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3 [ABL⁺22, MK21]. k [BG24, SLL⁺20]. $O(k)$ [BG24]. $O(m \log_2 n)$ [AB23].
-way [SLL⁺20].
1 [FBG21b, TPFH20a].
2 [FBG21a, TPFH20b]. 2.0 [WYH⁺21].
2013 [DH15]. 2014 [MSS16]. 2016 [BHHL17a, BHHL17b, Gil18]. 2017 [LRSLS20]. 2018 [FBG21b, FBG21a]. 2019 [Ber21].
3 [HDT⁺15].
Abort [DR15]. Abortable [CAL20, JJ21].
Abortable-locking [CAL20]. ABSS [CXL⁺24]. Abstract [GNC⁺17].
Accelerating [HSY⁺20]. Acceleration [GCF⁺20]. Accelerator [NT22].
Accelerators [HKL⁺14]. Access [AG18, AKMW18, BDE⁺21, HDT⁺15].
Accesses [KD19]. Accuracy [BHB⁺15, SSSB20, SSSS23]. ACM [Gib14].
Adapting [WSJ21]. Adaptive [CXL⁺24, GWWL16, JCG⁺14, KGSG21, LYH⁺24, MSA⁺18, MWF⁺19]. Adaptivity [LPY18]. Adding [ST17]. Addressing [DAC⁺16]. Adversarial [KKM23]. Affine [BCFC⁺21, DMB16]. Against [ES15].
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CDPN19, MHM⁺21, SLL⁺20, SSSB20, SB14]. **Algorithm-Based** [BHB⁺15]. **Algorithmic** [GNC⁺17]. **Algorithms** [AG18, AKPM20, AQ22, AQ23, AA23, AWFS22, BCRS16, BAI23, CGT⁺17, DK20, DBS21, HEY⁺20, JMT16, Kha19, KX16, KMVV15, LT22, MMM16, PRS18, SG15]. **Aligners** [SMM⁺16]. **All-to-All** [SS19]. **Allocating** [SA16]. **Allocation** [JPK⁺15, XZZY15]. **Allocator** [MSA⁺18]. **AMD** [LWB⁺22]. **Among** [CB16]. **Amortized** [JJ21]. **Analysis** [BMS23, LBGO23, PSFB19, SBF⁺16, WYH⁺21, XZC⁺24]. **Analytics** [BBB⁺20, LAVB24, WPD⁺17]. **Analyzing** [MH24]. **Anonymous** [KKM23]. **Aperiodic** [ACD⁺23]. **APGAS** [THC⁺16]. **Application** [SSSS23, SB14]. **Applications** [AGL19, BBPS19, BNSPP20, BGA⁺16, CDG17, FF20, HJWdM20, LWWC20, TPFH20a, TPFH20b, WMP14]. **Applied** [MA18]. **Approach** [BBT⁺23, KS21, WYO⁺23]. **Approximate** [LPY18, ST17]. **Architectural** [HHA17]. **Architecture** [BBT⁺23, HKL⁺14, SMM⁺16]. **Assessing** [BCRS16]. **Asynchronous** [BNSPP20]. **Atomicity** [GGRSY17]. **Attachment** [AKPM20]. **Attacks** [ES15]. **Autogen** [CGT⁺17]. **Automated** [FF20]. **Automatic** [ALMS18, CGT⁺17, GGRSY17, REP⁺14, WMP14]. **Autotuners** [LTL⁺18]. **Autotuning** [BBPS19, LTL⁺18]. **Average** [KKM23]. **Avoiding** [BDK15]. **Aware** [KR18, LBGO23].

