁺¹⁹, NP19, NFS15, OBPL19, OCM⁺¹⁹, PR14, PMMF15, PG17, PBS⁺¹⁷, QLN14, RKVL14, RAV11, RK19, RH17, RTA10, SSS⁺¹¹, Sch14a, SS14, SWL⁺¹⁵, Sie16, SN16, SM11, SBPD19, SSP16, SKK17, Sok13, SYE⁺¹⁸, SMCB⁺¹⁵, SMGK14, SBL16, TK14a, Tau10, Tic14, TdAdSS11, UW12, VSG18, VBMP15, VB19, VMFS16, WHG⁺¹⁹, WRF15, WZS⁺¹¹, WXW13, WXW14, WWC⁺¹⁶, WLQ⁺¹⁷, WN10, Wei12, WSH⁺¹⁴, WRR18, XQ19, XLX13, YZZ⁺¹⁷, YLQ⁺¹⁷, YK19, YLKN17, ZSW^{+17a}, ZLFM11, dASJC⁺¹⁹, CDBM16, CHZ18, DS14, FJ19, IBP⁺¹⁵, KC18, LKA⁺¹⁶, PE17, PMMF15, iSSMI11, SVG10, SBE⁺¹⁶, VLL⁺¹⁷]. **Particle-based** [HPKF15, JFHA19, WSH⁺¹⁴]. **particle-beam-dynamics** [KPA⁺¹⁹]. **particle-cell** [PG17]. **particle-continuum** [SYE⁺¹⁸]. **Particle-field** [QL10]. **Particle-In-Cell** [HZW⁺¹⁶, BOPL17, DS11a, AM14a, BPB⁺¹⁷, BDL⁺¹⁹, CH19, CC14, CC15, DBP⁺¹⁸, KKG⁺¹⁵, KHK⁺¹¹, LJE11, MKL17, MKU⁺¹², MEM⁺¹¹, MTO15, OBPL19, QL10, RKVL14, SSS⁺¹¹, SKK17, Sok13, VMFS16, WWC⁺¹⁶, WN10, IBP⁺¹⁵, LKA⁺¹⁶, VLL⁺¹⁷, CDBM16, CHZ18, DS14, KC18, PMMF15, SVG10, SBE⁺¹⁶]. **particle-mesh** [BCH11, ILZ⁺¹⁹]. **particle-pair** [RK19]. **ParticleRecognition** [Nov17]. **Particles** [ATW⁺¹⁹, AFIS12, CHNS18, ES16, EBCB⁺¹⁴, EEGW12, GBJ⁺¹⁵, Gwi12, HL18, MDPTK15, MMT⁺¹¹, MFLY19, PCGM14, RC18, SKK11, SMGK19,

TJH17, TD17, Ume18, Ume19, VC10, ZHCR18]. **particulate** [ZLFM11]. **partition** [HCH16, LKL11, Lee18, RMC16, ZMCT12]. **partitioned** [BY17, EPP12, FZ16, KZC⁺10, MKS10, WXL13]. **partitioning** [HJH17]. **partly** [KH12]. **Parton** [CGO17, BCH17, CUL⁺17, SZY⁺12, SZY⁺13, War16, ZYL⁺15, vH18]. **parton-interaction** [CUL⁺17]. **parton-level** [vH18]. **parts** [Fen12b, Kan14, SS13c, ZYL⁺19]. **passages** [JU17]. **passing** [TSTT13, XNK⁺16]. **past** [TKL⁺12]. **PASTA** [KBLJ18]. **Path** [NSXZ14, AGL11, Brá15, BGHN19, CMM14, LA13, MTS⁺16, MNV13, Miu11, RGKR17, WFM14, ZBG⁺16]. **path-integral** [ZBG⁺16]. **pathology** [LWES18]. **pathology-free** [LWES18]. **paths** [GA13]. **pathways** [MLGVE14]. **pattern** [CGSB18, FBG10, OG14, OO15a]. **patterns** [LSYZ12, MSPD12, WS11a]. **Pauli** [Bad11]. **PAW** [Hol19, RCGT16, SHW18, THJ⁺10]. **PBSA** [PSMS14, PSMS15]. **PCTDSE** [FZY17]. **Pd** [CHW⁺15, SWL⁺15]. **PDB** [DPK⁺15]. **PDB4DNA** [DPK⁺15]. **PDE** [BS15a, Fan19, RD10]. **PDE-constrained** [BS15a]. **PDEBellIII** [MWCY14]. **PDEs** [CWJ19, GLHR19, KSW12, MCL⁺17, RHH12]. **PDF** [BCR14]. **PDG** [BBC⁺13a]. **PDoublePop** [TTT16]. **PDRF** [sX14]. **pe** [FBP⁺14]. **Peacemaker** [KSL⁺11]. **peakon** [HDZ14]. **pedestrian** [PC11]. **Peierls** [PE17, ZLZ19]. **PEM** [VS19a]. **penalisation** [SNB11]. **Penalized** [WvSL13]. **Penetrating** [WGG16]. **PENGEOM** [ASPD⁺16]. **PenNuc** [GTPS19]. **Pentadiagonal** [TT14, GNP19]. **pentoxide** [LS11]. **peptides** [BBV⁺16]. **Percolation** [SW11, YHCS11, YH15]. **perfect** [JWM⁺18, DMH16]. **Perfectly** [LV15, SVV19, SKML11]. **perform** [PSMS14, PSMS15]. **Performance** [CMRVVR⁺14, CCY18, FBN⁺13, GHBL18, KKP11, KVW11, LSYZ12, PZL⁺19, Sha13a, Sin12b, TRM⁺12, Yi11, AL17, Ara14a, Ara14b, BBB⁺17a, BHNS17, BL18a, BCH17, BR13, BWPT11, BKPT12, BY13, CDS13a, CL15b, CRA10, Ein16a, FB19, GS15, Gai17, Gar19, GBK⁺12, HLZ⁺13, JTW⁺17, JVR12, KPA⁺19, KMS19, LSR⁺17, MWI⁺19, MMO⁺17, MVS15, ML16, DPHB17, NMS14, NFS15, PGO17, Rap11, RV10, SGM18, SHZ13, SSF⁺14, Tan19, TGH⁺16, VMGP⁺19, WGVPL17, WEH⁺19, XLCW14, YLL⁺19, dJBIM16]. **performant** [KSS18]. **perfusion** [BBB17b, IBB18]. **peridynamic** [CB15b, HS14a]. **periodic** [BRB12, BDT15, CWY⁺17, CZF18, DV11, EBCBG17, GBP13, HBP14, HBS⁺11, KFS17, KS12, KMJS16, KSY17, Law19, LRW⁺15, LF12, Mil16, PMS⁺15, Qia17, SXW⁺18, SS10b, TAFD19, VDB14, YW17, YLK10]. **periodical** [KAS12]. **periodicity** [PdMML19]. **peripheral** [KNS⁺17]. **Periphery** [ZCC19]. **Perl** [MGFRG12]. **permanent** [RMS⁺12, RE12]. **persistence** [KCL11, SBB⁺17]. **personal** [Cip11]. **personalized** [QHZ⁺14]. **perspective** [MTO15]. **pertaining** [OK14]. **Perturbation** [BK13b, ADT⁺19, BRH⁺16, CS10, CZ19, GBR⁺14, KBB⁺17, KPST15, LV10, MGRB11, Nis11, SCRS17, SÜ18, TVGB15, ZX10]. **perturbations** [LMRC15, Tic14]. **perturbative** [WL11b]. **perturbed**

[Bla15, FMW10, GN14, Wu10, YWYF09, YZZ11]. **petabyte** [Ano11o].
Petaflop [BBF⁺13]. **Petascale**
 [OYK⁺14, YBNY13, CBGY17, CBYG18, SKSK13, VCMS⁺13]. **petascalng**
 [SSS⁺11]. **PETOOL** [OAKS11]. **Petviashvili** [LS12a]. **Pfaffian** [GBRB11].
Pfaffians [RW11]. **PFMCal** [BDGM⁺17]. **PGAS** [BY17, TSTT13]. **Phase**
 [BM19, DVB11, JC16, KV10b, LLSK17, Ots11, Raw15, WJHW14, XHLM12,
 YLO13, AKR15, ABB⁺19, BT17b, BMW14, BS12, CZD15, CHW⁺15,
 CMR17, Evs14, FHA17, FKS⁺19, FFIH11, GTS14, GZW17, GLW14, GX15,
 Hon10, JHH⁺19, Ki10, KSW15, KS15, Liu15b, MRSD15, MKS10, MSHLS15,
 MSHL17, NS15, ÖKC11, PS14, QDZ⁺13, Raw16, SYD17, Sie16, SJW10,
 TKP15, VDF15, VS19a, Wai12, WYH19, XGH⁺19, YLK10, YZ19, ZAFAM16,
 ZKG⁺18, ZY19a, ZY19b, ZKS⁺18, vdSM16]. **Phase-Amplitude**
 [Raw15, Raw16]. **phase-covariant** [BS12]. **Phase-field** [LLSK17, CZD15,
 GZW17, JHH⁺19, TKP15, YLK10, ZKG⁺18, ZY19a, ZKS⁺18]. **Phase-fitted**
 [KV10b, PS14]. **phase-lag** [MKS10, NS15]. **phase-space**
 [KSW15, ÖKC11, XGH⁺19]. **Phasego** [Liu15a, Liu15b, LHWL16]. **phases**
 [BSWC14, EMW19, PS12]. **PHAST** [Fri17]. **phenomena** [KS15].
phenomenological [BNV18]. **phenomenology**
 [ACD⁺14b, ABH⁺18, BDDM18, BSW12, CFS13, LCE⁺13]. **PHI**
 [BFD⁺11, RJKC16, CGSB18, Lya15, MSS⁺14, SBE⁺16]. **Philip** [Sco19].
phone [Sal12]. **Phonon**
 [CP15b, Kon11, RE19, Sco13, BW16, CTT17, CCXC15, CGRB14, KA17,
 Liu15a, NGM⁺10, PMVG16, ZZSW19, ZZ17b, ZZ17b]. **phonons**
 [CVK⁺17, LCKM14, WCL14]. **PhonTS** [CP15b]. **photoelastic** [Wit14].
Photoelectron [MB16, Jab19]. **photoionization** [Hei12, HH11a, LH11].
photon [CMJ⁺11, DKT14, HEPW13, LLE⁺18, OK18, SMCB⁺15, Tic10,
 VDJ⁺11, ZLM12]. **photon-based** [CMJ⁺11]. **Photonic**
 [BDGM⁺17, HWCH11, HLW16, HLTW19, NJS17, PYW⁺14].
photonic-crystal [HWCH11]. **photons** [LN16]. **photorefractive** [Zi614].
PHOTOS [DPW16]. **photovoltaic** [CLH⁺17, RF15]. **phq** [ZZSW19]. **Phys**
 [AAT⁺20, Ano20, AZ17a, Ber16a, ERS10c, KYKN15a, Kra18a, LR16, Nat10,
 Ras17, RC16, RHBH15a, SGM11a, Sco13, SIMGCP14, SJY20, YQM14,
 ZTG14]. **Physalis** [Sie16]. **physical** [AABC⁺13, COK19, Che17, LCH11,
 MD11a, MDPTTC17, Mel19, RKVL14, Sit18, Smi14, ZF15]. **physicist**
 [Hah12]. **Physics** [AAA⁺16, Ano10a, Ano11b, Ano12a, Ano13a, Ano15a,
 Ano16a, BG19a, CXG⁺19, DS13c, Maž19, MLK⁺19, Ram10, ÜS18, Wu10,
 ADF⁺15, Ano10n, AM10, AM11, AMR19, BBB⁺18, BDKS10, BCP13, BC19,
 CB15a, CB17, CB18, CPW17, Che11, CKhN11, DGPW11, DNP⁺12, DPW16,
 Des16, DDK⁺15, ELL⁺17a, DRI⁺16, Hon18, JPCG15, JEC⁺12, KV10a,
 LPBH11, Müll14c, ONS⁺15, PBL⁺18, QGLP13, Sha13b, Sha16, SLR⁺11,
 Veb12, Wie15, YLKN17, ZWLZ17, ZMvE⁺13]. **Physics-oriented** [CXG⁺19].
PI [CMM14, KRM⁺19]. **PIC** [FK12, GV15, HTJ⁺16, KS16b, LYX⁺17,
 LTP16, SBL16, VV18, VGM⁺15, XYM⁺13, YXD⁺15]. **PIC/MC/Vlasov**
 [FK12]. **PIC/MCC** [SBL16]. **PICPANTHER** [KKG⁺15]. **Picture**

[BF16, BM13]. **PID** [OCF10]. **piecewise** [IH11, LV10].
piecewise-linearized [IH11]. **PIGLE** [ATW⁺19]. **PIMC** [ZBG⁺16].
pinning [HBS⁺11, JWC13]. **pipe** [Qia16]. **pipeline** [ECD⁺10, GCC⁺18].
pipelines [FWS⁺17, MSI⁺10]. **pipes** [DMC10]. **PISO** [SQA⁺15]. **PISO-like**
[SQA⁺15]. **Pitaevskii** [ABB13, AD14, AD15, ABDR17, CR13, JCL⁺18,
KYSV⁺15, LBB⁺16, LYSS⁺16, MGL13, MGL16, SSB⁺16, VDAH16,
VVB⁺12, YSVM⁺16, YSMA⁺17]. **pitch** [HJ14]. **pitch-angle** [HJ14].
Pitfalls [SYE⁺18]. **Pj** [NDSH18]. **placement** [NZQL14]. **planar**
[Aza13, BP12, BH13, MTE17, XD13]. **Planck**
[BMBC⁺17, Fuh15, JSLM16, KBSP12, PG17, SLEF17]. **Plane**
[MBF⁺10, AM14b, ACDdM14, DKSG16, GMF⁺17, HK15, JCW⁺13,
JGAL⁺13, KAW⁺10, LT15, MED11, MS11, PDC14]. **Plane-wave**
[MBF⁺10, LT15, MED11]. **planet** [HTT13, HTT14]. **planewave**
[CSPAD10, PBMAD12]. **planning** [CLH⁺17]. **Plasma**
[KC18, ZCC19, ALA⁺19, AAJA14, BMU11, BRL12, BT17b, BEKP19,
CLW11, CGSB18, CXL19, CHH⁺11, DBP⁺18, Evs14, FRFH10, GBSY18,
HKF⁺12, HO13, HBP14, Hon10, Hon18, Hsu11b, KYKN15a, KYKN15b,
KTE⁺12, KMD12, KM17, KRB15, KSY13, LOL⁺18, LDR⁺17, LHH⁺12b,
LHH⁺12a, LJD⁺19, LDF⁺16, MPS13, MLGVE14, MKU⁺12, MCM⁺12,
ML14, MN18, MMA15, MSM⁺11, NNWS15, OBPL19, PYW⁺14, PBD⁺15,
PDJ10, Ram10, REtVH12, SCB⁺17a, SCB⁺19, SLR⁺11, SLEF17, SBE⁺16,
THDH14, TL19, sX14, sX19, XYM⁺13, Yan09, ZFR18]. **Plasma-Material**
[KC18]. **plasmas** [AM19, BSM13, BT17a, BDBV12, BB13b, CHH⁺11,
CFF19, DS11b, DOP17, FR15, GB14, HKJ⁺12, HAK⁺14, KGG⁺16, LXR⁺18,
LH11, LHB⁺19, LRK13, MF17, OILK17, PHT⁺19, PMS⁺17, PBL⁺18, RF16,
RTT⁺18, SS14, SCM⁺16, VBC⁺12, VV18]. **plasmonic** [HT12, SVGS18].
Plasmonics [WTH15]. **plate** [TKL⁺12]. **platelet** [ZZG⁺16]. **platform**
[AABC⁺13, AMR⁺18, CPW17, HTJ⁺16, LWJV18, RDP14, Sal12, SJY18,
SJY20, ZZH⁺16]. **platforms** [LHZ11, PNL13, TKP15]. **PLATYPUS**
[DT11b]. **Plesset** [KK14a, KBB⁺17]. **plot** [BGH⁺18, Liu15b]. **plugin**
[SBB⁺17]. **PLUMED** [Gio14b, TBB⁺14]. **PLUMED-GUI** [Gio14b]. **plus**
[SCM⁺18]. **PML** [DV11]. **PNADIS** [ZLZ19]. **POD** [HZC19]. **POINCARÉ**
[MZE13]. **point** [Ano20, BMU11, BH13, BMZ⁺18, Buc19, CS10, CH11b,
DG10b, DMC⁺15, KK16a, KCN18, MDGC⁺12, NFI17, Nik12b, PPY14,
PDL⁺18, Pra11, SGM11a, SGM11b, TTG11, dSFdFF13]. **point-cloud**
[KCN18]. **point-transition** [NFI17]. **point-wise** [PDL⁺18]. **points**
[Fis12, GVR19, NO12]. **Poisson**
[CM14a, RC16, BCDP18, Bot13, BC11, CDBM16, CCL18, CRLS18, CB16b,
CHZ18, Dua10, DGG13, Exl17, GBN17, GJ13, HCSW10, JLW13, LCHM10,
LCHM13, LCRL10, Miy15, Qia16, Qia17, RC13, VLPPM14, ZPvR16]. **polar**
[CZL⁺11, WCL14]. **polarimetry** [FBHB17]. **polariton** [VBMS17].
Polaritonic [KAvdL11]. **polarization**
[AKZ⁺13, CAGL13, Den10, MCP10, NLB⁺19]. **polarized** [AFIS12]. **pole**
[ASEA14, AMRdA17, PDL⁺18]. **poles** [BG19b, SAS11]. **political** [Cho11].

pollution [MSML10]. **POLYANA** [DRR15]. **Polycrystalline** [KB15b, EBCBG17]. **polydisperse** [HKPF19, MFLY19, OL12]. **polyelectrolyte** [HB13]. **polygonal** [vdS13]. **polylogarithms** [ABRS19, BDV11, BD14]. **Polymer** [DF13, BL14, HCH16, LKL11, Lee18, MSZW11, MNC15, SAG13, WSTP15, dHGCS11]. **polymeric** [DEW16, SM19]. **polymers** [AMJ18, BJ11, GJB11, HP11, MJB11, RV10, VB11]. **Polynomial** [IUM13, KP12a, CB13b, CCK23, GDB10, GLX⁺14, HKZN17, Jal10, sL10, MCL⁺17, OCM⁺19, Pos19, UNK12]. **polynomials** [ACDdM15, BDJS18, GST17, SPS10, WISA11]. **polystyrene** [RV11]. **polyurethane** [KDM17]. **pool** [BKS15]. **Pople** [KS12, SS10a]. **population** [BWB⁺17, VPP⁺12, WRB11, YH15]. **population-based** [VPP⁺12]. **populations** [FSJ⁺16, HFOPF15]. **Pore** [DADS11, OP12]. **pore-scale** [OP12]. **porous** [CTL15, FKS⁺19, HZW⁺19, HSF⁺15, MPM14, OP12, RNdB19, SM14, vMB14]. **portable** [CDSG11, HTJ⁺16, RDC⁺18, RBC⁺19, SGM18, SS13a, VLL⁺17, dBCH14]. **porting** [HD11]. **posed** [LLP15]. **Positive** [Has11, XZF12, SMdONF14]. **Positivity** [SP18b, dTOV18]. **Positivity-preserving** [SP18b, dTOV18]. **positron** [GGGH14, Gre18, Kol15, SMOB19]. **POSMat** [MCY⁺16]. **possible** [ÁSTT16]. **post** [LAA⁺10]. **post-processing** [LAA⁺10]. **posteriori** [CLL16]. **Potential** [MCY⁺16, AM14b, BBF⁺10, BNAB11, DBDP12, DR12, FMRP16, FZY13, FPY⁺17, GC10, GC13, GC16, GC18, GCK19, GB11, HSF⁺19, JH15, JZZ⁺19, LCQF18, LWES18, LRR⁺17, MC16, MEG12, MAM14, ORCR17, PBMAD12, PH11, PB16, RS12, RFPM⁺17, SGDS16, TM14, WZHE18, WN19, Wit14, XNK⁺16, XD13, XHD15, ZHCR18, ZY19a, ZMPT13, ZFBR11]. **potentials** [BNV18, BL14, BY13, BSWC14, DT18, DHR14, Erm18, FCVH17, GH11, GD14, HLZ⁺13, KK14b, KHKR14, KHN19, LYJH19, Ngu17, OPO⁺11, OPSR13, OPR14, THDS16, TVZ⁺15, YW17, ZC12]. **POTHEA** [GCVA14b]. **POTLIB2Math** [TM14]. **Potts** [DG16, Boe14, FDWC12, KO13, KO14b, KO16, MEG12, NCHN15, TD11, XZF12, dSLF13]. **Power** [ZLL18, CC10a, CHC⁺11, EZBA16, SB11, SW12b, UW12, WWC⁺16, WCT11]. **power-law** [WCT11]. **PPA** [OK12, OK18]. **ppohDEM** [NMS14]. **Practical** [ABH⁺19, Dan12, EPS15]. **Prager** [GCH⁺18]. **PRAND** [BS14a]. **pre** [DdJC⁺19, RU13]. **pre-determined** [RU13]. **pre-exascale** [DdJC⁺19]. **precipitation** [XHLM12]. **Precise** [CKCS13, NKS15, ZY19b]. **precision** [AG12b, BDT15, CMRVVR⁺14, CMRVVR16, CBB⁺10, CH11b, GBFJ14, HS19, KB19, LGW13, LM16, MW19, MNOØ11, NO12, RCGT16, SLK19, SMGK14, TC12]. **Preconditioned** [EFK⁺19, HKZN17, LHJZ10, SAY⁺18, SPP19, TKS10, VBS⁺17]. **predict** [LOV10, Pra11]. **Predicting** [rJmYT11, WS11b, YS17, ZZH⁺16]. **prediction** [AFZ17, AFZ18, ATCZ19, BK13a, DBD⁺17, FLA⁺16, Liu14, LZ11a, LZ11b, LOSZ13, MW19, MW14, SLY18, WLZM12]. **predictions** [BBH⁺11a, DGPW11, KKK⁺15, Pit10, RH11, SAE⁺16]. **predictor**