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C [SG18]. **C-Stream** [SG18]. **Cache** [HL16, LKPP20]. **Cache-** [LKPP20]. **Calendar** [MIPQ24]. **Can** [DBS21]. **Cartesian** [SB14]. **Causes** [BGA⁺16]. **CC** [JJ21]. **CDCL** [EV21]. **Centers** [Alb19, AQ22, AQ23]. **Channel** [XZZY15]. **Checkable** [FF21]. **Checking** [RHR⁺21]. **Checkpointing** [BPRS22, BPRV24]. **Chick** [HEY⁺20]. **Chief** [Bad19]. **Chip** [CXL⁺24, MSA⁺18, XZZY15]. **Chiplet** [CXL⁺24]. **Chiplet-based** [CXL⁺24]. **Cholesky** [LYH⁺24]. **Chromatic** [KHSL16]. **Clairvoyant** [AV19, IKQP23]. **class** [REP⁺14]. **Clique** [DSMT20, MP15]. **Clos** [YNM16]. **Closure** [KH15, SSSS23]. **Cloud** [LLC⁺24]. **Clustering** [FLEN15, GLZ19, SZ19]. **Clusters** [CDPN19, JMNY15]. **Co** [SG18]. **Co-routine-Based** [SG18]. **Coalescing** [CRR19, DPRR15, MRR18]. **Coalescing-Branching** [CRR19, DPRR15, MRR18]. **Coarrays** [NLE⁺20]. **Coarse** [NT22]. **Coarse-grained** [NT22]. **Code** [MA18]. **Coded** [KGSG21]. **Cohorting** [DMS15]. **Collection** [DD24]. **Collective** [SG15]. **Coloring** [AB22, ABB⁺20, Mau23]. **Combining** [JXA20]. **Common**

[LAVB24, PS24]. **Communication** [BDK15, BSS18, CDPN19, LBGO23, SS19, WMP14]. **Compact** [SSSB20, SSSS23]. **compaction** [BG24]. **Competitive** [DKKM15]. **Competitively** [IMPT16]. **Compiling** [DMB16]. **Complex** [SSSS23]. **Complexity** [BMS23, PRS21]. **Components** [JLHH22, LT22]. **Composable** [MG17]. **Composition** [KH15]. **Compressible** [MK21]. **Computation** [ACD⁺23, BDE⁺21, CSC⁺18, FJRH24, MK21]. **Computational** [BMS23, KH15]. **Computations** [ABL⁺22, AHF23, HSS15, KHSL16, KL19, MHLK18, MHSK23, PRS21]. **Compute** [BBT⁺23, DD24]. **Compute-intensive** [BBT⁺23]. **Computer** [AKS⁺20]. **Computing** [BGHS16, FF21, HSY⁺20, JMNY15, WYO⁺23, Gib14]. **Concurrency** [AN22, TDB16]. **Concurrent** [GNC⁺17, KA22, LT22, MSD19, NRM20, RSB⁺22, VN19]. **Conditional** [BMS23]. **Conflict** [MIPQ24]. **Conflict-Resilient** [MIPQ24]. **Conjugate** [GWWL16, LBGO23]. **Connected** [JLHH22, LT22]. **Connectivity** [PRS18]. **Conquer** [CGT⁺17]. **Consensus** [KKM23]. **Conservation** [Alb19]. **Constant** [EGMP21, JJ21]. **Constant-Amortized-RMR** [JJ21]. **Constant-Length** [EGMP21]. **constrained** [BAI23]. **Constraint** [RHR⁺21]. **Constraints** [AG18]. **construction** [SB14]. **Consumption** [JCG⁺14]. **Containers** [IS17]. **Contended** [HHA17]. **Contention** [ALB⁺18, WSJ21]. **Continuous** [DKKM15]. **Controlled** [TDB16]. **Cope** [BCRS16]. **core** [AB20, JXA20]. **CoREC** [DSD⁺20]. **Cores** [SA16]. **Correctness** [CAL20]. **Cost** [MH24]. **Counters** [ST17]. **Cover** [CRR19]. **CPU** [WYO⁺23]. **CPU-GPU** [WYO⁺23]. **Creation** [BGLP16]. **CUDA** [KH15, MH24]. **cuFasterTucker** [LQX⁺24]. **cuFastTucker** [LHL⁺24]. **Customized** [GCF⁺20]. **Cuts** [AB23, GG21]. **Cycles** [BAI23, FO19].