[PAS11, PS14, SD10b, SA15b, TYH⁺15, Yua19]. **predictor-corrector**
 [PAS11, PS14, SD10b, SA15b, TYH⁺15]. **predictors** [ADdM17]. **Preface**
 [HS11, Hsu11a]. **preferences** [DMC⁺15]. **pregnancy** [ZBMM11].
preparation [Rut18]. **prescription** [Deu16]. **presence**
 [BT17b, DCC⁺10, JPK⁺12, Nis11, RS12, SD14]. **Present**
 [Pat12, GFJ⁺14, TIMM13]. **preservation** [MD11a]. **preserving**
 [BIT12, CWJ19, CM14a, CEF16, MF17, MN18, Miy15, Sal16, San15, SP18b,
 WXL13, WM13, YZ16, dTOV18, NO14]. **PRESHOWER** [HEPW13].
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 MLK⁺19, NKS15, SHW18]. **pressure-dependence**
 [Maż19, MLK⁺17, MLK⁺19]. **Pressure-induced** [HYM11]. **price** [KCL11].
price-price [KCL11]. **primal** [VvAV⁺11b]. **primal-dual** [VvAV⁺11b].
primary [MFLY19]. **primitive** [Ray10]. **principal** [MLGVE14, WLM14].
Principals [NFI17]. **principle** [CS17, Deg15, Evs14, HM18, SQL⁺10].
principles [CSL⁺13, EY11, ELL⁺17a, FWZ⁺12, GPS⁺13, JEC⁺12, LZL11,
 LS17a, PBMAD12, SWL11, ZZ17a, ZFZ19]. **PRO** [MGL16]. **Probabilistic**
 [Er14]. **probabilities** [DSHS17, PDC14, WW15]. **Probability**
 [PM13, SI11, AQJ10, Asc10, CMR17, Ker17, KCL11, KMS19]. **probe**
 [AAJA14, TCK⁺15, XLX⁺15]. **probes** [BMG⁺15, KKS18]. **ProbeZT**
 [KKS18]. **problem** [Ano20, BBB17b, BBC⁺13b, CLH⁺17, CDMCN11, CD12,
 Cho11, DPB16, Dua10, EKO16, GLX⁺14, IBB18, Ixa10, Jal10, KK16a,
 KPA13, KL11, LX12, LZP12, LWW10, MW12, MFM15, MK10, MD10b,
 PS11, RM10b, RC13, RC16, SCS12, TKJ19, WHB16, Wan10b, WP10b].
problems [AABC⁺13, AG12a, BCDP18, CCLL18, CAN11, CCHL11, CS10,
 DMP18, Des16, DCU⁺19, DB13, DS15, FGR14, GHvdL11, GMC18, GN14,
 GCHL15, HKS10, Ixa16, Jan10, JWM⁺18, JOR⁺12, KV10a, KBSP12,
 KAS12, KL14, LMRC15, LV10, LHJZ10, LWL12, LHC⁺13, LCQF18, LW14b,
 LAG⁺17, LR13, LR16, MCWJ15, ÖY13, PS14, PS11, SKFP16, SS13b, SK14,
 SMCB⁺15, SS10b, TFBW14, TACA15, TVT⁺16, VSO⁺13, WFV14, ZHSL13,
 ZWLZ17, ZX10, ZLL13, ZNT15, vRWS14, vWB10]. **procedure**
 [AKS17, BW16, BSWC14, CCLL18, KMD12, KM17, KSW12, RC18, TIMM13].
procedures [Dua10, FG13]. **Procesi** [HDZ14]. **Process**
 [BKS15, CLF18, DKT14, LTL⁺12, LCRL10, MLEM19, dHGCS11]. **processes**
 [BdVGS11, COK19, CZGC19, CPHL14, CF17, CRC⁺13, CI11, Fri19,
 GTPWL12, MKB⁺11, OK12, OK18, RCD⁺10, Ros15, SOYHDD19, TC11b].
Processing
 [Boe18, Dem11, Mau16, MSML10, YLO13, Ano19m, BK11a, BHS18, BJCW13,
 CDS13a, CMSN18, CSSB15, Col14, DBDP12, DS11a, DF13, FSH13, FUSH14,
 FCVH17, FVH18, Fil14, Fri14b, FWS⁺17, FZY13, HAN⁺16, LAA⁺10,
 LAS⁺17, MED11, MEM⁺11, NPAG11, PVH⁺17, PLD⁺13, RFSF18, SPTPR19,
 SLW19b, SH12b, SSM⁺17, TD11, Tic10, WDL11, WWFT11, Zlo13].
processor [APRG11, NBN⁺14, Rap11, TB14]. **processor-based** [TB14].
processors [LSG⁺12, RJKC16]. **produced** [AG14]. **Product**
 [JWC18, CCK23, DBK⁺14, Eks11, GDB10, HR11, Tos10]. **production**

[BBUY13, BKMP16, BG14b, CWW10, CWW15, Cip13, DDKM15, GLPQ11, Gin10, HLM13, KMO19, KKK⁺15, Les16, OK12, OK18, WW13, YWW13].

PROFESS [CXH⁺15, HHS⁺10, KST14a]. **profile** [ABB⁺19, Gio14a, VSG17]. **profiles** [AANAJ12, MSNI11, Wai12]. **profiling** [CCY18]. **Program** [BS11, BS13a, BB13a, CGV13, DHR14, GBS16b, LSDD14, NS10, VPM16, AC13, AM10, AM11, Arb12, AMR19, Asi10, AZ17a, AZ17b, AKV18, BGM⁺14, BF16, BBPS14, BH14b, BFD⁺11, Bog16, CKLM10, CDTV10, CH11a, CATK11, CXH⁺15, Cip11, Cip13, CCGC13, CRNK12, CM14b, CO11, Dan11, Dat13, DEMM19, DDKM15, Dev12, DKG⁺14, EJG⁺19, FMRP16, Fer15, FCCTFR18, FEH11, Fri12, Fro11, Gao13a, GLS⁺13, GCVA14a, GCVA14b, GNT17, HSF⁺19, HLM13, HEF12, HHS⁺10, HL19c, JPSS10, Jia18, KKS18, KNS⁺17, Kob13, Kol14, KS12, Kra11, LHC⁺12, LZL11, MCV18, MUU18, MCA17, MPS13, MLW⁺10, ME18, MNV13, MGB18, MBGK11, MSNI11, NGG⁺13, NGM⁺10, ÓN14, OKM12, dIRJL14, PCR17, PSL⁺17, Pit12, Pos18, RDP14, RFPM⁺17, SZY⁺12, Sai10, Sar17b, SSG⁺10, SSG⁺18, SBB13, SDM⁺12, SDS⁺17]. **program** [STY15, STY18, SZM⁺14, SS10a, SLLP17, SSK⁺13, TVZ⁺15, TS11, UW12, Ver16, XMLC16, YKK⁺19, YLTS16, ZF16, ZBG⁺16, ZKW⁺15, ZYZ15, ZSW⁺17a, ZMCT12, ZZD15, ZZ17b, ZHL11, Zlo13, ZUT13, dB14]. **programmable** [Rap11]. **programme** [KB19, LTP⁺17]. **programming** [BY17, EGT⁺18, GRTZ10, JTW⁺17, LSYZ12, SV14, iSYS12, TSTT13, VvAV⁺11b, VvAV⁺11a, WMK11, YHL11]. **Programs** [HL19b, ABB⁺14, Ano10o, AC16, Bjö11, CL15b, HD11, JCL10, JZZ⁺19, KO14b, Kom15c, KO16, KPST15, KYSV⁺15, KLM⁺19, LCJ10, LBB⁺16, LYSS⁺16, SSB⁺16, VVB⁺12, YSVM⁺16, YSMA⁺17]. **ProIO** [BABC19]. **Project** [GTK⁺19a, BBC⁺13b, DBK⁺14, GAC⁺17, LKPH19, LSJ13]. **projected** [BK12, Jan10, PR10, SKB10]. **Projecting** [BHS15, DHS14]. **Projection** [DAW⁺19, WX14, GHvdL11, Sal16]. **Projective** [CH19, LL12]. **projector** [CKT17, DA16, Hol19, THJ⁺10, YLO13, JTH14, RCGT16]. **prolate** [ALSW14, Kir10]. **ProMC** [CMSV14]. **proof** [BRB12, Deg15, SS18]. **proof-of-principle** [Deg15]. **propagating** [GTS14, MC10, Raw15]. **Propagation** [ACML11, APRG11, BF16, BRL12, BPMM14, BG14b, DKSG16, EKDGG15, GB14, HEPW13, HKvH16, HHM⁺15, IB11, JCL10, KFS⁺13, LR13, LR16, MiH12, MA11, OAKS11, PQTGS17, TMD11, TKZ18, VDJ⁺11, Wal11, WGG16, Zió14]. **propagator** [DSS⁺19, MNV13]. **propagators** [EPS15, GM16]. **propelled** [AD11]. **Proper** [HJH17, ST19]. **properties** [AM14b, BKA⁺14, BIT12, CLC14, CHW⁺15, CSL⁺13, DSS⁺12, DES⁺11, EY11, Fri12, GWL⁺17, GM11, GRR⁺14, HCRD14, KAR⁺15, KMM⁺19, KAvdL11, KZ14, LFKD18, LSDD14, LSG⁺12, MLW⁺10, MF17, MFS10b, MGB18, PVK⁺14a, PVK⁺14b, PMVG16, PGMU19, RKGK⁺17, SPAW17, Ste17, TG11, Voy13, WXL13, WQ18, WWL11, ZZSW19, ZMJ13]. **property** [FLW10, ZZ17a]. **proportional** [KB15a]. **Proposal** [BBC⁺13a, Yam16, Ano10o, DSS⁺19, KFS⁺13]. **prostate** [RMS⁺12]. **Protein** [Fri17, CB16b, LWL11, SZC⁺13, YK10, DPK⁺15]. **Protein-like**

[Fri17]. **protein-surface** [CB16b]. **proteins** [BHH⁺10, BHW⁺12, BBH⁺15, CS16, CZN14]. **protobuf** [BABC19]. **ProtoMD** [SMO16b]. **proton** [BS13b, Gin10, KMO19, MSNI11]. **proton-proton** [BS13b, Gin10]. **prototyping** [SMO16b]. **providing** [Kaw19]. **Ps** [KH11]. **Pseudo** [Dem11, BCJW13, KZC⁺10, LV15, MDHD18, SNB11, SVV19, TD14, UO15b]. **Pseudo-random** [Dem11, BCJW13]. **pseudo-spectral** [KZC⁺10, LV15, SNB11, SVV19, TD14]. **PseudoDojo** [vSGB⁺18]. **pseudopotential** [DSL11, GVPJ18, JCW⁺13, vSGB⁺18]. **pseudopotentials** [BPS⁺16, HBP⁺15, SG15, VFV19]. **Pseudorandom** [HLD13, ÖY13]. **pseudospectral** [DT11a, HKvH16, TC11b, YZ16]. **PSML** [GVPJ18]. **PSsolver** [ADdM12a]. **PSTD** [GV15]. **Pt** [SWL⁺15]. **PTD** [BD12]. **PTX** [iSYS12]. **public** [SAE⁺16]. **PUFoam** [KDM17]. **Pullback** [MBB⁺19]. **pulse** [APRG11, CCXC15, GCF⁺17, IB11, KME⁺11, SPS10, TKZ18, WP10b]. **pulsed** [CHC⁺11, GC12, LJSW11]. **PULSEDYN** [KS19]. **pulses** [BEKP19]. **PumpKin** [MLGVE14]. **PUQ** [HHM⁺15]. **pure** [CB13a, JCL⁺18, KAR⁺15, NS11b]. **purpose** [ASPDL⁺16, AABC⁺13, DBP⁺18, Fer15, GJ14, GNA⁺15, LPC⁺15, MSI⁺10, RFPM⁺17, iSSMI11, SS10a, TdAdSS11]. **Pushing** [CSV⁺18]. **PWBA** [BPC12, Cip11]. **PyCDT** [BMZ⁺18]. **pyCTQW** [IW15]. **PyDII** [DMC⁺15]. **PyFR** [WfV14]. **PyGBe** [CB16b]. **pyGDM** [Wie18]. **pyIAST** [SSH16]. **pyJac** [NCS17]. **PyR** [LSSW14, LS17b]. **pyramidal** [ZHC16]. **pyrochlore** [IUM13]. **pyrolysis** [XAPK14]. **PySCF** [KBSP19]. **PySCF-NAO** [KBSP19]. **pySecDec** [BHJ⁺18, BHJ⁺19]. **PYTHIA** [KRW13, SAC⁺15, EGPS10]. **Pythia8** [AAB⁺10b, War16]. **Python** [BMZ⁺18, CMM14, CFSK14, CFW17, CSRV13, CKK⁺13, CBB14, Cri18, DEMM19, DMC⁺15, GH18, GHN19, GdGB⁺18, HHP⁺16, JNN12, JNN13, KPK⁺17, KSH14, KBLJ18, LS17b, ML16, QZWU19, RKVL14, SV14, SSH16, Sta19, Var16, Wie18]. **PyVCI** [SC16a].

Q [SKB10, Wan10b]. **Q2DTor** [FCCTFR18]. **QBH** [Gin10]. **QCD** [AC15, AC16, AC18, BLPP13, BBUY13, BK13b, BCS10, BWWM19, BBC⁺11, BCDI12, BS13b, Bot11, CB13a, CDS⁺13b, CBB⁺10, FKL13, GM18, HKK11, JPSS10, KP12a, Kan18, LCL⁺11, LS13, MWL⁺10, NIK⁺12a, NS10, STK10, SV13, TKS10, WL11a, War16]. **QCDDLoop** [CEZ16]. **QCDDMAPT** [NS10, NS11a]. **QCDDMAPT_F** [NS11a]. **QCDDNUM** [Bot11]. **Qcompiler** [CW13]. **QCWAVE** [TJD11, Tab16]. **QDENSITY** [Tab16]. **QDENSITY/QCWAVE** [Tab16]. **QED** [BCR14]. **QEDMOD** [STY15, STY18]. **QEDv2** [SV14, Vuk12]. **QEngine** [SJHS19]. **qha** [QZWU19]. **QIST** [HWM⁺15]. **QLM** [Kri12]. **QM** [MMSF⁺15]. **QM/MM** [MMSF⁺15]. **QmeQ** [KPK⁺17]. **QMMM** [MMSF⁺15]. **Qprop** [MB16]. **QQbar_threshold** [BKMP16]. **QRAP** [SKB10]. **QSATS** [Hin11]. **QSWalk** [FRW17]. **QSWalk.jl** [GMO19]. **Quadratization** [XYZX19]. **Quadrature**

[SPSP18, AG12b, AAT17, BK12, HKPF19, JPM12, Jiw15b, MSR10, MN10, PFFK19, PTS12, Sch14b, Shi16, PSP16]. **quadrature-based** [BK12, HKPF19, PFFK19]. **quadratures** [PPY14]. **quadric** [ASPDL⁺16, DSPJ10, GSB⁺14]. **quadrilateral** [LWRQ16]. **quadrupole** [TUY15]. **quadrupoles** [SBPD19]. **quadtree** [TE18, TK19]. **quadtree/octree** [TE18, TK19]. **quality** [SZC⁺13]. **quantification** [CNS⁺14, KZ14, OO15b, OO15a]. **quantitative** [BHH⁺10, BBH⁺15, CSC11, LN16, SSM⁺17]. **quantities** [KFF⁺16, LCH11, WHG⁺19]. **quantity** [CLH⁺17]. **quantization** [Zit11].

Quantum [BDK11, BG11, CW13, DSW15b, DS13b, FGGM11, GRTZ10, KYM⁺17, LCH11, LW13, ON11, PNL13, TTS11, UKKB19, ZZD15, ACTP15, AK13b, Aza13, BBW11, BMW14, BBC⁺13b, BMNS14, BAF18, BVSG19, BS12, CZ17, CZ18a, CL10, CK12, CB16a, Dat13, DJW⁺19, Den10, DHR14, DDM14, EY11, FRW17, FUSH14, FVH18, FE11, FLW17, Fri14b, GWL⁺17, GZL14, GMO19, GM16, GH15, GWF⁺11, HWG13, Hin11, HRC11, Hoh14a, HWM⁺15, Hua17, HL19c, Ihn12, ID18, IIO16, IW15, JWC18, JNN12, JNN13, JMG⁺17, JDG12, KSL⁺11, KPK⁺17, KPOR18, Kro16, LKM⁺16, LV13, LW11, LWC14, LW16, Lut15, LJB⁺16, Men11, MNW⁺17, Mis12, Mis13, MKV11, MBFD12, NEW⁺18, Nog17a, Nog17b, NVW⁺13, OBH10, ORCR17, dIRJL14, PFA⁺15, PBS⁺17, PKRS16, RF10, RK11, RPL⁺14, RC11, Sai13, SV14]. **quantum** [San15, SGAA18, SL17, SH18, SZ15, SKFP16, SPMM11, SOM⁺13, SGW17, SO19, SH16, SZM⁺14, SJHS19, Sou14, SCG11, SKSK13, SÜ18, TJD11, Tab16, TTG11, TMS19, Vuk12, WFM14, Wan10b, WC10, WM13, WPAV14, YÇÖ15, YWOD19, ZHC16, VJV19, vWB10, BKC⁺17, GSZ13, KST14a, MMSF⁺15, RF10, YKS11]. **quantum-corrected** [SO19]. **quantum-mechanical** [LV13, RC11]. **quantum-transport** [EY11]. **QuantumOptics.jl** [KPOR18]. **Quark** [BBB⁺15, ARAB⁺17, ACD⁺14a, BG14b, CCN17, Gao13a, GBJ⁺19, HLM13, KKK⁺15, SS12]. **quarkonium** [Sha13b, Sha16, WW14]. **quarks** [ALL⁺11, BKMP16, KP12a]. **quartic** [KVVW11]. **Quasi** [JLA⁺14, BCT17, BHJ⁺19, CJH11, CHC⁺11, GZW17, HDZ14, KFS17, LKA⁺16, LB13, NJS17, dIRL11, PE15, VB19]. **quasi-bound** [LB13]. **quasi-cylindrical** [LKA⁺16]. **quasi-Degasperis** [HDZ14]. **quasi-harmonic** [dIRL11]. **quasi-incompressible** [GZW17]. **quasi-Magnus** [BCT17]. **Quasi-Monte** [JLA⁺14, BHJ⁺19]. **quasi-neutral** [PE15]. **quasi-one-dimensional** [CJH11]. **quasi-pulsed** [CHC⁺11]. **quasicrystalline** [HCC14]. **quasiharmonic** [dIRAPL11, QZWU19]. **quasilinear** [BB13b]. **quasilinearization** [Jiw12, KV10a]. **quasiparticle** [DSS⁺12, KMM⁺19, KOK17, ZZSW19]. **quasiparticles** [CTT17]. **quaternion** [JZJ18, San15, WM13]. **quaternionic** [JZJ18, LWW10, San15, Wan10b, WM13]. **qubit** [RF10]. **qubits** [LW11]. **QUCON** [vWB10]. **qudits** [LW11]. **questioning** [QHC⁺10]. **Quick** [TW15]. **quiet** [LSK⁺13, SKH⁺10]. **Quintic** [LX12, WZ13]. **quotient** [KSW12]. **QuTiP** [JNN12, JNN13]. **qwViz** [BBW11].

R [LQZ⁺13, ADH⁺17, GH18, GHN19, LQZ⁺13, MiH12]. **R-matrix** [MiH12].
r10 [AFZ17]. **r11** [AFZ18]. **r12** [ATCZ19]. **r7** [LZ11b]. **r9** [FLA⁺16]. **RA**
 [SKB10]. **raaSAFT** [ESM17]. **Radar** [WGG16]. **radial** [DG10b, DM17,
 DRR15, Kir10, LXR⁺18, MRL18, MK10, PAS11, SFV19, SD10b, SFV19].
radially [KSW12]. **Radiation**
 [OK18, ASPDL⁺16, ASS13, Aza13, BSC⁺13, CAN11, GLAC13, HJL⁺14,
 KEH12, LHJ⁺15, LAG⁺17, LS17a, PCEH15, QA13b, RDC⁺18, RB18, SL16,
 SCJH19, SC15, SC16b, VMFS16, YXT⁺15, Hak16, Hak19].
radiation-hydrodynamics [SC15]. **radiation-induced** [LS17a]. **radiative**
 [AFIS12, CZF18, ELDS14, HTT13, HTT14, XHLUF⁺18]. **radical** [Faw10].
radii [GR19]. **radio**
 [ECD⁺10, GB14, KMD12, KM17, KSY17, SVG10, TRM⁺12, TUY15].
radio-frequency [GB14, KMD12, KM17, SVG10]. **radio-map** [TRM⁺12].
radioactive [SM14]. **radiobiological** [KEH12]. **radiography**
 [BL18b, WHB16]. **radioisotope** [WT12]. **radionuclides** [GTPS19].
radiowave [OAKS11]. **radius** [KB15a, SH12a, XGH⁺19]. **raft** [MD11b].
Raman [CLY11]. **ramp** [Hon10]. **ramp-up** [Hon10]. **Random**
 [DVB11, NHD16, RNdB19, AM14a, ASPW13, BS11, BS13a, BS14a, BJCW13,
 BCJW13, BPSS18, CSRV13, Dem11, FLP10, GP13, GAHP15, GBS16b,
 Hal17, KC14, KS16b, KMS19, KD16, LS15a, LSG⁺12, MKMK10, MH11,
 Mis12, Mis13, PPS10, Rom15, Sav15, SS13a, Sib17, SW11, TC11a, UO15b,
 WRVdL15, XZF12, YZZ⁺17, YLO13]. **random-bond** [XZF12].
random-field [SW11]. **randomly** [SKML11]. **RandSpg** [AZ17a, AZ17b].
range [ADD⁺11, BTM⁺17, Boe14, BWPT11, BSWC14, Cor14, Fil13, Fil14,
 FN17, HWL⁺17, HM17, KK16b, KMD12, PG10, iT11]. **ranging** [SGSG19].
rank [Ara14a, Ara14b, BK12, DSHS17, KK14b, LO14]. **rank-structured**
 [KK14b]. **Rapid** [FWS⁺17, MJB⁺10, Ray10, SKH⁺10, HvAS⁺13, Ruf13].
RapidSim [CCN17]. **Rare** [KBT⁺14, CGV13, KI11]. **rarefied**
 [HZW⁺19, JvOK17, PG17]. **Rashba** [XJS16]. **ratchet** [HCT11]. **rate**
 [CGRB14, GJLB12, Shi16, SAN18, XHLUF⁺18, ZBMM11, WS11b]. **rates**
 [ADF⁺15, AAT17, GGGH14, SAG13]. **ratio** [RE19]. **rational**
 [ACDdM15, ADdM15, ACDdM19, Tia11, TK14b]. **Ratip** [Fri12]. **Ray**
 [MTM14, OTC14, BMF⁺19, BHN⁺16, CCM12, DA16, FWS⁺17, GTL⁺17,
 HCM19, KMA⁺12, LHC⁺12, LP15, LL15, MMC10, MCAdF14, MM11,
 Mü14a, Tic10, TVGB15, TS10, VDJ⁺11, WG16a, WFDK19, YvOSM15,
 Bru13, CDSG11, Cip13, GSB⁺14, LS12b, MD11b, PBMA12, Tic10].
Ray-tracer [OTC14]. **Ray-tracing** [MTM14, LHC⁺12]. **Rayleigh** [WG12].
rays [LKW11]. **RBF** [DM17]. **RCCPAC** [MCA17]. **RCM** [ZHSL13]. **RCS**
 [MSR⁺17]. **re** [CLJ12, TU14]. **re-formulation** [CLJ12]. **Reaching**
 [RCGT16]. **reactant** [ECSH16]. **reacting** [LL12]. **Reaction**
 [GAGW16, VRV15, VRV18, BO12, DMP18, DT11b, JuIAM16, LRSS19,
 MFM15, Shi16, SCM14, SAG13, TRN16, VMFS16, XWF18, dSF18, TDL⁺14].
reaction-diffusion [MFM15, SCM14, XWF18]. **reactions**
 [GC13, GBJ⁺12, GBJ⁺13, Pla16]. **Reactive** [WFM14, AV13, ASEA14,

CFFR15, HL19c, MLR10, iNSK⁺15, PNL13, WMI19]. **reactor**
 [TGH⁺16, ZSW⁺17b]. **reader** [CGO17, Sta19]. **Real** [Ano19m, AAB⁺10b,
 BD10, CDL⁺12, LAS⁺17, MSH11, SP16, SBH⁺12, AAA⁺16, BW12b, BR14,
 BG11, CDMCN11, ECD⁺10, FZ16, JL19, KK16b, KHZ⁺18, KKL⁺18, KS16b,
 MC16, MBF⁺10, MSS⁺16, OOK⁺12, dIRJL14, PVK⁺18, SCRS17, TL17].
Real-space [MSH11, SP16, SBH⁺12, BG11, FZ16, KKL⁺18, MBF⁺10,
 MSS⁺16, OOK⁺12, dIRJL14]. **Real-time**
 [Ano19m, BD10, CDL⁺12, LAS⁺17, AAA⁺16, BR14, JL19, PVK⁺18, TL17].
Realistic [Sol11]. **reality** [GHK19]. **realization** [BS11, GBS16b].
realizations [ÁSTT16]. **realized** [NPAG11, RH11]. **rearrangement**
 [Bin13, UFKB19]. **Receiver** [SC14]. **receptors** [PDC14]. **reciprocity**
 [DG10a]. **recognition** [DAW⁺19, UIY11]. **recoil** [DIR⁺19]. **RECOLA2**
 [DLU18]. **recombination** [Fri12, SVG10]. **recommendation** [QHZ⁺14].
reconfigurable [RDN⁺17]. **reconfiguration** [KC14]. **reconnection**
 [PBE14, YJK11]. **reconnections** [CZ17]. **reconstructing** [PR10].
Reconstruction [MD11b, ALC18, CPCDdM18, FBHB17, GMH11, HZC19,
 LSK⁺13, LAS⁺17, SAS11, VL19, WFV14, YvOSM15]. **record** [BS14b].
recording [MP11]. **recoupling** [Wei99]. **rectangular**
 [JYPA18, Qia16, SK15]. **recurrence** [BBF⁺10, TO10a, WSO⁺12].
Recursive [PO14, Fen12b, KvdO11, ADH⁺17, DLU18]. **recycling**
 [CMRVVR16, YRR13]. **Red** [BGL⁺14, BTL⁺17]. **reduced**
 [CZ18b, KKCC19, Kom15b]. **reduced-order** [CZ18b]. **Reducing**
 [BH17, BHVMH15, CMSN18, GM17]. **REduction**
 [BKM14, ASGLK10, BCS10, BKK13, BK15, BK16b, Che17, EPS15, GSB⁺14,
 MUU18, Mel19, MZE13, MNC15, PZL⁺19, Per14, SH18, Stu10, ZWC⁺19,
 BKK13, BK15, BK16b, Smi15]. **Redundant** [QHZ⁺14]. **Reduze** [Stu10].
reference [DKG⁺14, DFM⁺15, Duf16, JP10, KKO19, SS11b, VS19a].
reference-free [DFM⁺15, Duf16]. **refined** [EZL⁺16]. **refinement**
 [ACMM19, AWK⁺16, FXZ⁺14, GX15, JFC12, LH18, LWRQ16, MHV17,
 UBRT10, WQ18, YRR13, ZD15]. **reflection**
 [GCVA14a, Ram10, WS11a, Yan09]. **reflections** [NLSJ17]. **Reformulation**
 [LZP12]. **refractory** [SCNJ18]. **regarding** [MS15]. **Regge** [ASEA14].
regime [CXL19, REtVH12, TKL⁺12, YWOD19, dSFdFF13, vMB14].
Region [OK10, HJGL18, HJGL19, SZM⁺14]. **Region-of-interest** [OK10].
regional [BB12]. **regions** [Smi14]. **regression** [AG12a]. **regular**
 [MKV11, NO12, Sch18, SSG⁺10, SSG⁺18]. **Regularization**
 [Pál12, dDYK⁺18, Fen12b, Kri12]. **regularizations** [DDH17]. **regularized**
 [DS11b, PDL⁺18]. **regulatory** [HH11b]. **reinitialization** [FHA17].
rejection [SOYHDD19]. **related**
 [KAS12, MHA⁺12, PAS11, PS14, SCW⁺11]. **relation** [WSO⁺12, sX14].
relations [SS13c]. **relative** [Bar11b, BSWC14, FS17]. **Relativistic**
 [FGJB19, GLB13, Hsu11b, Müll14a, TM19, Aza13, Bab14, BHS18, BEKP19,
 CGM17, CEF16, EJG⁺19, Erm18, Fri12, GM11, GTS14, GBJ⁺10, GBJ⁺12,
 GBJ⁺13, GFJ⁺14, GBJ⁺15, GYW⁺10, HH11a, JGB⁺13, KB19, KHB14,

KKG⁺¹⁵, KNS⁺¹⁷, KPST15, KMA⁺¹², LWES18, MDHD18, MCA17, MF17, NGG⁺¹³, NPVR14, QYM11, QA13a, SZY⁺¹², Sar17a, SQS⁺¹⁶, SS11a, SLEF17, XQ19, XYM⁺¹³, ZD15, dIRM18]. **relativity** [MG10a, Mü11a, Bre10, GLMG12]. **Relaxation** [CYN19, BSM13, BPP11, BPMS16, Eba13, FN17, KS15, MKB⁺¹¹, SW12b, XHLUF⁺¹⁸]. **release** [GRR⁺¹⁴, RKGC⁺¹⁷]. **relevant** [LPBH11, MPS13]. **Reliability** [CZ18a, MH18, WLH⁺¹²]. **reliable** [AMM11, BS14a, CO11]. **reliably** [SZC⁺¹³]. **Relic** [AM11, AMR19, AM10, AM10]. **reloaded** [CdSM⁺¹⁸]. **remainder** [CB13b]. **remapping** [KN13, LJWK11, LJZ⁺¹⁸]. **remarks** [MS15]. **Removal** [BCH11, DF14]. **renormalisation** [Fon12, Roh16]. **Renormalization** [LSSW14, FSC13, HB12, KK16b, MK19, NBN⁺¹⁴, PO14, RGH10, Sta11, Trö11, Ver16, WPAV14, LSR⁺¹⁷]. **renormalized** [FHH⁺¹⁴, GZL14]. **reorthogonalization** [JK13]. **repeated** [OK14]. **replacement** [YZCS18]. **replica** [Boe18, GXF⁺¹⁵, GJB11, IIO16, IFOI18, JJ15, LRC⁺¹¹, LK15, UO15b, UO15a, HL19a]. **replica-exchange** [Boe18, GJB11, IIO16, IFOI18, UO15b, UO15a]. **Reply** [MLK⁺¹⁹]. **representation** [BDBV12, CYOS19, FK15, KCT15, Kaw19, LS19, LWL12, MLW⁺¹⁰, Naz12, PDL⁺¹⁸, PCGM14, WISA11, WZHE18, WvSL13]. **representations** [HR11, LDD⁺¹⁹, LLX14b, LJB⁺¹⁶, ÖKC11, SL17]. **representing** [McM17]. **reproduce** [BW16]. **Reproducibility** [WEH⁺¹⁹]. **Reproducing** [LLX14b]. **repulsion** [PB13, TO10b]. **requiring** [Fer15]. **rescaling** [Odr11]. **research** [GBS^{+16a}, LHC⁺¹², LYJY10, PFA⁺¹⁵, PYW⁺¹⁴]. **reservoir** [YSLY19, ZAFAM16]. **Reshetikhin** [JWJL12]. **residual** [YK18]. **residues** [LR18a, LR18b]. **resilient** [MCL⁺¹⁷]. **resistance** [ZLZ19]. **resistive** [Ein16b, FDZ17]. **reskit** [BG19b]. **Resolution** [AS16, ABRS12, BMG⁺¹⁵, CBGY17, JP10, JAS17, PHA18, Sit18, SCM⁺¹⁸, TRM⁺¹², XHLUF⁺¹⁸, YK19, dB14]. **reSolve** [CC19]. **resolved** [Sie16, WQ18]. **resolved-particle** [Sie16]. **Resonance** [KH11, VCMS⁺¹³, ASEA14, GH11]. **resonances** [BNV18, LTP⁺¹⁷, SAS11]. **Resonant** [BP12, BT17b, Dem13, JTT11, JGC⁺¹¹, WFDK19, YSN⁺¹⁴]. **resonator** [HWCH11]. **resonators** [Bal19, WX11]. **resources** [CCdC⁺¹¹]. **respect** [GCVA14b]. **respiratory** [CPCDdM18]. **response** [KBSP19, LLMW17, MDF11, VBS⁺¹⁷, ZHCR18]. **responsible** [JHJG14]. **REST2** [JJ15]. **restart** [SMUT19]. **Restoration** [JTP15]. **restoring** [GGG⁺¹⁹]. **restraints** [CRNK12]. **restricted** [TC11a]. **results** [CF16, KMO19, Sha18]. **resummation** [AHH⁺¹⁹, CC19]. **retarded** [GBJ⁺¹⁹]. **retrieval** [SSP16]. **reveals** [BVC13]. **Reverse** [OPO⁺¹¹, OPSR13, OPR14, SGNL17, TKP12]. **Reversibility** [Urb18]. **reversible** [FW11, HCT11]. **Review** [RL10]. **Revised** [MGK13]. **Revision** [CC12, ZHPS10, Sib17]. **revisited** [BR11, DIP11, Jab15, LV10, XD13]. **reweighting** [BMHP17, LS13, Sin11, Sin12a]. **Reynolds** [SCM⁺¹⁸]. **rezoning** [LJWK11, LJZ⁺¹⁸]. **RF** [DFM⁺¹⁵, Duf16, AM19, AAJA14]. **RF-MEAM** [DFM⁺¹⁵, Duf16]. **RG** [NDSH18]. **RGEs** [LS17b]. **RGIssearch**

[Ver16]. **RHEED** [Dan10a, Dan10b, Dan11, Dan14, Dan16, Dan17, Dan19]. **rheometer** [SPTPR19]. **rhoCentralRffFoam** [MTE17]. **rhombohedral** [WWL11]. **ribbed** [JU17]. **ribosome** [MTSI11]. **Riccati** [IH11, LD10b]. **Richards** [BALV16, ORS⁺14]. **RichardsFoam** [Org15]. **RichardsFoam2** [Org15]. **Richardson** [SPP19]. **Riemann** [FJK⁺17, QSB19, TKJ19]. **Riesz** [MDHD18]. **right** [REBS16, STK10, TKS10]. **right-hand** [STK10, TKS10]. **Rigid** [NPAG11, ER19, Faw10, MNV13, SA14, Van15]. **rigid-molecular** [SA14]. **Rigorous** [FNPMB10, BDT15, CZL⁺11, NM14]. **ring** [SAG13, WJHW14]. **rings** [Pos19, Pos19]. **ris** [NGG⁺13, EJG⁺19]. **Rivet** [BBG⁺13]. **RKN** [Wu10, Bla15, FLW10, FMW10, LWYW11, MHWH19, YWYF09]. **RKN-type** [Wu10, FMW10, YWYF09]. **RLW** [MC12]. **RMHD** [Mar15]. **RNGAVXLIB** [GBS16b]. **RNGSSELIB** [BS11, BS13a]. **Robin** [RTA10, SN16]. **Robust** [CS17, GN14, ACdS13, CPV13, Den10, KV19, TZM17, dlRL11]. **Roe** [TCP13]. **role** [BNAB11, GAHP15, Has11, HH11b, PDJ10]. **rolled** [NJS17]. **rolled-up** [NJS17]. **rolling** [NDSH18]. **roof** [RLL12]. **roofline** [KKP11]. **ROOT** [Ano11o, Car10a, Car10b, SS18, ZHL11]. **Roothaan** [BMW14, SEW12, SEW14, SW14b]. **rootless** [GBC⁺18]. **roots** [Zou18]. **Rosenbluth** [GB17]. **rotating** [JWC13, KLM⁺19, LCCC11, TZM17]. **rotation** [BSM13, DIR⁺19, Ume19, VDAH16]. **Rotational** [AS11a, KSW12, CATK11]. **rotationally** [HC17, QwWL⁺15]. **rotations** [OML11, PUO14]. **Rotne** [GCH⁺18]. **rotors** [ZBG⁺16]. **rough** [EBCB⁺14, KC14, SKML11]. **roughened** [CLY11]. **roughness** [NEW⁺18]. **round** [JCL10]. **round-off** [JCL10]. **roundabout** [wH15]. **route** [CMR17, SDL⁺16, mZfXL15]. **routine** [BDGG19, RM10b, WPD⁺15]. **routines** [KMO19]. **rovibrational** [CNMC10a, CNMC10b]. **RPA** [CCGC13, DSW⁺15a]. **RPIM** [DG10b]. **RPMDrate** [SAG13]. **RPYFMM** [GCH⁺18]. **Rubik** [CD12]. **rules** [Nog17a, Nog17b, Sem16, WL11a]. **run** [GHdF10]. **runaway** [LSF14]. **RunDec** [HS18]. **rung** [DSW⁺15a]. **Runge** [BM13, CFMR10, DBMR18, DIP11, DM17, FG13, Ixa12, KMS14, KZC⁺10, KAS12, MIW⁺12, MKS10, NS15, WXL13, WW10, YZWR14]. **running** [CDS13a, KPV16, SS12]. **Runtime** [ÜS18, ER19]. **RWG** [ZDWY10]. **Rydberg** [SPAW17]. **Rys** [AG12b, Sch14b].

S [BL18a, CCK23, Maż19, XYZX19, BFD⁺11]. **S-IEQ** [XYZX19]. **S/PHI/nX** [BFD⁺11]. **SaaS** [VPMVH⁺17]. **SADE** [FF11]. **SAFT** [ESM17]. **SAFT-** [ESM17]. **Sailfish** [JK14]. **SALMON** [NSH⁺19]. **Salpeter** [GGG16, GVS⁺15, SAW18]. **sample** [MP11, HJE⁺19]. **sampled** [GGG⁺19, ME18]. **samples** [MPSV15]. **Sampling** [BBV⁺16, Hal17, KBT⁺14, RPB⁺15, BFM10, Boe18, CND11, FLE19, GM14, IIO16, IFOI18, KCN18, KD17, KI11, KS16b, KSW15, KS15, LWL12, PPS10, RLBC⁺14, Sor19, SOYHDD19, SSBS15, TBZ12, WLH⁺12, Wil15, XLL15, YK10, YL12, ZF15]. **SANC** [AAB⁺10a]. **sandpile** [AS11a]. **Sar** [TU14].

SARAH [DNPS13, Sta13, Sta14]. **Sassena** [LS12b]. **SASSIE** [CRNK12]. **satisfactory** [DGST17]. **SATLAS** [GdGB⁺18]. **saturated** [JHJG14]. **saw** [BBC⁺13a]. **SAWdoubler** [SBB13]. **Saxon** [DT18, MAM14]. **Sb** [AM14b]. **SbNCa** [BKA⁺14]. **SC-NBL** [KHN19]. **Scala** [Pos19]. **Scalability** [ZZG⁺16, APC⁺14, SCM13, VV18]. **Scalable** [ASA18, AIG16, KMM⁺19, NSH⁺19, VFV19, BL19, BVC13, BY17, BHND16, BENK⁺17, DHJ13, DG10c, FWS⁺17, GGI⁺13, GP13, ILZ⁺19, JPH⁺14, KC18, MTM13, VBG⁺10].

scalar
[AHK⁺12, BMS⁺16, CEZ16, LS19, LZL10, PQTGS17, SAHP15, vH11].

scale
[BMC⁺11a, BC10, DdJC⁺19, Bis15, BHJ⁺15, BHJ⁺18, BAF18, BY17, BC19, CB15a, CB17, CB18, DSW⁺15a, Deu16, DADS11, DO14b, DML⁺16, GS15, GHvdL11, GZL14, GHdF10, GBS⁺16a, GAO13b, HLS12, HLS⁺17, HKK11, JEFP14, JXTS16, JWCW17, JOK13, KHZ⁺18, LCQF18, LR13, LR16, MBS⁺10, MCNRC16, NLB⁺19, ORS⁺14, OP12, PLD⁺13, RLM13, Sch14a, Sha13a, SXW⁺18, SMUT19, SLZ16, SPSP18, Tau10, THDS16, TIMM13, TIM⁺16, UBRT10, VBG⁺10, WSI13, WDL11, WSH⁺12, WLZN17, YFAT17].

scales [HCM19]. **Scaling** [ZMJ13, AS11a, BH14b, BH16, CCWL11, FUSH14, FVH18, GNA⁺15, GYW⁺10, HHS⁺10, JWCW17, KBB⁺17, LD10b, MMO⁺17, OOK⁺12, RWKS15, YKK⁺19, dSVLP13, vMB14]. **scanning** [Fer15, PSMS14, PSMS15, TCK⁺15, MAC12]. **Scans** [Mau16]. **scar** [TTS11].

SCATCI [ART17]. **scatter** [LP15, MTO15]. **scatter-gather** [MTO15]. **scattered** [End11]. **Scattering** [BD12, AV13, AKR15, AFIS12, Bab14, BH16, BH17, CKLM10, CAN11, CGRB14, CRNK12, EW14b, EW16, GLAC13, GMC18, HC16, HHT14, HL19c, IB11, Jab17, KC14, KB15b, KL11, KvdO11, LHJZ10, LN16, LS12b, LWES18, LAG⁺17, MLR10, OK14, PNL13, PR10, PKRS16, SMOB19, SNG⁺11, Ser10, SKML11, SAS11, SDL⁺16, TACA15, TVGB15, WJCZ18, WFDK19, ZHSL13, ZYL⁺19, ELL⁺17a, XNK⁺16].