D [ABL⁺22, MK21]. **DAG** [BMS23]. **Daly** [BPRS22]. **Damaris** [DAC⁺16]. **Data** [AG18, Alb19, AQ22, AQ23, DK20, DAC⁺16, DSD⁺20, Gre21, GNC⁺17, HHA17, KHSL16, LLC⁺24, MG17, RB14, RSB⁺22, ZLLD18]. **Data-Graph** [KHSL16]. **Data-Parallel** [LLC⁺24]. **Deadline** [JMNY15]. **Deadline-Sensitive** [JMNY15]. **Decentralized** [LLC⁺24]. **Decomposition** [LHL⁺24, LQX⁺24, LSE⁺19, MCGL23, ZBCC23]. **Deep** [PSFB19, ZWS23]. **Deformation** [ABL⁺22]. **Dense** [BHB⁺15, LKP23]. **Dependence** [CZS⁺17]. **Depth** [AB23, GG21]. **Derandomization** [FF21]. **Design** [CAL20, LWB⁺22, NT22, VN19]. **Designing** [DMS15]. **Designs** [GNC⁺17]. **Detection** [DVS18, FF20, FO19, KUCT15, LS18]. **Deterministic** [EGMP21, JJ21, VN19, YNM16]. **Deterministically** [KHSL16]. **Devices** [AKMW18]. **DFS** [Kha19]. **Dictionaries** [BCFC⁺21]. **Differentiated** [CSC⁺18]. **Dimensions** [DVS18]. **Discovery** [CGT⁺17, LKP23]. **Discrete** [ST19]. **Dissipative** [BBT⁺23]. **Distributed** [DMB16, FO19, GLZ19, KS21, KX16, LSE⁺19, Mau23, MCGL23, MHSK23, PRS18, PRS21, SZ19, ZWS23, REP⁺14]. **Distributed-GPU** [ZWS23]. **Distributed-memory** [LSE⁺19]. **Distributions** [ST19]. **Divergence** [WYH⁺21]. **Divide** [CGT⁺17]. **Divide-&-Conquer** [CGT⁺17]. **DNS** [SSSB20]. **domain** [MK21]. **DomLock** [AN22, KN17]. **Draw** [ST19]. **driven** [BBT⁺23]. **DSM** [JJ21]. **Dual** [AG18, IS17]. **Dynamic** [AKMW18, AV19, CXL⁺24, CGT⁺17, DSMT20, DMB16, KHSL16, KKM23, KS21, KUCT15, Kha19, MMM16, MKPSA20]. **Dynamically** [NT22]. **Dynamics**

[BBT⁺23].

EagerMap [CDPN19]. **Easy** [Mau23].
Editor [Bad19, BHHL17a, BHHL17b, Her15].
Editor-in-Chief [Bad19]. **Editorial** [Bad19]. **Efficient** [CZS⁺17, CAL20, CGT⁺17, DBS21, DR15, GNC⁺17, LS18, LWWC20, MK21, MHSK23, PRS16, SLL⁺20, SSS15, ABB⁺20, LKPP20, ZBCC23]. **Eigenvalue** [AHF23]. **Elastic** [SG18]. **Element** [DK20, KL19, MK21].
Embedding [SML19]. **Empirical** [TDB16].
Emu [HEY⁺20]. **Energy** [Alb19, SA16, ZBCC23]. **Energy-efficient** [ZBCC23]. **Engine** [SG18]. **Engineering** [AWFS22]. **Enhanced** [MKPSA20].
Enhancing [RB14]. **Enlarged** [LBGO23].
Enough [BPRS22]. **Enumeration** [BAI23, DSMT20]. **Enumerative** [JXA20].
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Equation [KS23]. **Equations** [MK21]. **Era** [HSY⁺20]. **Erasure** [KGSG21]. **Errors** [BCRS16]. **ESTIMA** [CDG17]. **Euler** [MK21]. **Evaluation** [AB20, MH24]. **Event** [BBT⁺23]. **Event-driven** [BBT⁺23].
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Exploring [LAVB24]. **Expression** [KH15].
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Fail-Stop [BCRS16]. **Failure** [KR18].
Failure-Aware [KR18]. **Failures** [BPRV24, BHB⁺15]. **Family** [KA22].
Fascicle [AB20]. **Fast** [ACD⁺23, BAI23, BDA⁺18, DBS21, KMOVV15, MSD19, PRS18, RSB⁺22, ACD⁺23]. **Faster** [KKM23].