SCBiCG [GCHL15]. **scene** [CFCB12]. **scene-dependent** [CFCB12]. **SCF** [WPD⁺15]. **Scharfetter** [PFFK19]. **Scheduler** [ALS16]. **Scheifele** [YZZ11].

scheme [AAD13, AAD14, ACML11, ACTP15, BM13, BBC⁺13a, BE14, BMBC⁺17, BB12, CWS14, CZD15, CYN19, CWY⁺17, CEF16, DJ11, DM17, DOP17, DML⁺16, EW14a, EW14b, EEGW12, FOB⁺15, Fu19a, Fu19b, GN14, GRLS18, HP14, HZ11, Jiw15a, JSLM16, JP10, KC14, KHK⁺11, KZC⁺10, KP14, LJE11, Les16, LS12a, LLXK16, LL19, LWES18, LB10b, MWI⁺19, MKU⁺12, MS14, MF17, McM17, MN18, MMA15, MBB⁺19, MS15, MD10b, ICD13, NO14, NAQ16, iNSK⁺15, OKM12, PZZL19, PA13, QSC14, RHW⁺12, RH11, SP16, SR12, SK15, SSH⁺13, SCLW16, SD10b, SA15b, SC15, SB11, Sok13, SW12b, SCM14, TKJ19, TD17, TYH⁺15, TCP13, UNK12, WZS⁺11, WG16b, Yua19, ZY19a, ZNT15, ZWC⁺19, dTOV18]. **scheme-independent** [Les16].

schemes
[ACMM10, ACM12, BK16a, Cap13, CBAM12, CM14a, DBMR18, DJ14, FDZ17, GA10, GLW14, HWS16, HJ14, IKS19, JKIS16, Kaw19, KPVvdH13, lLSZ14, LYL⁺17, MIW⁺12, PFFK19, PTMDPK14, QA13b, SP18b, SYE⁺18,

Ume19, XHLUF⁺18, XYK12, XYZX19, YZ16, YZ19, ZKS⁺18, dIRM18, vdS10].
Schild [WN10]. **Schmidt** [CBGY17, CBYG18]. **Schnek** [Sch18]. **Schotte**
 [Gor19]. **Schramm** [SW11]. **Schrödinger**
 [ABB13, ABH⁺19, BAR12b, CWS14, Cap13, CPV13, CZS10, CSJ⁺17, DT10,
 DT11a, DM17, Dua10, DM12, FE11, GS15, GG16, IKS19, Ixa10, JYPA18,
 KZC⁺10, LV14, LWZ14, LST15, Lin13, LB10b, LY16, MC16, Moh14, ICD13,
 MNOØ11, ÓN12, PAS11, PM16, QSC14, SFV19, SSH⁺13, SB11, TD14,
 TT14, TY10, Wan10a, Wil19, XZ12, ZST11]. **Schrödinger/Gross** [ABB13].
Schroedinger [SMdONF14]. **Schur** [UKKB19]. **Schwarz**
 [HLLH16, HCSW10, TVT⁺16]. **Schwarzschild** [JLM18, Jia18]. **Schwinger**
 [CKCS13, HB12, HM12b, SAW18]. **Science**
 [LSJ13, SNG⁺11, TN11, CKhN11]. **sciences** [GMH11]. **Scientific**
 [CCdC⁺11, AMR⁺18, Che11, CSRV13, Dan10a, Dan10b, Dan11, Dan12,
 JVR12, OTC14, RSSH⁺10]. **scintillators** [KME⁺11]. **scrape** [JHL⁺15].
scrape-off [JHL⁺15]. **screened**
 [GWL⁺17, GH11, JH15, JZZ⁺19, PH11, ZHPS10]. **screening** [CSC11].
scripts [CF16, Gio14b, RJW⁺19]. **SCTE** [MGFRG12]. **SE**
 [NAQ16, QYM11, QA13a, SP18b, WZS⁺11]. **Search**
 [ATA⁺19, BBB⁺11, BPSS18, BG13a, DR12, GCC⁺18, HJE⁺19, JTP15,
 KPVvdH13, MTS⁺16, PP13, PMS⁺15, TC11a, WP11, WRFS15]. **searches**
 [GTL⁺17, VPP⁺12, WRVdL15]. **SearchFill** [DBJ11]. **Searching**
 [KBLJ18, Ano11a, LOK⁺16]. **SecDec** [BH13, BCH13, BHJ⁺15, CH11a].
SecDec-3.0 [BHJ⁺15]. **Second**
 [BB13a, HD17, ADdM15, ACdM19, BKV16, GPS⁺13, KTB17, Kir10,
 KBB⁺17, LX12, LJSW11, LW14b, NS15, NO12, PKT15, Pla16, RL10,
 VEB⁺18, WC13, WYSW10, WT15, ZY19a, Zit11]. **second-order**
 [BKV16, GPS⁺13, KBB⁺17, LW14b, PKT15, RL10, WC13, WYSW10].
second-quantization-operator [Zit11]. **secondary**
 [BMC⁺11a, CL11, KMO19]. **section** [ALL⁺11, BS13b, BHS15, CYD11,
 CM14b, DHS14, OILK17, SGAA18, Shi16, vdS13]. **sections**
 [ASEA14, BPC12, Cip11, Cip13, DLM18, Gao13a, GLS⁺13, Koll14, Lit13,
 PDL⁺18, VC10]. **sector** [BBH⁺11a, CH11a, KU10]. **sectors**
 [BM19, BBH⁺10, KKS18, KZ11]. **Security** [ÖY13]. **sediment** [SYD17].
see [BBC⁺13a]. **see-saw** [BBC⁺13a]. **seed** [RMS⁺12]. **seeding** [ASPW13].
seepage [BLV⁺19]. **seesaw** [CGV13]. **segment** [LFG14]. **segment-wise**
 [LFG14]. **segmentation** [MGO13]. **Segmented** [KS16a]. **Seismic**
 [LZZL10, CL15a, GMRHRCME13, MCAdF14]. **SeismicWaveTool**
 [GMRHRCME13]. **Selecting** [CB15b]. **selection**
 [ABH⁺19, BPSS18, CLH⁺17, CZZ⁺19, HJH17]. **selective** [JK13, TIMM13].
Self [BMC⁺11a, CCGC13, ASGLK10, AK15, BCH11, Buc19, CDTV10,
 CGSB18, Den10, DR12, Erm18, GCVA14b, HPKF15, KOK17, MT13,
 MLEM19, NPVR14, PB13, Pit12, QHC⁺10, SEW12, SEW14, SBB13,
 SHNM11, XNK⁺16]. **self-adjointed** [GCVA14b]. **self-avoiding** [SBB13].
self-bound [MLEM19]. **self-consistency** [SHNM11]. **Self-consistent**

[CCGC13, Buc19, CDTV10, DR12, KOK17, NPVR14, SEW12, SEW14, XNK⁺16]. **self-consistent-field** [Erm18, Pit12]. **Self-energy** [BMC⁺11a, PB13]. **self-force** [AK15]. **self-forces** [ASGLK10]. **self-gravitating** [MT13]. **self-interactions** [BCH11]. **self-motile** [HPKF15]. **self-organized** [CGSB18]. **self-polarization** [Den10]. **self-questioning** [QHC⁺10]. **selfadaptable** [CFCB12]. **Selfconsistent** [ELL⁺17a]. **Semi** [DS15, GHBL18, GHMB⁺19, KZC⁺10, MHWH19, BB12, CZD15, DS10, Ein16a, FJK⁺17, GZZ19, GAB⁺16, IBP⁺15, JYPA18, Lan13, LHH⁺12b, MCV18, MIW⁺12, MRVF13, QSC14, Ser10, SMdONF14, SHL⁺11, UNK12, WG16b, Wie15, ZLL13]. **semi-analytic** [Ser10]. **Semi-analytical** [MHWH19, DS10, FJK⁺17, MRVF13]. **Semi-analytics** [DS15]. **semi-automatic** [Wie15]. **semi-axis** [SMdONF14]. **semi-classical** [MCV18]. **semi-discretized** [JYPA18]. **Semi-explicit** [KZC⁺10, QSC14]. **Semi-Implicit** [GHBL18, GHMB⁺19, BB12, CZD15, GZZ19, IBP⁺15, LHH⁺12b, MIW⁺12, SHL⁺11, WG16b]. **semi-infinite** [ZLL13]. **semi-Lagrangian** [Ein16a, GAB⁺16, Lan13, MIW⁺12, UNK12]. **semiconductor** [ASGLK10, AK15, ACCB13, Bot12, CM15, CL10, CLL16, DJ12, GTG⁺11, HHC16, MiH12, NAQ16]. **semiconductors** [BMZ⁺18, GC12, KOK17, LZL11, PFFK19]. **semidefinite** [VvAV⁺11b, VvAV⁺11a]. **semiempirical** [IIO16]. **semismooth** [CB15d]. **semismooth-Krylov** [CB15d]. **Semtex** [BLAS19]. **sensitivities** [GA13]. **sensitivity** [CSC11, HS14a, KTA12, PPS10, SAA⁺10, SK10, TBZ12, WLH⁺12, WLS13]. **separation** [MSRL10, SJW10]. **separations** [DSK19]. **sequence** [GCF⁺17, HLD13, ÖY13]. **SequenceL** [BBB⁺17a]. **sequences** [DBB12, DB13, PdMML19]. **sequential** [AL17, NM14]. **serial** [CUL⁺17]. **series** [ADdM16a, ADdM17, BDCS18, CZ17, CC10a, CO11, GMPFC⁺14, HvWT17, LLHC11, NO12, YZCS18]. **SERS** [CLY11]. **SERS-active** [CLY11]. **servers** [WMK11]. **Service** [MLR10, HDF⁺19, VDJ⁺11]. **Set** [NHSY15, CK18, FM12, FHA17, Ki10, KN13, MBFB13, PVK⁺18, Pit12, RCGT16, XHLM12, XLX⁺15, YS17, MFG⁺13]. **sets** [Cor14, FBG10, GJLB12, JH15, SZC⁺13, VdLF14]. **setting** [CNS⁺14]. **setup** [FJ19]. **several** [GCHL15]. **sfermion** [HEF12]. **SFOLD** [HEF12]. **sGDML** [CSP⁺19]. **SGO** [CJJ⁺17]. **SGS** [ZSW⁺17b]. **Shafranov** [HS14b, SVS19]. **Shakhov** [ZXZ⁺19]. **shaking** [RHHF12]. **shallow** [QM10, STA18]. **Sham** [KKL⁺18, SCS12, SCB17b, SPSP18, zYCG⁺18]. **Shape** [DGMZ15, BNPPD19, NS11b, OK14]. **shaped** [HSD17, KKO19, MSR⁺17, Nov17]. **shapes** [AIG16, GTPWL12, GGGH14, HS19, XLX⁺15, YLYL17]. **Shardlow** [LBM⁺14]. **Shardlow-like** [LBM⁺14]. **SHARE** [PLRT14]. **Shared** [DKG⁺14, BKS15, CL15b, LRSS19, NFS15, TE18, WMRR17, WRMR19]. **Shared-memory** [DKG⁺14, NFS15, TE18]. **sharing** [TRM⁺12]. **sharp** [CDL⁺12]. **SHAVEL** [ME18]. **shear** [BF10, CMVRB⁺14, SPTPR19]. **shear-shear** [CMVRB⁺14]. **sheath** [KMD12, KM17, KSY17].

sheath-plasma [KMD12, KM17]. **shedding** [TKL⁺12]. **shell** [ACTP15, BM16, Cip11, DT18, Faw10, MCA17, SMUT19, Trö11]. **shell-model** [BM16, SMUT19]. **ShengBTE** [LCKM14]. **Shepard** [FZY13]. **shields** [OVSI15]. **Shift** [KHN19, Ber14, EJG⁺19, FZ16, NGG⁺13, Ram10, RLM13, STY15, STY18]. **shift-invert** [RLM13]. **shift-operator** [Ram10]. **shift-without-invert** [FZ16]. **Shift/collapse** [KHN19]. **shifted** [ABF19]. **shifts** [NLSJ17]. **shock** [Fu19a, KR14, PBD⁺15, QLE16]. **shock-capturing** [Fu19a]. **shock-fitting** [PBD⁺15]. **Short** [BBF⁺10, ADD⁺11, BTM⁺17, BWPT11, Fri10, FN17, HWL⁺17, Ram10, TKR13]. **short-range** [ADD⁺11, BTM⁺17, FN17, HWL⁺17]. **Short-recurrence** [BBF⁺10]. **short-time** [Fri10]. **shorter** [BL18a, dJBIM16]. **shortest** [BGHN19]. **shot** [HLS12]. **showers** [BG14b, GRZ10, TS10, War16]. **shuffled** [AZM14]. **Si** [CHW⁺15, Dan16, MTS⁺16]. **SiC** [Dan17]. **sides** [STK10, TKS10]. **sign** [BH11, Kap16]. **signal** [JHJG14, LCRL10]. **signals** [CCM12, CWY⁺17, HCM19, PMS⁺15, SSP16]. **signatures** [RMC16]. **significance** [SC14]. **silane** [SVG10]. **silicene** [ZRS12]. **silicene-like** [ZRS12]. **silico** [HG13]. **silicon** [GWL⁺17, LOK⁺16, OPO⁺11, OPSR13, OPR14, PVH⁺17, Wit14]. **Simak** [Maž19]. **SIMD** [BDL⁺19, PH13, VLL⁺17, WN19]. **Simflowny** [AABC⁺13, AMR⁺18, VMGP⁺19]. **Simflowny-based** [VMGP⁺19]. **similar** [FS17]. **Similarity** [BEKP19, LLQX19]. **SIMLA** [GH15]. **SimPhoNy** [AKH⁺18]. **Simple** [DSW15b, NOR15, PM16, AL17, AKV18, BBB⁺19, CCL15, DZ15, GAHP15, KKG⁺15, KOK17, RU13, SGM11a, SGM11b, WWC⁺16, WCT11, XWWhZ13, XW15, ZYZ10, YB13, dSVLP13, LYJH19, PGMU19]. **SIMPLE-NN** [LYJH19]. **simplex** [Kap12b]. **simplification** [SBQ14]. **simplifications** [BD12]. **Simplified** [vMB14, AKK⁺18, SA14, TVZ⁺15, YZWR14]. **simulate** [AMM11, BVSG19, CUL⁺17, JWC18, MPM14, RTT⁺18, SQA⁺15, TXZL15, TS10, WGG16, ZBG⁺16]. **Simulated** [BL14, BSM13, BDKS10, CM10a, CD12, HG13, IZRT15, LM12, VdLF14, VDF15, Yam16]. **Simulating** [GH15, Gre18, Hoh14b, RFSF18, Wan16, Wei11b, BHNS17, BENK⁺17, CJ12, DMC10, HGCARM15, JPK⁺12, KPOR18, LHH⁺12a, LL15, LL12, OK18, SV14, SJY18, SJY20, WX11, WFDK19, WMI19, XAPK14, XD16, YWW13, ZKG⁺18]. **Simulation** [AZS⁺11, AKR15, Bar12a, BdVGS11, Beu11, BBR19, CM15, CAGL13, EFG⁺10, FBP⁺14, HEPW13, Hon10, JP11, KKS18, MHV17, MTE17, OBM19, PPV⁺11, PC11, RF10, RSBB14, SKK⁺19, SÓÓN11, SKH⁺10, TKZ18, UIY11, XLX⁺15, AKH⁺18, AFIS12, ASPDL⁺16, ALSW14, AIG16, AABC⁺13, AMR⁺18, AAJA14, BLV⁺19, BF16, Bar11a, BK16a, BE14, Boe14, BCM⁺16, BO12, BHND16, CHNS18, CC16, CGSB18, CXG⁺19, CHC⁺11, CSSB15, CHH⁺11, CvW12a, CvW12b, CdFDS16, CF17, CCN17, DXY⁺19, DG10b, DSW⁺15a, DHJ13, DBP⁺18, DES⁺11, DDM14, FYK18, FLZ⁺18, FFT⁺14, FGC⁺11, FFIH11, FM15, FN17, GC12, GTPS19, GM11, GRR⁺14,

GRZ10, GSB⁺¹⁴, GHMB⁺¹⁹, GB14, Gri11, GRTZ10, GTK^{+19b}, HBE10, HBL⁺¹³, HL19a, HKJ⁺¹², HT12, HvAS⁺¹³, HXW⁺¹³, HAN⁺¹⁶, Hsu11b, HB13, HHT14, HCSW10, JA17, JXTS16, JLM18, Jiw12, JPM12, JAS17]. **simulation** [KOT12, KDM17, KS19, KGFS18, KNS⁺¹⁷, KO12, KO13, KKO19, Kro16, KMJS16, KCS⁺¹⁵, KP14, KSY13, KQYH17, KSY17, LCC13, LDR⁺¹⁷, LJE11, LJSW11, LCH11, LX14, LSK⁺¹³, LYZ13, LS17a, MD10a, MT13, MGRB11, ML17, MTSI11, MKU⁺¹², MMC10, MSNI11, MFG⁺¹³, MRL19, Mü14c, MSH11, NFI17, NB17, NP19, NLB⁺¹⁹, NZQL14, NM14, NFS15, OKM12, OYK⁺¹⁴, PKT15, PZL⁺¹⁹, Pei18, PVK⁺¹⁷, PCEH15, PA13, QL10, RF16, RJW⁺¹⁹, RB18, RTT⁺¹⁸, RD10, RLBC⁺¹⁴, RKGK⁺¹⁷, Sal12, SBH⁺¹⁴, SCC⁺¹², SSF⁺¹⁷, Sch18, SM19, Sha18, Sie16, SS11b, SBPD19, Sit18, SVG10, SKM15, SMCB⁺¹⁵, SBL16, SBE⁺¹⁶, TJD11, Tab16, Tan19, Tau10, TL17, Tic10, TVGB15, TMS19, TIMM13, TGH⁺¹⁶, TCCV18, TMD11, TB14, TIM⁺¹⁶, TPC16, VDB14, VPMVH⁺¹⁷, VRV15, VEM12, VK16, WP11, WS11a, WGVPL17, WGG⁺¹⁹]. **simulation** [WSI13, WBY11, WBS⁺¹⁸, WT12, WL11b, WLZN17, YLQ⁺¹⁷, YBNY13, YLKN17, YG12, ZFH14, ZXL16, ZZD⁺¹⁶, ZZHG18, ZHC16, ZPvR16, ZBN⁺¹⁹, ZLFM11, dHv12]. **Simulations** [APRG11, Bab14, LDW13, TKL⁺¹², AM14a, ASGLK10, AK15, AD15, AGB⁺¹⁵, AMJ18, ABRS12, BJBC⁺¹⁴, BBB^{+17a}, BT17a, BB13a, BHS18, BS15b, BSC⁺¹³, BFPP12, BFB⁺¹³, BBS14, BPML12, BDBV12, BVP10, BG11, BTL⁺¹⁷, BCDI12, BB13b, BY17, BC19, BBV⁺¹⁶, CDS13a, CB15a, CB17, CB18, CTT17, CMM14, CHA11, CXH⁺¹⁵, CLL16, CW16, CCL18, CL11, CZGC19, CPHL14, CFF19, CBGY17, CH11b, DZ15, DSHS17, DGJH19, De 11, DEMM19, DS13a, DPK⁺¹⁵, DF13, Dem11, DF14, EBCB⁺¹⁴, EVB14, EBCBG17, ESM17, Evs14, FCVH17, FW11, FRFH10, FKH15, FPY⁺¹⁷, FHA17, FB19, GHK19, GHdF10, Gio14a, GLR17, GNA⁺¹⁵, GAB⁺¹⁶, GSKM14, GSKM15, GM14, GJHF14, GJB11, GZJW18, GBJ⁺¹⁵, GCH⁺¹⁸, GB17, GMHZ19, GM18, HJH17, HO13, HS14a, Hin11, HPKF15, Hoh18, HYM11, HLZ⁺¹³, HM17, HHM⁺¹⁵]. **simulations** [HKK11, HHP⁺¹⁶, JBKM15, JBG⁺¹⁶, JBG⁺¹⁷, JFHA19, JPH⁺¹⁴, JvOK17, JJ15, JHL⁺¹⁵, JVR12, JKIS16, KRM⁺¹⁹, KÓG17, KK16b, KC14, KP16, KSS18, KS16b, KHK⁺¹¹, Kon11, KGG⁺¹⁶, KRB15, Kra18b, KLO⁺¹⁹, KHN19, LYP14, LPC⁺¹⁵, LGW13, LLSK17, LS14, LS15a, LS15b, Les16, LWL11, LYX⁺¹⁷, LHZ11, LYL⁺¹⁷, LOK⁺¹⁸, LKW11, LSK⁺¹⁴, LHB⁺¹⁹, LBP15, MMSF⁺¹⁵, MDW16, MÅWK18, MIW⁺¹², MIW⁺¹³, MAC12, MMO⁺¹⁷, MKL17, MM17, MP11, MFS^{+10a}, MS14, MRZ10, Maz13, MNV13, MVI⁺¹⁶, MHR⁺¹³, MMA15, MNPF17, MTO15, MKB⁺¹¹, ML16, MSM⁺¹¹, NJ18, NBM⁺¹⁵, NNWS15, NDSH18, NFA⁺¹⁶, Ngu17, iNSK⁺¹⁵, NVW⁺¹³, ÖKC11, ORI⁺¹⁰, Oti13, PHT⁺¹⁹, PCGM14, PG17, PLD⁺¹³, PE15, PLCC12, PDJ10, Qia17, RKVL14, RtV16, RV11, RHHF12, RJKC16, SH12a, SCB^{+17a}, SCB⁺¹⁹, SFP11, SISW10, Sco13, SXW⁺¹⁸, SOM⁺¹³, SLZ16, SKK17]. **simulations** [SJ11, SS11c, Sok13, Sør19, SYE⁺¹⁸, SCM⁺¹⁶, SCM13, Sus17b, TM19, TK14a,

TSK⁺¹⁷, TSTT13, THDS16, THDH14, TS19, Trö11, TYH⁺¹⁵, UKKB19, UBRT10, UO15b, UO15a, VBG⁺¹⁰, VV18, VK14, VMFS16, WFM14, WJCZ18, WWHW14, WWC⁺¹⁶, WNYP17, WFZG19, WTH15, WYH19, WDL11, WSH⁺¹⁴, Wie18, WWVB11, WSH⁺¹², WWFT11, WAW14, WWM14, XYM⁺¹³, XGH⁺¹⁹, YW17, ZW15, ZMvE⁺¹³, dSF18, dHGCS11, Vfv19]. **Simulator** [CP15b, ATW⁺¹⁹, DJW⁺¹⁹, IW15, MBRV⁺¹³, NSH⁺¹⁹, PR14, ZAFAM16, KDP⁺¹⁴]. **simulators** [YSLY19]. **simultaneous** [Kra18b, SGDS16]. **sinc** [MM10]. **sinc-collocation** [MM10]. **Sine** [SW14c, AH13, DG10b, GMHZ19, JPM12, MD10a, Pál12, PTS12, dHV12]. **Sine-Gordon** [SW14c, AH13, GMHZ19]. **Single** [FHA17, GM16, HKZN19, MAM14, Aza13, CATK11, CSL⁺¹³, DKT14, EY11, EBDM17, JA17, JXTS16, KKK⁺¹⁵, LHSL14, LBP15, RV10, RV11, SD14, UW12, WG16a, WBY11, ZZY10, ZLFM11]. **single-** [JXTS16, LBP15]. **single-crystal** [WBY11, ZZY10]. **single-electron** [JA17]. **single-molecule** [EBDM17]. **Single-step** [FHA17, GM16]. **single-tag** [DKT14]. **single-walled** [CSL⁺¹³, LHSL14]. **singular** [CZ18a, GWF⁺¹⁶, HKSW10, MC16, NO12, SK14, ZX10]. **singularities** [BAK⁺¹⁵, BAK⁺¹⁶, BAK⁺¹⁷]. **singularity** [PPY14]. **singularly** [GN14]. **Sinusoidal** [RHHF12]. **SIP** [FXZ⁺¹⁴]. **SIScone** [Wei12]. **site** [DMC⁺¹⁵, SFP11, YHCS11]. **site-diluted** [SFP11]. **situ** [KY14, MMC10]. **sixth** [LST15, NS15]. **sixth-order** [LST15]. **Size** [GWL⁺¹⁷, VKLM11, AS11a, BM13, BHNS17, Evs14, MDPTK15, MST⁺¹⁸, OBH10, OOGP19, SSP16, ZHCR18]. **size-dependent** [ZHCR18]. **sizes** [Cas12]. **skeletons** [BRB12]. **skew** [GBRB11, HM18]. **skew-symmetric** [GBRB11, HM18]. **skin** [ZZHG18]. **SKRYN** [CB15d]. **Sky3D** [ASA18, MRSU14, SRS⁺¹⁸]. **Skyrme** [RHBH15a, CCGC13, PSL⁺¹⁷, RHBH15b, SDM⁺¹², SDS⁺¹⁷, SSK⁺¹³]. **Skyrme-HF** [RHBH15a, RHBH15b]. **Skyrme-type** [CCGC13]. **skyrme_rpa** [CCGC13]. **skyrmion** [BUJ15]. **slab** [TAFD19]. **SLABCC** [TAFD19]. **slabs** [LN16]. **SLAM** [MZ14]. **Slater** [USOA13]. **slave** [QwWL⁺¹⁵]. **slave-boson** [QwWL⁺¹⁵]. **SLDMOL** [CZN14]. **sleep** [SLC11]. **SLHA** [Mur14]. **SLHAplus** [BCPS11]. **slicing** [SCS12]. **slightly** [BAF18]. **SLIMP** [ZZ15]. **slip** [ZLZ19]. **slope** [CZZ⁺¹⁹]. **Slow** [SDJ⁺¹², WL11b]. **Slow-to-start** [SDJ⁺¹²]. **Slurm** [OBPL19]. **small** [Ber14, BBV⁺¹⁶, FLP10, JLW13, PP13, QHC⁺¹⁰, TIMM13, dSLF13]. **small-world** [FLP10, QHC⁺¹⁰, dSLF13]. **smallest** [DS15]. **Smilei** [DBP⁺¹⁸]. **SMMP** [YK10]. **SModelS** [AKK⁺¹⁸]. **smooth** [CCLL18, Cou13a, Cou13b, GGG⁺¹⁹, Qia10, WG16b, WvSL13]. **Smoothed** [FHTO17, GRLS18, KS16a, PE15, DCVB⁺¹³, DCGG13, EKK14, JXTS16, KPPC13, NFS15, RH17, RTA10, SN16, WRR18, YK19, dASJC⁺¹⁹, CDR⁺¹⁵]. **smoothed-particle** [dASJC⁺¹⁹]. **smoothing** [HHC16]. **SNEG** [Zit11]. **snowdrift** [QHC⁺¹⁰]. **SO-FDTD** [LJD⁺¹⁹]. **SoAx** [HL18]. **soccer** [dSVLP13]. **social** [CHDF10, IBKK11]. **socket** [TRM⁺¹²]. **soft** [GSC⁺¹⁶, HBL⁺¹³, KL11, NFD⁺¹⁹, SM19, SM19, WS11b]. **SOFTSUSY**

[AAT⁺20, AAT⁺14]. **SOFTSUSY3.0** [AB10]. **SOFTSUSY3.2** [AKH12]. **SOFTSUSY3.5** [ABdA15]. **SOFTSUSY3.7** [AMRdA17]. **SOFTSUSY4.0** [AC17]. **Software** [Jav17, MCY⁺16, NFA⁺16, SSP16, AKZ⁺13, BMF⁺19, BCG⁺15, BRH⁺16, CPCDdM18, CYOS19, Dan12, FBC⁺12, GXF⁺15, GJA⁺16, HBH⁺17, HM10, HM17, KMM⁺19, KST⁺14b, LPC⁺15, LHGF18, LSK⁺14, M⁺AWK18, MNL19, MMY⁺19, NBW16, ORI⁺10, Ost10, PVH⁺17, PMS⁺15, RDP14, SD15, SCC⁺12, Sin11, Sin12a, SLR16, SS18, Sou14, SJY18, SJY20, TL17, VPP⁺12, WGG16, WGG⁺19, WZS⁺18, zYCG⁺18, ZMvE⁺13]. **soil** [OML11, PBF⁺16]. **soils** [GTSL⁺13]. **SOL** [FLSZ13]. **SOL-core** [FLSZ13]. **solar** [DJ12, FXZ⁺14, GSKM15, HGCARM15, Kap16, WFZG19]. **SOLARPROP** [Kap16]. **solid** [BCP⁺16, Bot13, CCD⁺16, HXW⁺13, JPCG15, KS16a, Miu11, NGCI⁺12, dIRAPL11, PLD15, QDZ⁺13, UA17]. **solid-fluid** [CCD⁺16]. **solid-solid** [QDZ⁺13, UA17]. **solid-state** [dIRAPL11]. **solidification** [YK18]. **solids** [AKZ⁺13, Hin11, Jab19, MSHLS15, MSHL17, dIRJL14]. **solitary** [AS11b, DS11b, DN13]. **soliton** [DT11a, Pál12, TD14, XLL15]. **soliton-like** [XLL15]. **solitons** [DG10b, GMHZ19, HWCH11, JPM12]. **SOLPS** [SCB⁺17a, ZCC19]. **soluble** [vdSM16]. **solute** [DMC⁺15, JJ15, RNdB19, XHLM12]. **Solution** [APV10, CDTV10, DS10, LHC⁺13, PH11, RHBH15a, RHBH15b, SDM⁺12, SDS⁺17, AGH⁺16, AH13, BSM13, BH16, BKS15, Bis15, CDMCN11, CSJ⁺17, DMP18, DT11a, DS11b, DN13, DSW⁺15a, FGLB12, FFIH11, FM15, HKS10, HVP⁺19, HK12, JK10, JL10, Jiw15a, KAS12, LD10a, LD10b, LV14, LZP12, LLP15, Lin13, LWW10, LZ12, MJB⁺10, Moh14, MA11, MM10, MNC15, NFI17, ÓN12, OK14, PSBT12, PAS11, PDRG10, PR13, PTS12, PSL⁺17, RDP14, RVA14, RM10a, RM10b, RLM13, RGKR17, SFV19, SW14c, SD10b, SS13b, SSH16, SK14, SSK⁺13, VBG⁺10, YZ16, ZDWM17]. **Solutions** [Lev19, AD14, ADdM12a, Beu11, CZ18a, CB13b, DGST17, Er14, JLW13, KMM13, Krö19, LLL12, LLL13, sL10, Mar19, MC12, MSZW11, MK10, MNOØ11, NO12, PAS11, PS14, SR12, TD14]. **solvated** [WFM14]. **solvation** [ZPH⁺15]. **solve** [AD14, AD15, ADdM12a, DG10a, JSLM16, ÓN14, RJLL16, SS13c]. **solved** [ACMM10]. **solvent** [CBB14]. **solvent-filled** [CBB14]. **solvents** [ZBG⁺16]. **Solver** [DSW15b, ALA⁺19, BMC⁺11a, BMC⁺11b, BKOZ16, BAR12b, BLAS19, Bot13, BC11, CVK⁺17, CP15a, CPV13, CCL18, CZF18, CRLS18, CRA10, CFF19, CBB14, CDR⁺15, DBLF16, DGG13, DM12, Ein16b, Exl17, FJK⁺17, FSC13, FE11, FZY17, GS15, Gai17, GBP13, GJ14, GJ13, GNP19, GG16, HWG13, HZW⁺19, HWM⁺15, Hua17, HCHW11, KVV19, KDM17, KYM⁺17, KH12, LYP14, LW14a, LC15, LCKM14, LYX⁺17, LKPH19, LF12, LWJV18, LWP⁺17, LCHM10, LCHM13, MC16, MTE17, MGL16, MR14, MCM⁺12, ML14, MFM15, MVS15, MCL⁺17, OILK17, ORS⁺14, PZY16, PMS⁺17, PBD⁺15, Qia17, QSB19, RVDS16, RDVS18, RC13, RC16, SVGS18, SVS19, SKFP16, SSX14, SGW17, SLEF17, TL17, Ter17, UKKB19, VL19, VV16, VV18, WFZG19, WBS⁺18, WC13, Wit14, sX14, YXT⁺15, YWOD19,

Zag14, ZPH⁺¹⁵, ZPvR16, ZCG17, ZPS⁺¹⁸, HB13]. **solvers** [AL17, BSK⁺¹⁸, BB13b, CB18, CGM17, CBB⁺¹⁰, CSV⁺¹⁸, DBMR18, DZ13, FR15, GWF⁺¹¹, HC17, Hoh18, JHH⁺¹⁹, LV15, Qia16, VLPPM14, zYCG⁺¹⁸]. **Solving** [BAK⁺¹⁵, BAK⁺¹⁶, BAK⁺¹⁷, CD12, CBB⁺¹⁰, Dem13, DPB16, DSP15, ENEO15, Fan19, Fil13, FGG11, HAK⁺¹⁴, HAH13, HS14b, IH11, JC16, Jan10, LV10, RHH12, SMdONF14, VSO⁺¹³, BK11b, BMBC⁺¹⁷, CS10, CKK⁺¹³, DT10, DM17, FGR14, GBSY18, GX15, HLLH16, HM12b, JPSS10, Jal10, Jiw15b, LLMW17, LBB⁺¹⁶, LYSS⁺¹⁶, LAG⁺¹⁷, MHW19, MLS10, MM12, ICD13, NAQ16, PS11, QYM11, QA13b, QA13a, RL10, Ras09, Ras17, SSB⁺¹⁶, SSH⁺¹³, SP18b, SCLW16, TY10, TKS19, UNK12, VVB⁺¹², Wil19, WVF14, XWF18, XZ12, YZWR14, YSVM⁺¹⁶, YSMA⁺¹⁷, ZHSL13]. **SOM** [KH19]. **SOMA** [SM19]. **Some** [CEPI10, FG13, HWCdM19, MR13, MS15, ZHSL13, Er14, Ixa16, KD16]. **soot** [ZLFM11]. **sooting** [EZL⁺¹⁶]. **sorting** [BDL⁺¹⁹, MEM⁺¹¹, MM11]. **SOSpin** [CECGS16]. **sound** [KL11]. **sound-soft** [KL11]. **source** [AZ17a, AZ17b, AFZ17, AFZ18, ATCZ19, BCP⁺¹⁶, CMC⁺¹⁵, CHC⁺¹¹, CYOS19, CFW17, CDR⁺¹⁵, DSK19, Dan11, DGJH19, DBP⁺¹⁸, DBLF16, FLA⁺¹⁶, HSF⁺¹⁵, HKvH16, HWM⁺¹⁵, Hua17, JWC18, JNN12, KDM17, KPK⁺¹⁷, KSH14, LPC⁺¹⁵, LZ11a, LZ11b, LZ12, MK10, MZE13, MSNI11, MMY⁺¹⁹, MVS15, MGFRG12, NMS14, NGCI⁺¹², ORS⁺¹⁴, SC16a, SPAW17, SAHP15, SDL⁺¹⁶, TL17, TACA15, VBG⁺¹⁰, VB19, WFDK19, WGG16, WGG⁺¹⁹, WFV14, WPAV14, WZS⁺¹⁸, XAPK14, Zag14, ZCG17]. **Sources** [EW14b, EW16, EEGW12, KM10, ML14]. **Space** [BBB17b, FDZ17, JKG⁺¹⁸, BG11, BAK⁺¹⁵, BAK⁺¹⁶, BAK⁺¹⁷, BY17, CDBM16, CVK⁺¹⁷, Chr18, CSV⁺¹⁸, EUT⁺¹⁵, Evs14, FZ16, FGLB12, GTS14, GBSY18, HLW16, JBG⁺¹⁷, JLM18, Jia18, KKL⁺¹⁸, KS16b, KSW15, KS15, LOK⁺¹⁶, MDHD18, MC16, MBF⁺¹⁰, MJB⁺¹⁰, MGB18, MSS⁺¹⁶, MSM⁺¹¹, MSH11, NAQ16, OBH10, ÖKC11, OOK⁺¹², dIRJL14, PSB11, PSBT12, QYM11, QA13a, Qia17, SP16, SCRS17, SA15a, SBH⁺¹², UFKB19, XGH⁺¹⁹, ZD15]. **space-charge** [Qia17]. **Space-dependent** [BBB17b]. **space-fractional** [MDHD18]. **Space-time** [FDZ17, CVK⁺¹⁷, Chr18, JLM18, Jia18]. **spacecraft** [MPS13]. **spacecraft-plasma** [MPS13]. **spacegroups** [AZ17a, AZ17b]. **Spaces** [Asc10, Bog16]. **spacetimes** [Müll14a]. **spacewise** [PR13]. **spacewise-dependent** [PR13]. **SPARC** [GS17b, GS17a]. **Sparse** [YOM⁺¹⁹, CB16a, DN18, GBP13, GJ18a, Kra10, SPP19, TS19]. **sparticle** [AC17]. **Spatial** [RLBC⁺¹⁴, ABCM14, BMF⁺¹⁹, BNAB11, FCC15, KS16b, LST15, LJB⁺¹⁶, McM17, MLS10, MSRL10, MGR16, TZG12, VV16, FCC15]. **spatially** [MD10a]. **spatio** [KEH12]. **spatio-temporal** [KEH12]. **Special** [MSI⁺¹⁰, iSSMI11, QA13a, RL10, ZD15]. **Special-purpose** [iSSMI11]. **specialist** [OTC14]. **species** [DGS⁺¹⁹, HAK⁺¹⁴, NNWS15, SM14, SCM14]. **specific** [AZ17a, AZ17b, Gor19, LPC⁺¹⁵, SGM18, XZF12]. **specific-heat** [XZF12]. **specific-purpose** [LPC⁺¹⁵]. **specified** [MD10b]. **specifying** [DZ15]. **spectra** [Aza13, AKV18, BW16, BPMS16, Bru13, CM15, CCL15, CGV13, DA16,

ECSH16, GGG16, HW11, MGRB11, MSPD12, MNPY14, MB16, PBMAD12, Pos18, Ruf13, SC16a, TKP12, TVGB15, WFDK19, YLTS16, Zlo13].

Spectral [BAF18, Hak16, Hak19, MLS10, SPSP18, AH13, AKV18, BLAS19, BCM⁺16, CDBM16, CMC⁺15, CvW12a, CvW12b, Col14, GMHZ19, HS14b, HZW⁺16, Kap12a, KZC⁺10, LSDD14, LW14a, LV15, LKA⁺16, LCCC11, Liu11, Liu13, LDF⁺16, Raw15, SI11, SLY18, ST19, SNB11, SVV19, SMdONF14, TD14, Wan10a, YXD⁺15, DBLF16, PSP16, SMdONF14].

spectral/ [BCM⁺16, CMC⁺15]. **spectrally** [ABDR17]. **spectrometry** [CWY⁺17, SMCB⁺15]. **spectroscopic** [Hak16, Hak19, MM11].

spectroscopies [CMJ⁺11, SNG⁺11]. **spectroscopy** [GSB⁺14, Hoh14b, HTT13, HTT14, HZC19, LCL⁺11, MGA⁺13, RMW13].

Spectrum [FCC15, HS19, Ruf13, AB10, AhPSV15, Bru13, CC10a, Gar19, GWF⁺16, GCF⁺17, JK13, KZ11, MZ14, OCL⁺13, Rom15, SCS12, SAE⁺16, ZUT13].

Speed [LGW13, MSR⁺17, CNS⁺18, Fu19b, JTP15, MTE17, VL19, WLM14, YvOSM15]. **Speed-up** [MSR⁺17]. **Speeding** [GMC18, MED11, KC14].

Speeding-up [GMC18]. **speeds** [SSX14]. **SPFP** [LGW13]. **SPH** [CRLS18, CDR⁺15, ACMM10, ACML11, ACM12, BE14, CCD⁺16, CP15a, CPR12, CdLOL19, CBAM12, EDPZ19, FJK⁺17, JOR⁺12, KGFS18, KPPC13, Lan13, MRVF13, MRSD15, OLG⁺16, RJLL16, SYD17, SCM⁺18, VSO⁺13, VKP14, VSG18, WMRR17, WRMR19, XLX13, XD16].

SPH-DCDEM [CCD⁺16]. **SPH/SPMHD** [VSG18]. **SPheno** [DNPS13, PS12]. **sphere** [LPRPR17, ME18, RC18]. **spheres** [AYDY11, CKLM10, LDW13]. **Spherical** [ASS13, Bal19, BMG⁺15, Cai11, CDTV10, CCK23, Den10, DT18, GDB10, GC10, GC16, GC18, GCK19, KT10, sLqSqL⁺13, ME18, NKS15, PM16, RV11, SR12, Ser17, TO10a, YÇÖ15].

spherocylinder [FBP⁺14]. **spheroidal** [Kir10, OWS⁺14]. **spheroids** [ALSW14]. **SPICE** [EFG⁺10]. **SPILADY** [MDW16]. **Spin** [BW11, BJBC⁺14, BPP11, BFPP12, BBS14, BR13, BVP10, CL14, CB15d, CAGL13, DRR16, FW11, HvWT17, IZRT15, IUM13, KO12, KO14b, Kom15a, Kom15c, KO16, LBP15, MDW16, PdMML19, RRCSCJ10, RLS16, RE12, SHZ13, WX14, Wan16, WLG18, Wei11b, WPAV14, XJS16, Yam16]. **spin-** [HvWT17, SHZ13]. **spin-adapted** [WPAV14]. **spin-dependent** [XJS16].

spin-ice [IUM13]. **spin-lattice** [MDW16, Wan16]. **spin-orbit** [CL14, RE12, WLG18]. **spin-orbit-coupled** [WX14]. **spin-system** [BJBC⁺14]. **spinney** [CKJR11]. **spinor** [GLMG12]. **spinors** [CKJR11, Erm18, GLMG12]. **SPIP** [BF16]. **SPIREs** [MCM⁺12]. **Spline** [LZ17, BH16, End11, Fro11, Jal10, Jiw15b, LD10b, LX12, Lin13, Moh14, PCGM14, RM10a, ZF16]. **spline-Fourier** [PCGM14]. **splines** [RHC15, RCH16, WvSL13]. **Split** [GTS14, BK11a, DIR⁺19, DT10, JZJ18, JCL⁺18, OAKS11, PMMF15, Ram14, SB11, WZ13]. **Split-operator** [GTS14]. **split-step** [DT10, JCL⁺18, OAKS11, Ram14, WZ13]. **Splitting** [Bla15, ABH⁺19, BE14, BB12, CZ18a, CZS10, GML15, LBM⁺14, LL19, NAQ16, QM10, QSC14, Sch14a, TD14, TCP13, XLX13]. **splittings** [IKS19].