FastTucker [LHL⁺24, LQX⁺24]. **Fault** [BHB⁺15, KGSG21]. **Feasibility** [BMS23].
FEAST [NRM20]. **FEM** [MHSK23]. **Fetch** [AH19]. **Fetch-and-increment** [AH19].
fgSpMSPV [CXL⁺22]. **Fine** [CXL⁺22, EV21]. **Fine-grained** [CXL⁺22, EV21]. **Finite** [DK20, JXA20, KL19, MK21].
Finite-element [MK21]. **Finite-state** [JXA20]. **Fly** [LLS⁺15]. **Folded** [YNM16].
Folded-Clos [YNM16]. **Fork** [SML19].
Fork-join [SML19]. **Formation** [DKKM15].
Fortran [NLE⁺20]. **Fourier** [ACD⁺23].
Framework [CXL⁺22, LKPP20, MA18].
Free [DK20, KL19, MIPQ24, MSKL⁺22, ZLLD18, AKPM20, MHSK23, NRM20, WSJ21].
Frequency [XZZY15]. **Futures** [HL16].

Games [BGLP16, FLEN15]. **GCN** [WYO⁺23]. **General** [BCRS16, DMS15, MSD19].
General-Purpose [BCRS16]. **Generality** [IS17]. **Generalized** [BWB⁺19].
Generating [AKPM20]. **generation** [WMP14]. **Geometry** [SSSS23]. **Globally** [MWF⁺19]. **Good** [BPRS22]. **GPGPU** [MA18]. **GPOP** [LKPP20]. **GPU** [ADMO17, BNSPP20, DD24, KS23, LQX⁺24, MGG15, WPD⁺17, WYO⁺23, YSS⁺19, ZBCC23, ZWS23]. **GPUs** [ACYC⁺20, BDA⁺18, FJR24, GWWL16, LWB⁺22, LHL⁺24, MSFH22]. **Gradient** [GWWL16, LBGO23]. **grained** [CXL⁺22, EV21, NT22]. **Granularity** [KN17]. **Graph** [AB22, BNSPP20, CSC⁺18, DBS21, FJR24, Gre21, KHSL16, KX16, LKPP20, LAVB24, Mau23, MGG15, PRS21, SZ19, WPD⁺17, XZC⁺24, ZWS23].
Graphics [BOU16, KL19]. **Graphs** [CSC⁺18, CRR19, DSMT20, DPRR15, Kha19, PRS18, PS24, RHR⁺21]. **Greedy** [KMOVV15]. **GreenMD** [ZBCC23]. **Group** [AH19]. **Groute** [BNSPP20]. **Guarantees**

[AKMW18]. **Guest**
[BHHL17a, BHHL17b, Her15]. **Gunrock**
[WPD⁺17].