SpM [YOM⁺19]. **SPMHD** [VSG18]. **spontaneous** [EZBA16, ZLM12].
spreading [SOYHDD19]. **spurious** [BCH11]. **SQDFT** [SPSP18].
SQERTSS [DSHS17]. **square** [Ber16a, Ber16b, DSPJ10, GST15, HML11,
Lee18, LS15b, LSCZ11, Liu13, Ots11, UW12]. **square-lattice** [Ots11].
squared [CB13b]. **squares** [AG12a, Gor19, Kra11, LWW10, Wan10b].
squark [AMRdA17]. **SQuIDS** [DSW15b]. **SRD** [TCCV18]. **SSA** [FCC15].
ssDNA [AGVP10]. **SSE2** [BS11]. **SSNTDs** [VSG17]. **SSPH** [JOR⁺12].
Stability [FR15, AS11b, Bar11b, BSWC14, CHW⁺15, HW12, LOK⁺18,
RC15, WRBL19, ZRS12]. **Stabilized** [TXZL15, JTN⁺11, XYZX19].
Stabilized-Invariant [XYZX19]. **Stabilizing** [GA15]. **stable**
[DSPJ10, GZW17, Ram14, SS13b, SPS10, WYH19, ZY19a, ZKS⁺18]. **STAG**
[NCB18]. **stage** [CCW10, PZZL19]. **Staggered**
[HP14, BCDI12, DJ11, GM18, Mar15, SCLW16, TH17]. **Standard**
[AB10, AAB⁺10a, BM19, DET12, Deg15, ABB⁺14, ABdA15, AC17,
AMRdA17, Ano10o, Cou13a, Cou13b, GLX⁺14, ABC⁺18, BCPS11, BCP13,
HLM13, KPV16]. **standing** [ACTP15, BMF⁺19]. **star** [SEW12, SEW14].
Stark [CFSK14, PMMW15]. **Stark-effect** [CFSK14]. **STARlight** [KNS⁺17].
stars [VPM12]. **start** [SDJ⁺12]. **starting** [RLS16]. **State**
[BBS19, RSB14, ASEA14, BP12, BKS15, Bis15, BK11b, BTC⁺17, CR13,
DBK⁺14, DLW⁺18, Eba13, ELL⁺17a, FTI18, Faw10, FDWC12, GM14,
HM12a, JPCG15, JW13, JTT11, JMG⁺17, KO13, KSY17, MST⁺18,
MEG12, NDSH18, OK12, OML11, dIRAPL11, Pat12, RLS16, SAW18,
SGSG19, TPC16, VS19b, WX14, XZF12, dSF18]. **state-of-the-art** [Pat12].
state-to-state [ASEA14, BTC⁺17, TPC16]. **States**
[JWC18, ABDR17, ACTP15, AM17, BR13, BVC13, CLHL19, CWW15,
Dua12, FLE19, GH11, HL19b, JDG12, KH11, LKM⁺16, LV13, Liu15a, LB10a,
LB11, LB12, LB13, MH11, Mis12, Mis13, MNPY14, NJS17, RV10, TTS11,
XJS16, ZAHA10, dSLF13, vH18, KBLJ18]. **static** [Fuk17, GB17, dIRL11].
stationary [AD14, ABDR17, Fis12, GG16, MGL16, VDAH16, ZAHA10].
Statistical [Bin13, Mag18, SLC11, SM11, Ano11o, CSRV13, ELL⁺17a, Fri17,
HJE⁺19, KD16, LLHC11, MW12, PMMF15, Sin11, Sin12a, VLM11, ZF15].
statistics [Zlo14, dSVLP13]. **steady** [Bis15, HJGL18, HJGL19, JMG⁺17,
KSY17, MST⁺18, NDSH18, SK15, YTYA17, ZNT15, dSF18]. **steady-state**
[JMG⁺17, MST⁺18, NDSH18, dSF18]. **steam** [CLW11]. **steered** [ZF15].
steering [MMC10]. **stellarator** [HSD17]. **stellarator-like** [HSD17]. **stencil**
[VV16]. **stencils** [DSPJ10]. **step**
[ABH⁺19, BM13, BIT12, DT10, FGR14, FHA17, GM16, JCL⁺18, KMS19,
LS15b, LWYW11, MAC12, MC10, NS15, OAKS11, PAS11, PS14, Ram14,
SVV19, SB11, SS10b, Ume18, Ume19, WZ13, YZZ11, PG19]. **step-selection**
[ABH⁺19]. **step-size** [BM13]. **stepping**
[AH13, DJ14, IBP⁺15, QWZW18, SHT18, WMI19]. **Stern** [CBB14].
Stewartson [GML15]. **Stieltjes** [GLX⁺14]. **stiff** [LL12, WMI19]. **stiffness**
[BW11]. **STM** [MAC12]. **Stochastic**
[EPB⁺16, JP11, LL12, NEW⁺18, ÖKC11, PLCC12, STT11, SMJ17,

WSTP15, ZE11, ZE16, ZBMM11, AD15, BdVGS11, DBJ11, DHJ13, DSP15, Er14, FRW17, GJLB12, GMO19, HJ14, JK10, KD17, KBSP12, KH19, LP15, NBM⁺15, NFI17, PCVZ11, SJ11, VBC⁺12, YK12]. **stock** [KCL11]. **Stokes** [BKOZ16, BLAS19, EW14a, FDZ17, FBHB17, FM15, LWJV18, MVS15, QSB19, Sal16, SK15, SP18b, VSO⁺13, ZPS⁺18]. **Stokesian** [BHND16]. **Stomo** [PR12]. **stopping** [AG12a]. **storage** [Ano11o, BMC⁺11a, CLH⁺17]. **strahlung** [DDKM15, BHZ13]. **straight** [BL18a, dJBIM16]. **Strain** [LHSL14, KCA⁺15, Laz15, WP10a]. **Strategies** [KS15, ABH⁺19, Cha19, DCGG13, FSJ⁺16, HJH17, SKH⁺10, ZHSL13]. **strategy** [BPMM14, BHVMH15, CMRVVR16, CXG⁺19, FHTO17, LKM⁺16, LWL12, NM14, WLZN17]. **Stratified** [SSBS15]. **Stratonovich** [KD17]. **streak** [WS11a]. **Stream** [YTYA17, BABC19]. **streaming** [CO11, ST19, WFV14]. **Streamline** [DCM⁺12]. **streams** [BS13a]. **Strength** [ZFZ19, CLHL19, SW14a]. **strengths** [SEW12, SEW14]. **stress** [CHDCJA17, KCA⁺15, Voy13]. **stress-fluctuation** [Voy13]. **stresses** [Van15, YK18]. **stretching** [BJ11]. **stripe** [WWVB11]. **Strong** [GNA⁺15, ZZ15, BMW14, CPHL14, CHZ18, DOP17, HEF⁺11, MMO⁺17, RGKR17, SW14b, SS12, YKK⁺19, ZYZ15, ZY19a]. **Strongdeco** [JDG12]. **strongly** [JDG12, KS19, LKT⁺16, LDF⁺16, MN18, NO14, UKKB19]. **Structural** [KAR⁺15, SWL⁺15, ZRS12, ÁSS18, Bin13, CZN14, EBDM17, FSJ⁺16, HYM11, MHV17, PPS10, QDZ⁺13, RAV11, ZMPT13]. **Structure** [FGJB19, HL18, XNK⁺16, ACD⁺14a, AGVP10, Ano10n, ACC17, AFZ17, AFZ18, ATCZ19, Aza13, BK13a, BC10, Bjö11, BBO19, CWJ19, CKSM⁺19, CPV13, CYD11, CJJ⁺17, CSK⁺19, Cor14, DCU⁺19, DO14b, FLA⁺16, Faw10, GTL⁺17, HKS10, HMR⁺19, Hol19, HJE⁺19, HBH⁺17, JWCW17, JGB⁺13, KB19, KGFS18, Kra17, Kra18a, LS19, LZP12, LQZ⁺13, Liu14, LZ18, LH18, LZ11a, LZ11b, LSK⁺14, LOSZ13, MED11, MSZW11, MW14, MNL19, MNPY14, PSP16, Rut18, San15, SS10a, SCG11, TMA⁺15, THJ⁺10, TC12, WG16a, WLZM12, WM13, WAHL13, XLCW14, YFAT17, zYCG⁺18, YG12, ZLZ19]. **structure-based** [MNL19]. **structure-preserving** [CWJ19, San15, WM13]. **structured** [ACMM19, CVK⁺17, FRFH10, JBG⁺16, JBG⁺17, KK14b, YH15, dBCH14]. **structures** [ÁSTT16, ASEA14, AZ17a, AZ17b, BHN⁺16, Bot12, CJH11, CCM12, CZF18, DV11, Fri19, HLTW19, LCY⁺11, LF12, LZ12, LOV10, MCV18, MD19, MFLY19, OG14, OO15a, RJKC16, SZC⁺13, VDB14, WLZ⁺13, WTH15, XLL15]. **stuck** [GK11]. **studied** [GZL14, WXW14]. **studies** [CMJ⁺11, DGPOR18, HW11, MKR⁺12]. **study** [AS11a, AYDY11, BTM⁺17, CMRVVR⁺14, CB15b, CZ19, CB16b, CMR17, CRNK12, EY11, FDWC12, GLAC13, Gwi12, HCRD14, HST⁺11, HCC14, HML11, HB13, IUM13, JTN⁺11, JW13, KBB⁺17, KV19, LLHC11, LRC⁺11, LQZ⁺13, LN16, lLsSqL⁺13, LHSL14, LS11, LNSD15, LSD18, sLqSqL⁺13, LMAB16, MiH12, MPSV15, Miu11, NRSVW12, PBE14, RB18, SS18, SWL11, TG11, VEM12, ZDWY10, ZDD⁺13, dSF18]. **Studying** [YLYL17, AKZ⁺13, GTSL⁺13, HP11, KS19, LSDD14, Leó12, MFS10b, QDZ⁺13]. **Sturm** [LV10].

Sturmians [MCGR11]. **sub** [BHN⁺16, IBP⁺15, TIMM13]. **sub-** [BHN⁺16]. **sub-grid** [TIMM13]. **sub-stepping** [IBP⁺15]. **subdomains** [EDPZ19]. **subject** [PR13]. **submicron** [BHNS17]. **submicron-size** [BHNS17]. **subpixel** [HHC16]. **subroutine** [SFV19]. **subsequent** [KEH12]. **subsonic** [TKL⁺12]. **subspace** [BB15, BBF⁺10, BH11, BVSG19, LHJZ10, STK10, YRR13]. **substitution** [PdMML19]. **substrate** [EW16]. **substrates** [CLY11, EBCBG17, WTH15]. **substructure** [BJ14]. **subsystems** [Ano10n]. **subtract** [Sib17]. **subtract-with-borrow** [Sib17]. **subtraction** [AK13a, BWWM19, HMU10]. **successive** [BSM13]. **Sufficient** [MD11a]. **suitability** [JHH⁺19]. **suitable** [BW15]. **suite** [FBC⁺12, PVH⁺17]. **SUKI** [SKK⁺19]. **sum** [GJ13, WL11a]. **summation** [KK14b, KR16, LHZ11]. **SummerTime** [LM16]. **sums** [LM16, LNP⁺17]. **supercell** [Laz15]. **supercomputer** [GHdF10, Yi11, ZBN⁺19]. **supercomputers** [KCS⁺15, NB17, ZZG⁺16]. **supercomputing** [AGL11]. **superconducting** [CdFDS16, KA17, PMVG16]. **superconductor** [HBS⁺11]. **superconductors** [CMJ⁺11, OBM19]. **superfluid** [SQA⁺15, WFM14]. **supergravity** [Fis12]. **SuperIso** [AM10, AM11, AMR19]. **superlattices** [ACCB13, MiH12, RFSF18]. **SuperLFV** [Mur14]. **supernova** [BNAB11]. **supernovae** [CHA11]. **Superposition** [HD17, HCRD14]. **superpositions** [BS12]. **superpotential** [Sta10]. **superspace** [DF11b]. **Supersymmetric** [AB10, ABdA15, AC17, AMRdA17, AhPSV15, CJ12, CGV13, DET12, ES16, Mur14, SD15, Sta11, SOPS12]. **supersymmetry** [AKH12, AM10, AMR19, BBC⁺13a, BSW12]. **Support** [GBJ⁺15, LS15a, Smi16]. **Suppressing** [KÓG17]. **suppression** [GV15]. **supramolecular** [KBB⁺17]. **Surface** [GMH11, HJE⁺19, MGS13, AGVP10, ACMM10, BHW⁺12, CCD⁺16, CL11, CPR12, CB16b, Dan10a, Dan10b, Dan16, Dan17, FM15, Gai17, GZZ19, GSKM15, Kaw19, ML14, NEW⁺18, NLB⁺19, NS11b, PR10, PR12, RE19, RJLL16, SÓÓN11, TM14, TG11, XD16, ZPH⁺15, dSF18]. **surfaces** [ASPDL⁺16, BKN⁺17, Dan19, DR12, EBCB⁺14, EBCBG17, FGC⁺11, HS16, KC14, RFPM⁺17, SKML11, TKJ19, WS11a, XWF18, YLK10, Zhe15]. **surfactant** [ZKS⁺18]. **surfactants** [vdSM16]. **SURFF** [MB16]. **surrounded** [FM15]. **susceptibilities** [GTK⁺19a]. **susceptibility** [ZKW⁺15]. **SuSeFLAV** [CGV13]. **SusHi** [HLM13, HLM17]. **suspension** [TCCV18, vdS10]. **suspensions** [BE14, BHND16, DGPOR18, HPKF15, MDPTK15]. **SUSY** [ABH⁺18, Fon12, MZ14, Ros15, Sta14]. **SUSY_FLAVOR** [CRC⁺13, RCD⁺10]. **Susyno** [Fon12]. **SUSYQCD** [AMRdA17]. **Suzuki** [WC13, WC15]. **Swan** [HD11]. **Swarm** [PE17, GWF⁺16, GD14, SWL⁺15, YZZ⁺17]. **sweeping** [LHL11]. **Swendsen** [KO12, KO13, KO14b, Kom15a, Kom15b, Kom15c, KO16]. **switch** [UA17]. **switching** [PM14]. **SymbMat** [CK12]. **Symbolic** [Che17, CK12, GBD10, GDB10, LLL12, LLL13, Cri18, GBRB11, JC13, JC14,

KH10, Pan15, SZ15, Zit11, KDP⁺¹⁴, CCK23, Mel19]. **symbols**
 [Nik12b, Wei11a]. **Symmetric** [CFMR10, CYSL12, ACC17, CDMCN11,
 CFSK14, CLW11, GBRB11, GHMB⁺¹⁹, GCHL15, HC17, HM18, JOR⁺¹²,
 KSW12, MCP10, NLSJ17, PAS11, PS14, RS12, REBS16, SW12a, SW13b,
 Sza13b, Sza13a, SJY18, SJY20, TC12, Yua19]. **symmetric-** [SJY18, SJY20].
symmetrical [AAD14]. **symmetries** [JC13, JC14, VJC12]. **Symmetry**
 [MW14, Alv12, BCDP18, CDTV10, CFSK14, FF11, GNT17, HJL⁺¹⁴,
 LRC⁺¹¹, ZAHA10]. **Symplectic**
 [LQ18, MKS10, Bla15, CWJ19, CFMR10, CZS10, CYSL12, HDZ14, KMS14,
 KZC⁺¹⁰, LS12a, LYL⁺¹⁷, QSC14, RHW⁺¹², SSH⁺¹³, SW12a, SW13b,
 WXL13, WWHW14, WWC⁺¹⁶, XQ19, ZST11]. **SYMLER** [KDP⁺¹⁴].
synchronous [BENK⁺¹⁷, Fer15, SCM13]. **synchrotron** [LSF14]. **synthesis**
 [LHWL16]. **Synthetic** [MGA⁺¹³, BL18b, KFF⁺¹⁶, PN15]. **System**
 [KBT⁺¹⁴, Ano11a, BMC^{+11a}, BJBC⁺¹⁴, BCDP18, BHH⁺¹⁰, BBH⁺¹⁵,
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 HLD13, JMG⁺¹⁷, Kro16, LDR⁺¹⁷, LL19, sL10, MD10a, MSI⁺¹⁰, MCAdF14,
 MSH11, OK10, ÖY13, PMMW15, SXW⁺¹⁸, TTG11, TTS11, TD17,
 WNYP17, mZfXL15]. **systematic**
 [BW16, BSK⁺¹⁸, ER19, GA13, MNL19, RCGT16]. **systems**
 [ÁSTT16, ÁSS18, AKR15, ABF19, ASPDL⁺¹⁶, AGH⁺¹⁶, ADdM^{+12b},
 ACdM14, BMC^{+11b}, DdJC⁺¹⁹, BFPP12, BBS14, BKS15, Bis15, BVC13,
 BMW14, BC11, CR13, CLH⁺¹⁷, CGM17, CZ18b, CLJ12, CYSL12, CSK⁺¹⁹,
 CL15b, CB15d, CB16a, CR12, CBB⁺¹⁰, CFFR15, Dan14, Dan16, Dan17,
 Dan19, DBJ11, DEW16, Er14, Ert15, FLW10, Fil14, FE11, FLW17, GLHR19,
 GJ18a, GS17a, GH11, GM16, GBJ⁺¹⁰, GBJ⁺¹², GBJ⁺¹³, GCHL15,
 HBL⁺¹³, HL19a, HAN⁺¹⁶, IUM13, JLA⁺¹⁴, JWC18, JXTS16, JLW13,
 JNN12, JNN13, JGC⁺¹¹, KFS17, Kau13, KPA13, KHZ⁺¹⁸, KI11, KO12,
 KS12, KPOR18, KGNS10, LLQX19, LKM⁺¹⁶, LCY⁺¹¹, Leó12, LRW⁺¹⁵,
 LWYW11, LS16, LB10a, LB13, LKT⁺¹⁶, LCHM10, LL12, LCHM13, LBP15,
 MPM14, MFM15, Men11, MGS13, Miy15, NFD⁺¹⁹, PFA⁺¹⁵, PTMDPK14,
 PLCC12, QZWU19, RF10, RAV11, RHC15, RCH16, RCH19]. **systems**
 [RLMG⁺¹¹, SW14b, SL17, SH18, SCJH19, SEGP15, SGW17, SLR16, SS10a,
 SPP19, TM14, TDL⁺¹⁴, UO15b, UO15a, Voy13, VBMP15, VB19, Vuk12,
 WXL13, WRB11, WAW14, WYSW10, WW10, YZWR14, ZAHA10, dB14].
SYVA [GNT17].

T [CCK23, HD17, PC11, NDSH18, MB16, KB19]. **T-matrix** [HD17].
t-SURFF [MB16]. **T3PS** [Mau16]. **table**
 [JTH14, LYJY10, Wei11a, vSGB⁺¹⁸]. **tackle** [CKS10]. **tadpoles** [Pik18]. **tag**
 [DKT14, HLS12]. **tag-mediated** [HLS12]. **tailored** [VvAV^{+11b}]. **tangents**
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 [BAK⁺¹⁷, HC16, LHJ⁺¹⁵, MSR⁺¹⁷, SMOB19]. **Tartarus** [SGSG19]. **task**
 [TGH⁺¹⁶]. **task-based** [TGH⁺¹⁶]. **tasks** [HWT10]. **tau**
 [SW14c, Wan10a, HTT13, HTT14]. **TAUOLA** [CPWZ18, DNP⁺¹²]. **Taylor**

[WG12]. **Taylor** [vH10]. **TD** [HM17]. **TD-DFT** [HM17]. **TDDFT** [PVK⁺18, PUO14]. **TDDS** [GLHR19]. **TDF** [SGDS16]. **TDHF** [MRSU14, SRS⁺18]. **TDSE** [FZY17, ÓN14]. **TE** [LS17b, LSSW14]. **tearing** [HSK⁺12]. **Technical** [DNP⁺12, DPW16, LS15a]. **technique** [BALV16, BCDP18, CS10, DG10a, DG10b, DM17, Eba13, EKDGG15, GHvdL11, GGG16, GTS14, Hon10, JAS17, KN13, Koh15, KR16, LLX14b, NPAD11, NDSH18, NVAFO18, QZ19, Ram10, SK14, TH17, VDB14, WLS13, WDR16, MAIVAH14]. **techniques** [BCS10, BD12, BJM15, BVSG19, BSW12, GSB⁺14, JZJ18, KHKR14, LAG⁺17, MIW⁺13, MC12, MHWH19, OBH10, PLF⁺17, RGH10, RWKS15, WMI19, ZWC⁺19]. **technological** [CMdB11]. **technology** [DM12, MSI⁺10, MRL19, RB18]. **telegraph** [PKT15, XYK12]. **telescope** [ECD⁺10]. **tell** [KSL⁺11]. **TEM** [KQYH17]. **Temperature** [HST⁺11, HEF⁺11, OBM19, BM16, CM10a, GB14, HvWT17, Hin11, KST14a, KCT15, KA17, KGNS10, Liu13, LK15, Liu15a, LJD⁺19, Mil16, RF16, SLK19, SLC11, SC15, SC16b, SPSP18, VdLF14]. **Temperature-controlled** [HST⁺11]. **temperature-dependent** [SLC11]. **temperatures** [Wai12]. **tempering** [Boe14, FFT⁺14, JJ15, VdLF14, VDF15]. **Template** [LHL11, BJ14]. **TemplateTagger** [BJ14]. **Temporal** [MDF11, SCB⁺17a, YHCS11, IBP⁺15, KEH12]. **TENO** [Fu19a, Fu19b]. **tensile** [SCM⁺18]. **Tension** [RM10a, DIR⁺19]. **Tensor** [SPS18, BK12, Bre10, DKOS14, DLW⁺18, GCH⁺18, HR11, KAK12, KK14b, KK14a, KCA⁺15, Lya15, MK19, NKS15, Nie18, PGO17]. **Tensors** [Dep17, Ara14a, Ara14b]. **term** [Pla16]. **terms** [ACMM10, ACML11, ACM12, Deg15, HMU10, LNP⁺17, MSR10]. **ternary** [Sza16]. **terrain** [OAKS11]. **TERS** [Nat10, Nat09]. **Tersoff** [Ngu17]. **Tesla** [Lya15, AAA⁺16]. **Tessellation** [CMSN18]. **tessellations** [SOJ14]. **Test** [LNSD15, PBE14, SISW10, TdAdSS11, VEM12, ZZG⁺16]. **test-kinetic** [VEM12]. **TESTER** [DGPW11]. **Testing** [ES11, FMRP16, Pit10, Liu11, MGFRG12, TVT⁺16, Zlo14]. **Tests** [SMJ17, Gag12b, Gag12a, GH18]. **tetrahedral** [JG16]. **tetrahedron** [GJ18b, Kap12a]. **tetrahedron-based** [GJ18b]. **Tevatron** [BBH⁺10, BBH⁺11a]. **TFmix** [SLK19]. **Th** [CHW⁺15, GJ14]. **th-order** [GJ14]. **their** [BDJS18, GSMK17, GCVA14b, KAR⁺15]. **theoretic** [SSBS15]. **Theoretical** [HCC14, LQZ⁺13, NS11b, NVW⁺13, Sit18]. **theories** [ADF⁺15, CJ12, Cip11, Fri14a, LM19, LSSW14, SA14]. **Theory** [GS17a, VCMS⁺13, ZZH⁺16, ASA18, ADT⁺19, BPC12, BB13a, BW12a, BG11, BO12, BRH⁺16, CXH⁺15, CKhN11, Chr18, CZ19, Cri18, DF13, FK15, GWL⁺17, GTK⁺19a, GBR⁺14, HAH13, Hsu11b, HHS⁺10, JCW⁺13, KBB⁺17, KVW11, KBSP19, KPST15, Kra17, Kra18a, LA13, LSDD14, LWES18, LSK⁺14, MGRB11, MBF⁺10, MOB12, MSS⁺16, MG10a, Mü11a, MC17, Naz12, NRSVW12, Nut14, OOK⁺12, OT11, Pre18, QJF16, RWKS15, San15, SD15, SCRS17, SSH16, SBH⁺12, SÜ18, TVGB15, VBS⁺17, WHG⁺19, Wan10b, WM13, YZWR14, YLYL17, ZAHA10, BK13b, BC10, DBB12, GS17b, LT15]. **thermal** [CCXC15, DS13b, FSH13, Fow18, FM15, GM14, TKP12, Wan16,

YK18, CKFB12, VS19b]. **Thermal-FIST** [VS19b]. **thermal-hydraulics** [YLL⁺19]. **thermally** [CZN14]. **THERMINATOR** [CKFB12]. **thermo** [DGMZ15]. **thermo-mechanical** [DGMZ15]. **thermochemistry** [YFAT17]. **thermodynamic** [BSWC14, Cou13a, Cou13b, DES⁺11, GRR⁺14, MJB11, RKG⁺17, TDL⁺14, ZZH⁺16]. **thermodynamics** [AGVP10, Fri17, KH10, MWL⁺10, dIRAPL11]. **Thermoelectric** [BKA⁺14, KAR⁺15, NVAFO18, PVK⁺14a, PVK⁺14b]. **thermostat** [GJHF14, JBKM15]. **Thermostatistical** [GM11]. **thermostatistics** [AMR15]. **Thick** [SMUT19]. **Thick-restart** [SMUT19]. **thickness** [CDSG11]. **thin** [BL14]. **Third** [MAM14, NS15, VEB⁺18]. **Thomas** [GLHR19, SLK19]. **Thouless** [RMC16]. **threads** [CUL⁺17, sLqSqL⁺13]. **Three** [BY13, CW16, dAFdSVM12, HWS16, LJSW11, LB13, MNPF17, SC15, WWC⁺16, YWX11, ABB⁺16, BC11, BKM14, BK16b, CS16, DS13c, DMC10, DO14b, EKO16, Exl17, FFT⁺14, GTPWL12, GBD10, GSMK17, HLW16, HLTW19, HCSW10, Ixa16, JWCW17, KKP11, KP12b, KH12, KRB15, KKO19, LA13, LLXK16, LCQF18, MÅWK18, PBE14, Qia16, RWKS15, SFP11, SCLW16, SC16b, TSIM16, Ume18, WL11b, XZF12, ZFH14, ZZG⁺16]. **three-** [GSMK17]. **Three-body** [BY13, LB13, EKO16, Ixa16]. **Three-dimensional** [CW16, dAFdSVM12, LJSW11, MNPF17, WWC⁺16, BC11, DS13c, DO14b, FFT⁺14, GTPWL12, HLTW19, HCSW10, KKP11, KP12b, KH12, KRB15, KKO19, LLXK16, LCQF18, Qia16, RWKS15, SFP11, SCLW16, XZF12]. **three-level** [WL11b]. **three-nucleon** [GBD10]. **three-state** [XZF12]. **three-step** [Ume18]. **Three-temperature** [SC15, SC16b]. **threshold** [BH17, BKMP16, Has11, HST⁺11, dSdO12]. **throttling** [DSHS17]. **throughput** [ECD⁺10, ZZ17a, ZFZ19]. **THz** [WQ18]. **Ti** [Ell17b]. **TIERRAS** [TS10]. **TIGER2** [BW15, MPB10]. **tight** [HSF⁺19, HM17, Jac19, RJKC16, SHNM11, YLYL17, LSK⁺14]. **tight-binding** [HSF⁺19, HM17, Jac19, RJKC16, YLYL17]. **TIM** [LHC⁺12, OTC14]. **Time** [DAW⁺19, GTG⁺11, HKF⁺12, IBB18, LLQX19, LB10b, RJKC16, TD14, TC11b, TT11, AAA⁺16, ADdM16a, ADdM17, Ano19m, ABDR17, AH13, BS15a, BR14, BD10, BMBC⁺17, BB12, BENK⁺17, CZ18a, CMSN18, CVK⁺17, CC10a, CH19, CKSM⁺19, CDL⁺12, CW16, CZZ⁺19, CYOS19, Chr18, CHZ18, CO11, DS13a, DS10, DM17, DV11, DSW⁺15a, DKSG16, DHR14, DJ14, DM12, ECD⁺10, FDZ17, FGLB12, FNPMB10, Fri10, GS15, GMPFC⁺14, GML15, GBR⁺14, GM16, GVR19, GBSY18, GJHF14, GWF⁺11, GMHZ19, HE13, HWG13, Has11, HC16, HLLH16, HC17, HL19a, HKvH16, Hsu11b, HHC⁺10, HWM⁺15, Hua17, HM18, IW15, JLM18, Jia18, JL19, JHJG14, JMG⁺17, KK16b, KBSP19, KYSV⁺15, KSY17, LLHC11, LV14, LS15b, LLP15, LTP⁺17, LAS⁺17, LBB⁺16, LYSS⁺16, LR13, LR16, MWI⁺19, MC16, MGRB11, MGL16, MC10, MBFD12, ICD13]. **time** [MC17, NPM16, NAQ16, ÓN12, PSB11, PSBT12, PM16, PVK⁺18, PTMDPK14, PBS⁺17, QYM11, QA13a, QWZW18, RE19, Ram14, RVDS16,

RDVS18, SHT18, SSB⁺16, SLY18, SKFP16, SVV19, SSH⁺13, SGW17, SBPD19, SBH⁺12, SCB17b, SW12b, TTG11, TL17, TT14, TVT⁺16, TVGB15, UW12, US16, VDB14, VBS⁺17, VVB⁺12, Vuk12, WL11b, WMI19, YOM⁺19, YSVM⁺16, YSMA⁺17, YWOD19, ZD15, ZYZ15, ZY19a, dSF18, dHGCS11, CYN19, Wil19]. **time-delay** [DS10, LTP⁺17]. **time-delayed** [JHJG14]. **Time-Dependent** [LB10b, GTG⁺11, IBB18, TC11b, TT11, BMBC⁺17, DS13a, DHR14, DM12, FGLB12, GS15, GBR⁺14, HM18, JL19, KBSP19, KYSV⁺15, LV14, LBB⁺16, LYSS⁺16, MC16, MGRB11, MGL16, MC17, NPM16, ÓN12, PM16, SSB⁺16, SSH⁺13, SCB17b, TVGB15, UW12, VBS⁺17, VVB⁺12, WL11b, YSVM⁺16, YSMA⁺17, ZYZ15, dSF18]. **Time-domain** [LLQX19, CKSM⁺19, CW16, FNPMB10, HE13, HC16, HC17, HKvH16, MBFD12, ICD13, SVV19, SW12b, TT14, VDB14, Wil19]. **Time-efficient** [RJKC16]. **time-evolution** [JMG⁺17]. **time-evolving** [US16]. **time-fractional** [CZZ⁺19, GMHZ19]. **time-harmonic** [HLLH16, LLP15, TVT⁺16]. **time-integration** [CH19]. **time-modulated** [TTG11]. **time-spectral** [SLY18]. **Time-splitting** [TD14, BB12, GML15]. **time-step** [LS15b]. **time-stepping** [DJ14, QWZW18, SHT18, WMI19]. **TIMEDELn** [LTP⁺17]. **times** [VKLM11]. **timeseries** [HBP14]. **TimeSeriesStreaming.vi** [CO11]. **timesteps** [YQM12, YQM14]. **Timing** [SJW10]. **tin** [LZP12]. **TINKER** [BBL⁺13]. **tip** [XLX⁺15]. **TNAMD** [MPB10]. **TNSPackage** [DLW⁺18]. **tokamak** [Ano10n, ALC18, BSM13, BMU11, BT17b, BB13b, FBHB17, GGI⁺13, HV15, HAK⁺14, HF16, JHL⁺15, KYKN15a, KYKN15b, KGG⁺16, KQYH17, LDR⁺17, LRK13, OILK17, PHT⁺19, PMS⁺17, PS11, YLKN17, ZFR18, SM13]. **tokamaks** [ML17, PPV⁺11, TJH17]. **TOMBO** [ONS⁺15]. **Tomlinson** [AMM11]. **tomographic** [HZC19, YvOSM15]. **tomography** [AGMS15, CM10b, DADS11, FWS⁺17, LM12, MD11b, PR10, PR12, SSM⁺17, YvOSM15]. **Tool** [BCTP18, Mau16, Ruf13, SF10, BJ14, BM19, BCH17, Bre10, BHW⁺12, CF16, CKS10, CC19, CRC⁺13, CZN14, DGPW11, DES⁺11, DRR15, EBDM17, FYK18, FCC15, Gio14a, GM17, GRR⁺14, GPS⁺13, GBC⁺18, GFB⁺10, GGF⁺13, HD11, Hir15, HB13, KS19, KFS⁺13, Kol15, KRB19, LCE⁺13, LHL11, LS17b, MLGVE14, MVI⁺16, MNPY14, MYP⁺14, MG10a, Müll11a, Mur14, NRSVW12, OG14, OO15b, OO15a, OVSI15, OAKS11, PSMS14, PSMS15, PG19, Pra17, RF15, RJW⁺19, RCD⁺10, Ros15, RKGC⁺17, Rut18, SGDS16, SZC⁺13, SPY11, SOPS12, Sta14, TKS19, WS11b, sX19, YOM⁺19, YB13, BBB⁺15]. **toolbox** [ACD⁺14b, AD14, AD15, Bal19, BHJ⁺18, DSK19, HT12, Hoh14a, Hoh14b, Hoh18, HSF⁺15, Men11, PFA⁺15, TACA15, VDAH16, WJCZ18, WTH15]. **toolkit** [BG19a, BG19b, BMZ⁺18, HWM⁺15, Hua17, Liu15b, Pei18, SBH⁺14, SMO16b, WFDK19, Wie18]. **Tools** [GHdF10, GHvSF14, ABB⁺14, Ano10o, CFW17, Fis12, Fri14b, LHGF18, MFS10b, SLW19a, SLW19b, SS13c, VKS16]. **Top** [ALL⁺11, CFSK14, CM14b, HLM17, KKK⁺15, ZZG⁺16, CM14b]. **top-pair** [CM14b]. **top-quark** [KKK⁺15]. **topological** [BLS17, FWZ⁺12, WZS⁺18]. **topologies** [ABB⁺16, BCM⁺16]. **Topology**

[BBO19, LRR⁺17]. **Topology-based** [BBO19]. **tops** [MNV13, SJY18, SJY20]. **TORBEAM** [PBL⁺18]. **torch** [CLW11]. **toroidal** [BDBV12, DXY⁺19, HKJ⁺12, JGC⁺11, KTE⁺12, LC15, MJB⁺10, PCGM14]. **Torricelli** [BMF⁺19]. **torsional** [FCCTFR18, ZMCT12, ZMPT13]. **torsions** [FCCTFR18]. **torus** [KGG⁺16, YKK⁺19]. **Total** [TAFD19, KCA⁺15, MKU⁺12, SAA⁺10, SGDS16, SSM⁺17]. **toy** [GFJ⁺14]. **toy-model** [GFJ⁺14]. **trace** [SK12]. **tracer** [OTC14, WLQ⁺17]. **tracing** [CMS17, KMA⁺12, LHC⁺12, LHL16, MTM14, MMC10, MCAdF14, Mül14a, PBL⁺18, TZK16, VLZ17]. **track** [AANAJ12, BPMM14, BKM11, JuIAM16, LFG14, MSNI11, SMCB⁺15, VSG17, AKKK16]. **TrackEtching** [VSG17]. **Tracking** [KL14, RNdB19, AGMS15, BKM11, BY17, CNS⁺18, CWY⁺17, KSW12, LQ18, ZSW⁺17a]. **tracks** [Eme11, KEH12]. **tract** [CPCDdM18]. **tractable** [Brá15, Deu16]. **trade** [CLLK11, NBN⁺14]. **trade-offs** [NBN⁺14]. **traffic** [JHJG14, Kom15b, SDJ⁺12, SJW10]. **train** [DKOS14]. **Training** [vSGB⁺18, LYJH19]. **trajectography** [Mag18]. **trajectories** [Bin13, DRR15, KI11, KS15, LS12b]. **trajectory** [DAW⁺19, TS11, Wil15]. **Transfer** [Hak16, Hak19, Lee18, TRN16, ZLL18, ASS13, BBB17b, CLJ12, CZF18, DBMR18, ELDS14, Gai17, GZL14, HTT13, HTT14, IBB18, MR14, NBM⁺15, NCHN15, NFI17, NGCI⁺12, STT11, SR12, XHLUF⁺18]. **transferable** [HBP⁺15]. **transferred** [CLW11]. **transform** [Jan10, KT10, sLqSqL⁺13, Ras09, Ras17, Ser17, TO10a, WLG⁺13, XGH⁺19, FCC15]. **transformation** [BMNS14, GKM10, GSMK17, Mey18, MGK13, OK14, SMGK14, SCG11, JLW13]. **transformations** [Che17, Mel19, MWCY14]. **transformed** [PSL⁺17, SSK⁺13]. **transforms** [GMF⁺17, SPS10, SBvD13]. **Transient** [NB17, CAN11, CCXC15, CB15b, GTSL⁺13, MK10, QWZW18, RJLL16, WNYP17]. **transiesta** [PLF⁺17]. **Transition** [BP12, BR13, KBLJ18, LA13, BM19, BL14, CK12, DSHS17, Fri12, HW11, KA17, LRC⁺11, MTS⁺16, NFI17, RMC16, RE12, SLZ16, SV12, Wai12, WJHW14]. **Transition-path** [LA13]. **Transitions** [BM19, ABB⁺19, BUJ15, CMR17, JJB11, KPA13, Ots11, QDZ⁺13, RAV11, VDF15]. **translation** [TSIM16]. **translational** [CATK11]. **translationally** [SMGK19]. **translocation** [KSH11, dHGCS11]. **transmission** [GCVA14a, HTT13, HTT14, MD10a, PYW⁺14, SVGS18, WHB16]. **transmutation** [CLF18]. **transparency** [WL11b]. **Transparent** [NPM16, SP18a]. **Transport** [BNPPD19, CP15b, VC10, ASPDL⁺16, BDPM15, BTL⁺17, CVK⁺17, CCXC15, CXG⁺19, CAGL13, DSP15, EY11, FUSH14, FVH18, FZ16, FLSZ13, FRFH10, FR15, FM15, GZL14, GLHG12, HBE10, HCC14, HF16, Ihn12, Jab19, JA17, JL19, KLKR11, KYKN15a, KYKN15b, KPK⁺17, KKS18, LLE⁺18, LCKM14, LRK13, MD11a, MCV18, Mar15, MS14, NPM16, NBCL18, OBH10, PPV⁺11, PLF⁺17, PMS⁺17, PBF⁺16, PFFK19, PVK⁺14a, PVK⁺14b, PMVG16, RF16, RDC⁺18, RNdB19, RB18, SL16, SISW10, SCJH19, SK12, SD14, SCW⁺11, SSF⁺14, SC15, SC16b, Tic10, Tic14, WRFS15, XJS16, YSN⁺14, ZFR18, VFV19]. **transpose** [Lya15]. **transverse** [CC19, MSH11, Qia17]. **trap**

[BDP16, KYSV⁺15, LBB⁺16, SSB⁺16, VVB⁺12, YSVM⁺16]. **trapping** [JA17]. **traveling** [sL10]. **TRAVIS** [MTM14]. **treat** [FCCTFR18]. **treatment** [BKC⁺17, FZR19, Fuh15, KPPC13, MCNRC16, NMCR15, dRLL11, SM11, TC11b]. **tree** [ACD⁺14b, FSF11, KPvvdH13, WISA11, WSH⁺12, YZWR14]. **tree-level** [ACD⁺14b]. **trees** [NCHN15]. **Trends** [AGL11]. **TRHD** [SC15, SC16b]. **trial** [BMW14]. **triangular** [CCLL18, HML11, MH11]. **triangulation** [GMH11, Zhe15]. **triangulations** [CHNS18]. **triatomic** [AV13]. **triaxial** [MAM14, MAM14]. **tribological** [EVB14]. **trick** [WW12]. **tricritical** [dSFdFF13]. **tridiagonal** [LW14a, LWW10]. **trigger** [Dim14, Ano19m]. **Trigonometrically** [YZZ11, DMP18, KMS14, RVA14]. **Trigonometrically-fitted** [YZZ11, RVA14]. **triple** [RMW13]. **triple-correlation** [RMW13]. **triply** [YLK10]. **TRIQS** [APS⁺16, KH19, PFA⁺15, SKFP16]. **TRIQS/CTHYB** [SKFP16]. **TRIQS/DFTTools** [APS⁺16]. **TRIQS/SOM** [KH19]. **trivializing** [ES11]. **TRolke** [LCRL10]. **Trotter** [WC13, WC15]. **true** [LSK⁺13]. **true-direction** [LSK⁺13]. **truly** [Mis12, Mis13, RH17]. **truncated** [GWF⁺16]. **truncating** [BL14]. **truncation** [KN13]. **tubes** [Sza16]. **tumor** [LRSS19]. **tunable** [MFLY19, TMA⁺15]. **Tuning** [BMDP19]. **tunnel** [CAGL13]. **Tunneling** [MAC12, Raw16, YSN⁺14]. **turbid** [LN16]. **turboEELS** [TVGB15]. **turboTDDFT** [GBR⁺14, MGRB11]. **turbulence** [BY17, DXY⁺19, DCM⁺12, Fu19b, GAB⁺16, HO13, JHL⁺15, KTE⁺12, KQYH17, MMO⁺17, SNB11, THDH14, TIMM13, Uty14, YBNY13, ZW15, ZFR18]. **turbulent** [APC⁺14, BCM⁺16, CBGY17, CBYG18, JU17, Kra18b, Les16, LWJV18, ML16, PN15, Tau10, VK16, WMI19, ZPS⁺18, ZBN⁺19]. **TVD** [Yua19]. **Tweezers** [BGL⁺14, BMG⁺15, Ost10]. **TweezPal** [Ost10]. **Twenty** [DKMS19]. **twisted** [ABF19, BBC⁺11, BMHP17, CZ19, LS13]. **twisted-mass** [LS13]. **Two** [BBPS15, CCW10, KV10a, LWYW11, MKL17, Ore19, PMMF15, RS12, SVV19, THJ⁺10, VK14, dSdO12, AMRdA17, AG12b, ALA⁺19, AH13, AM17, BKS15, BH13, BIT12, BK15, CAN11, CS16, CCK23, CC10b, CC12, CDS⁺13b, CS10, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, DN13, Dev12, DT18, DKT14, Eba13, ERS10c, ERS10a, ERS10b, Erm18, FS17, FGR14, FEH11, FKS⁺19, Gag12a, GDB10, GH11, GC10, GC16, GCK19, GLW14, HEF12, HKK11, JEF14, JWC13, JH15, JPM12, KS16a, KK14a, Ki10, KYKN15a, KYKN15b, KAvdL11, KTE⁺12, KO12, KO13, LOL⁺18, LA13, LSDD14, Laz15, LW14a, LLSK17, LST15, LXR⁺18, LHH⁺12b, LJZ⁺18, LB10a, LY16, LR13, LR16, LS17b, ML17, MH18, MSZW11, NS15, OAKS11, PZZL19, PP13, QLE16, QSB19, RVA14, RCH19, SYD17, Sie16, SLR16, SQA⁺15]. **two** [SW12b, SS10b, SDJ⁺12, SJW10, TZM17, TBZ12, TT14, VvAV⁺11b, VS19a, WHG⁺19, XZ12, YÇÖ15, YZZ11, YdDH⁺12, ZLM12, mZfXL15, ZHC16, ZFR18, dTOV18]. **two-body** [FEH11, HEF12, LSDD14, VvAV⁺11b]. **two-center** [DT18]. **two-color** [HKK11]. **two-component** [Eba13, Erm18, TZM17]. **two-dimension** [LXR⁺18]. **Two-dimensional**

[VK14, AH13, CAN11, CC10b, CC12, CHZ18, Dan14, Dan16, Dan17, Dan19, DG10b, DS11b, JEPF14, JPM12, KS16a, KYKN15b, KO12, KO13, LLSK17, LST15, LHH⁺12b, LR13, LR16, MSZW11, QSB19, SLR16, SDJ⁺12, SJW10, TT14, XZ12, dTOV18]. **two-electron** [AG12b, GH11, JH15, KK14a, LB10a, YÇÖ15]. **two-flavor** [CDS⁺13b]. **two-fluid** [ALA⁺19, KTE⁺12, LOL⁺18, ML17, SQA⁺15, ZFR18]. **Two-grid** [KV10a]. **Two-Higgs-Doublet** [Ore19, ERS10c, ERS10a, ERS10b]. **two-layer** [GLW14]. **two-layered** [PP13]. **two-level** [BKS15, LW14a, LY16, ZHC16]. **two-loop** [AMRdA17, BH13, LS17b, YdDH⁺12]. **two-parameter** [JWC13]. **two-particle** [Dev12, MH18, WHG⁺19]. **two-phase** [FKS⁺19, Ki10, SYD17, Sie16, VS19a]. **two-photon** [DKT14, ZLM12]. **two-point** [CS10]. **two-power** [SW12b]. **two-route** [mZfXL15]. **Two-stage** [CCW10, PZZL19]. **Two-step** [LWYW11, SVV19, BIT12, FGR14, NS15, SS10b, YZZ11]. **Two-way** [MKL17, OAKS11]. **type** [BCC⁺18, BKOZ16, BKM14, BK15, CB13b, CCGC13, Ert15, FMW10, FG13, FPY⁺17, Giu19, HF16, HBS⁺11, IUM13, KBSP12, MNOØ11, NS15, PPY14, PKT15, PDRG10, RJW⁺19, SLZ16, TL17, WfV14, Wu10, WL11b, YWYF09, SAS11, MWCY14]. **type-II** [HBS⁺11, SAS11].

U [CHW⁺15]. **uasiparticle** [SKB10]. **UCL** [CYD11]. **udkm1Dsim** [SBH⁺14]. **udocker** [GBC⁺18]. **UFO** [DDF⁺12, Sta13]. **ultra** [HEPW13, KVV19, KNS⁺17, QYM11, TIM⁺16]. **ultra-high** [HEPW13, KVV19]. **ultra-large-scale** [TIM⁺16]. **ultra-peripheral** [KNS⁺17]. **ultra-relativistic** [QYM11]. **ultracold** [BG11, SJHS19]. **ultrafast** [FWS⁺17, NFI17, SBH⁺14]. **Ultrahigh** [VV18]. **Ultrahigh-order** [VV18]. **ultrashort** [GC12]. **ultrashort-pulsed** [GC12]. **ultrasonic** [RLMGM⁺11]. **umbrella** [IIO16, IFOI18]. **UmUTracker** [ZSW⁺17a]. **unbounded** [Exl17, GMHZ19]. **uncertain** [ÁSS18, MCL⁺17]. **Uncertainty** [CNS⁺14, CC16, HHM⁺15, KKK⁺15, KZ14, LCRL10, LLX14a]. **Unconditionally** [Ram14, ZY19a]. **under-ice** [TS10]. **under-saturated** [JHJG14]. **underground** [TS10]. **underwater** [TS10]. **undirected** [FLP10]. **UNEDF** [BBC⁺13b]. **Unfolding** [ZZD15, ZZ17b, ZZ17b]. **unification** [ABdA15]. **Unified** [DE13, Ram12, Wei99, CSC11, CSJ⁺17, KEH12, MRVF13, RHW⁺12, Sch14a, SK12, sX19, YK18, zYCG⁺18, MW19]. **uniform** [BDP16, CDMCN11, GBN17, KS15, LA13, LFG14, PdMML19, Ser10, Ser17, Wit14, YQM12, YQM14]. **uniformly** [Gwi12, SKK11]. **union** [TMS19]. **union-find** [TMS19]. **Unique** [WLG⁺13]. **UNIST** [LLE⁺18]. **unit** [Laz15, MEM⁺11, RC18, Tic10, MSML10, YLO13]. **Units** [Boe18, APRG11, BK11a, BHS18, BJCW13, CDS13a, Col14, DBDP12, DS11a, DF13, FSH13, FUSH14, FCVH17, FVH18, Fil14, FZY13, HAN⁺16, LAS⁺17, MED11, NPAG11, PLD⁺13, SH12b, TD11, WDL11, WWFT11, Dem11]. **Universal** [CCWL11, DNP⁺12, BDDM18, DGPW11, EGPS10, GGI⁺13,

KRM⁺19, SJ11, DDF⁺12]. **Universality** [Fri10, PM13]. **unknown** [PR13]. **unknowns** [YBK⁺11]. **unparticles** [AAB⁺10b]. **unsaturated** [GTSL⁺13]. **Unsteady** [FJK⁺17, SL14, TY10, Tia11, TCP13, TPC16, Uty14].

unstructured
 [ASGLK10, AK15, ALA⁺19, Cha19, GLHG12, HWCdM19, LYP14, LJWK11, LWRQ16, MTO15, OCM⁺19, PZZL19, PBD⁺15, SP18b, SC15, ZS13].

unstructured-grids [SC15]. **unweighted**
 [Gag12b, Gag12a, GH18, GHN19, WW12]. **Update**
 [ABB⁺14, CYD11, KT10, AMJ18, BCMS10, CK19, GSMK17, HJGL18, HJGL19, NM14, TJD11, Tab16, Tom16]. **Updated**
 [GAC⁺17, Hol19, KKK⁺15, Cip11, LCE⁺13, LW16, MBGK11, MYP⁺14, MG10b, PVK⁺14b, SZY⁺12, SZY⁺13]. **updates** [LS15a]. **upgrade** [Dan11]. **upgraded** [AMR⁺18, CWW10, CWW15, OKP10, Sha16, ZYL⁺15]. **upper** [CPCDdM18]. **Uquantchem** [Sou14]. **use** [ERPDLF15, KAR⁺15, Kom15a, LCJ10, MNV13, Sou14, ZDWM17]. **Useful** [Bar11b, HWCdM19]. **user** [AKK⁺18, BBG⁺13, CFS13, GLR17, GBC⁺18, RFPM⁺17]. **user-friendly** [CFS13, RFPM⁺17]. **uses** [CEPI10]. **Using** [BS14a, CSRV13, RMC16, AM14b, APRG11, ACD⁺14a, AGMS15, Ano20, ALC18, Asc10, AH13, APC⁺14, AAJA14, BMC⁺11a, BSM13, BdVGS11, BH14b, BL18a, BD10, BKM11, BCM⁺16, BTC⁺17, BVSG19, BGHN19, BY17, BSW12, BMDP19, CKLM10, CCLL18, CL15a, Cap13, CHNS18, CB13b, CAN11, CC16, CMSV14, CSP⁺19, CDS⁺13b, CKK⁺13, Cip11, CBB⁺10, CBYG18, CH11b, CBB14, CB16b, CL13, CLB11, CRNK12, CMS17, DXY⁺19, DM17, Dem13, DRUE12, DKOS14, DM12, EDPZ19, Ein16b, EKDGG15, FJK⁺17, FDWC12, FNPMB10, FWS⁺17, FZY13, GBP13, GSMK17, GA10, GSB⁺14, Gor19, GMH11, GYW⁺10, GM18, GRTZ10, HTJ⁺16, HCC14, HAN⁺16, HHC16, HZC19, HKK11, Ihn12, JK13, JU17, JSLM16, KK16a, KH11, KTB17, KK14a, KD17, KKP11, KMM⁺19, KN13, Koh15, KS12, KKS18, KST⁺14b, KHKR14, KCS⁺15, LLHC11, LD10b, LA13]. **using** [LBM⁺14, LOK⁺16, LWZ14, LYX⁺17, LXR⁺18, LHH⁺12b, LS12b, LTP⁺17, LAS⁺17, LNSD15, LHGF18, LWP⁺17, LRSS19, MED11, MGRB11, MHV17, MP11, MSI⁺10, MRVF13, Maż19, MC12, MVI⁺16, Mis12, MM10, MSML10, MLK⁺17, MLK⁺19, MGR16, MSS⁺14, NGM⁺10, OBH10, OKM12, OYK⁺14, PSBT12, PPV⁺11, PDRG10, PVK⁺17, PDL⁺18, PSL⁺17, PR10, PR12, PCEH15, PMVG16, PA13, RE19, RDP14, RMS⁺12, RLMGM⁺11, SCB⁺17a, SAW18, SEW12, SEW14, SÓÓN11, SW14c, SWL⁺15, SPMM11, SD10b, SA15b, SLR⁺11, SSF⁺14, Sie16, SC15, SN16, SPS10, SKH⁺10, SHL⁺11, SBH⁺12, SS10a, SOYHDD19, SSK⁺13, TOB⁺14, TVGB15, TW15, TCP13, UBRT10, VSO⁺13, VDA⁺19, VvAV⁺11a, VJC12, WISA11, WW15, WLG⁺13, WAHL13, WMRR17, WRMR19, WFV14, WAW14, XHLUF⁺18, XLX⁺15, XYZX19, YZ16, YK10, Yi11, YBK⁺11, YBNY13, YE14a, YB13, YXT⁺15, YG12, ZBG⁺16]. **using** [ZDWY10, ZKG⁺18, ZMvE⁺13, dJBIM16, VFV19]. **USPEX** [LOSZ13].

utilitarian [BC19, CB15a, CB17]. **utilization** [sLqSqL⁺13, SMCB⁺15]. **UV** [Deg15, Fen12b, dDYK⁺18]. **UV-divergent** [Fen12b, dDYK⁺18].

V [Maż19, DGPW11, LS11, RF10]. **v.2** [JPSS10]. **v.3** [MNL19]. **v0.7** [Hua17]. **v03** [GBJ⁺13]. **v04** [GES13]. **v05** [GFJ⁺14].
v05-Implementation [GFJ⁺14]. **v1.0** [GTK⁺19a, HM12a, LKPH19, Mau16]. **v1.0.0** [BJ14]. **v1.01** [BS13b]. **v1.02** [CDTV10]. **v1.1** [AKK⁺18]. **v1.3** [LW16]. **v2** [CRC⁺13]. **v2.0** [Nat10, HAV⁺14, Nat09]. **v2.00d** [SSK⁺13]. **v2.49t** [SDM⁺12]. **v2.5** [Ros15]. **v2.73y** [SDS⁺17]. **v3** [HCM19]. **v3.0** [AM11]. **v3.00** [PSL⁺17]. **v4** [AMR19].
vacancies [DBJ11, PLD15]. **vacancy** [ZY19a]. **VACTIV** [Zlo13]. **vacuum** [PS11]. **vadose** [Org15]. **valence** [MCA17]. **validate** [Fis12]. **validated** [EZL⁺16, JTH14]. **validation** [CPW17, HLL13, OBM19, YG12]. **validity** [Liu11]. **valley** [LHL16]. **value** [CS10, GWF⁺16, GN14, Jan10, KAS12, LX12, LW14b, SS13b, SK14, SS10b, ZWLZ17, ZX10, ZLL13, BBV10, YZ16]. **valued** [KL17, LK12]. **values** [Wie13]. **Vanadium** [LS11]. **vanished** [NS15].
Vanka [BKOZ16]. **Vanka-type** [BKOZ16]. **vapor** [PBF⁺16]. **variability** [PPS10]. **Variable** [KMS19, QDZ⁺13, BL19, BDV11, DT10, GZW17, LZZL10, MMY⁺19, Moh14, OAKS11, PKT15, SL17, TK14b].
variable-density [BL19]. **Variable-step-length** [KMS19]. **variables** [BKM14, BK15, BK16b, CM10a, GLR17, Gio18, KTA12, Mar15, RE19, SK10].
Variance [EPS15, ICPD16, SAA⁺10, GSB⁺14, HLL13, WLS13].
Variance-based [ICPD16, WLS13]. **variances** [BMDP19]. **variant** [MN10].
variate [KHK⁺11, MS14]. **variates** [Rom15]. **variation** [MKU⁺12].
Variational [VvAV⁺11a, ZX10, BLV⁺19, HM18, MMY⁺19, Miu11, VvAV⁺11b, ZOZ13].
variations [McM17, PR12, VV16]. **varied** [YLYL17]. **varint** [CMSV14].
various [AC16, Hol19]. **vascular** [GVR19]. **VASP** [DA16, HW12, MDGC⁺12]. **vdW** [LAA⁺10]. **vector** [BW11, DDKM15, FBHB17, GJ18a, GMHZ19, GNT17, KYKN15a, KYKN15b, KL17, LK12, LHJZ10, ME18, PDL⁺18, QM10, SAHP15, SBQ14].
vector-boson [DDKM15]. **vector-valued** [KL17, LK12]. **vectorisation** [TH17]. **vectorization** [SAN18, WN19]. **Vectorized** [RMW13, TGH⁺16].
vectors [ERPFDLS15, FBG10, YE14a]. **Vekilov** [Maż19]. **velocimetry** [AGMS15, iSSMI11]. **velocities** [JC16, MSHLS15, MSHL17]. **Velocity** [PVK⁺18, CDBM16, HST⁺11, JBG⁺17, JH11, Sza13b, Sza13a, Sza16, YW17, YTYA17]. **velocity-dependent** [HST⁺11]. **Velocity-gauge** [PVK⁺18, YW17]. **VENUS** [LSK⁺14, PCGM14]. **VENUS/NWChem** [LSK⁺14]. **ver** [BBRS19, RSBB14]. **Verification** [LLE⁺18, DGS⁺19, YG12].
Verlet [LYJY10]. **versatile** [Sou14, ZSW⁺17a, ZPS⁺18]. **Version** [AAT⁺20, AFZ17, ATCZ19, BC19, CB17, FLZ⁺18, Hak19, HS18, ZZD⁺16, AC13, AFZ18, AC18, BPC13, BB13a, BH16, BLG14, Bon15, Bon16, BHW⁺12, BBH⁺15, CWW10, CWW15, Cip11, FLA⁺16, FGJB19, Gin10, GRR⁺14, GFB⁺10, GBJ⁺13, GCVA14a, HAV⁺14, HD17, JCL10, Jia18, JGB⁺13,

Kol14, KDM11, KUVV13, LCJ10, LZ11b, LRR⁺15, MFS10b, MAM14, MYP⁺14, MG10b, Nat09, Nat10, NS11a, OKP10, Org15, dIRL11, dIRAPL11, PSL⁺17, PR12, Pit12, PVK⁺14b, RDVS18, RHBH15a, RHBH15b, SMOB19, SSG⁺18, SRS⁺18, SDM⁺12, SDS⁺17, Sit16, SSK⁺13, TV10, WMK11, WW13, WRMR19, XW15, ZXL16, ZMPT13, DIR⁺19, FP14, Sem16, ZE16]. **versions** [Cip13, KRW13, dSdO12]. **versus** [FBN⁺13, RD10]. **vertex** [BDGG19, Eks11, Sus17b]. **vertexing** [Dim14]. **vertical** [TKL⁺12]. **Very** [BC10, MNOØ11, Fu19b, GMC18, LOV10, MN16]. **very-high-order** [Fu19b]. **Very-high-precision** [MNOØ11]. **VEST** [SBQ14]. **vh** [BHZ13]. **via** [ACdS13, AG14, AdDM14, BK11a, Boe14, BHW⁺12, BMG⁺15, CS17, DG10b, DS10, DN13, GB11, GH15, GTG⁺11, JTT11, LPBH11, Law19, LN16, LWJV18, Maz13, Per14, PG19, SGDS16, SDL⁺16, TO10a, UA17, XLL15, YJK11, ZZ17a, ZFZ19, dSF18, dHV12]. **viability** [BL18b]. **vibration** [Gar19]. **vibrational** [CHW⁺15, HW11, YFAT17]. **vibrations** [AYDY11, LQZ⁺13]. **vibroacoustic** [FOB⁺15]. **victory** [LKPH19]. **video** [DGPOR18]. **video-microscopy** [DGPOR18]. **View** [HS16]. **viewer** [GHK19, HS16, Kaw19]. **viewing** [KY14]. **VII** [SDM⁺12]. **VIII** [SDS⁺17]. **violating** [AKH12, CGV13, CRC⁺13, Mur14, RCD⁺10, Ros15]. **violation** [AB10, LCE⁺13, Urb18]. **violent** [MRSD15]. **Viriato** [LDF⁺16]. **virtual** [AAB⁺10b, BBUY13, BCM⁺16, GHK19, GHdF10, NOR15, TCK⁺15]. **viscoelastic** [MAIVAH14, RTÁT15, XD16]. **viscosities** [GZW17]. **Viscosity** [BJM15]. **viscous** [CdLOL19, GZW17, HJGL19, KHB14, XD16]. **VISHNU** [SQS⁺16]. **visited** [BVC13]. **Visual** [Dan12, AKV18, GGF⁺13, GFB⁺10]. **Visualisation** [BBW11, Rut18]. **Visualization** [AKH⁺18, GCP⁺15, SC14, AZS⁺11, Ano11o, dAFdSVM12, JEC⁺12, KY14, MSI⁺10, NBM⁺15, OK10, TL17, WLG⁺13]. **Visualizing** [ERPDFLS15].

Vlasov [BCDP18, CDBM16, CC14, CC15, CEF16, CHZ18, Fil13, FK12, GBSY18, KSS18, MIW⁺12, MIW⁺13, MMA15, PDJ10, SS11b, UNK12, dB14]. **Vlasov-Hybrid** [KSS18]. **VLBI** [TRM⁺12]. **VLBI-resolution** [TRM⁺12]. **VMD** [BPML12, Gio14a]. **vmf90** [dB14]. **VOF** [LHG⁺19]. **Vofi** [BMS⁺16]. **VOFTools** [LHGF18, LHG⁺19]. **Volgenant** [BGHN19]. **VOLSCAT2.0** [SMOB19]. **voltage** [Fer15]. **Volume** [ALA⁺19, HKF⁺12, Bal19, BMS⁺16, BHW⁺12, CHNS18, CAN11, FBN⁺13, Fu19a, JHH⁺19, KCN18, LOL⁺18, LHH⁺12b, LK15, LOK⁺18, LHGF18, LHG⁺19, MF17, ML14, MMA15, QLN14, SNB11, SC15, SHL⁺11, WFZG19, YLK10, Zag14, ZDWM17, LYP14]. **volume-of-fluid** [JHH⁺19, KCN18]. **volume-temperature** [LK15]. **volumetric** [JKIS16, MSR⁺17]. **Voronoi** [FJ19, BLS17, CMSN18, EDPZ19, FRG12, FLP10, JFHA19, LTP16, SOJ14]. **vortex** [CZ17, JWC13, LRC⁺11, PN15, TKL⁺12]. **vortex-shedding** [TKL⁺12]. **vorticity** [MN18]. **voxel** [Ham11]. **VR** [GHK19, OK10]. **vs** [BBS14, CZ19]. **VSHEC** [ZUT13].

w2dynamics [WHG⁺19]. **Waals**

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X [BMU11, BMF⁺19, Bru13, CDSG11, Cip13, DA16, FWS⁺17, GTL⁺17, GSB⁺14, LP15, LS12b, MD11b, PBMAD12, Pat15, Pat17, Sht17, Tic10, TVGB15, WG16a, WFDK19, XHLUF⁺18, YvOSM15, YWOD19]. **X-factor** [XHLUF⁺18]. **X-point** [BMU11]. **X-ray** [Bru13, CDSG11, Cip13, GSB⁺14, LS12b, MD11b, PBMAD12, Tic10, BMF⁺19, DA16, FWS⁺17, GTL⁺17, LP15, TVGB15, WG16a, WFDK19, YvOSM15]. **xAct** [Nut14]. **Xeon** [Lya15, RJKC16, CGSB18, MSS⁺14, SBE⁺16]. **XMDS2** [DHJ13]. **XML** [BDKS10, JTH14]. **XML-based** [BDKS10]. **XQCAT** [BBB⁺15]. **XRF** [MPSV15]. **xSLHA** [Sta19]. **XtalComp** [LZ12]. **XtalOpt** [AFZ17, AFZ18, ATCZ19, FLA⁺16, LZ11a, LZ11b]. **XTOR** [ML17]. **XTOR-2F** [ML17]. **xTras** [Nut14]. **XY** [KO16, SFP11].

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