Hard [BBT⁺23]. **Hard/Software**
[BBT⁺23]. **Hardware**
[ABB⁺20, HKL⁺14, PRS16].
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[XZZY15, MHM⁺21]. **Hop** [BAI23].
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[AB22, AN22, JCG⁺14]. **In-Memory**
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[IMPT16, SML19]. **Interoperability**
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FBG21b, FBG21a, Gil18, Gro17, Her15,
LDML16, LRSLS20, Lil14, MSS16, PRS15,
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[AA23]. **IRIS** [ES15]. **Irregular**
[FF20, HEY⁺20, LWWC20, TPFH20a,
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[MCGL23]. **iSpan** [JLHH22]. **Issue**
[ALS18, AS23, BHHL17a, BHHL17b, BHL19,
Ber21, DH15, FBG21b, FBG21a, Gil18,
LDML16, LRSLS20, MSS16, PRS15,
RLSLS19, TPFH20a, TPFH20b]. **Item**
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[EDMSV15, LPY18]. **Linear** [AB20, ACD⁺23, DKKM15, KGSG21, KS23, GG21]. **Linearizable** [MIPQ24]. **Linked** [ZLLD18]. **Links** [TJK15]. **list** [BG24]. **LLVM** [SML19]. **Load** [ACYC⁺20, CDPN19, MWF⁺19]. **Load-Balanced** [MWF⁺19]. **Load-balancing** [ACYC⁺20]. **Local** [FF21]. **Locality** [BGLP16, HL16, KS21, MG17]. **Locality-Based** [BGLP16]. **Locality-sensitive** [KS21]. **Locally** [FF21, MHSK23]. **Lock** [ALB⁺18, DMS15, HB23, MIPQ24, MSKL⁺22, NRM20, WSJ21, ZLLD18]. **Lock-Free** [MIPQ24, MSKL⁺22, ZLLD18, NRM20, WSJ21]. **Locking** [GGRSY17, KN17, CAL20]. **Locks** [DMS15]. **Loop** [DMB16]. **loops** [REP⁺14]. **Low** [AB23, DD24, GG21, KA22, MMM16]. **Low-Latency** [KA22]. **Low-Overhead** [DD24]. **Low-Rank** [MMM16]. **Lower** [BSS18].

Machine [XZC⁺24]. **Machines** [JXA20, LMT⁺21]. **Made** [Mau23]. **Management** [ALB⁺18, DAC⁺16, TJK15]. **Mantissa** [GCF⁺20]. **Many** [AB20, JXA20]. **Many-core** [AB20]. **Many/Multi** [JXA20]. **Many/Multi-core** [JXA20]. **Map** [BBB⁺20]. **Mapping** [CDPN19]. **MapReduce** [KMVV15]. **MASA** [SMM⁺16]. **Massive** [AKPM20]. **Massively** [BDE⁺21, BBT⁺23, LSE⁺19]. **Matching** [AG18, RHR⁺21]. **Matrix** [ASA18, ABB⁺20, ABL⁺22, ACYC⁺20, BDKS16, BHB⁺15, DK20, KL19, MHSK23, SSS15, ZBCC23]. **Matrix-Free** [DK20, KL19, MHSK23]. **Maximal** [BGHS16, BDA⁺18, DSMT20]. **Maximum** [AG18, MP15]. **MCSH** [HB23]. **Mechanisms** [JMNY15]. **Memory** [ALMS18, BDE⁺21, CDG17, DMB16, DR15, EDMSV15, HDT⁺15, KUCT15, LKPP20, MHLK18, MMF⁺15, AWFS22, BCFC⁺21, DSMT20, DSD⁺20, LSE⁺19, REP⁺14]. **Memory-efficient** [LKPP20]. **Memory-Starved** [MHLK18]. **Memoryless** [BPRV24]. **Merging** [SLL⁺20]. **Mesh** [ABL⁺22, HJWdM20]. **Meshes** [MHSK23]. **Message** [PRS16]. **Metadata** [RHR⁺21]. **methodology** [WMP14]. **Methods** [LBGO23, MMM16, MHSK23]. **Metrics** [LWB⁺22, RB14]. **Microarchitecture** [LWWC20]. **Minimum** [AB23, GG21]. **Mitigating** [SLD⁺21]. **Mobile** [AKMW18, FH19]. **Model** [AKPM20, BNSPP20, BWB⁺19, LWB⁺22]. **Modeling** [GWWL16, MWF⁺19, MH24]. **Models** [ASA18, BCFC⁺21, PS24]. **Modern** [NLE⁺20]. **Module** [CXL⁺24]. **Moldable** [PS24]. **Moore** [HSY⁺20]. **MPI** [ALB⁺18, DK20, HDT⁺15, WMP14]. **MPI-3** [HDT⁺15]. **MPI-Parallel** [DK20]. **MST** [PRS18]. **Multi** [AB20, AN22, BNSPP20, CXL⁺24, CAL20, DK20, FF20, GWWL16, KN17, LHL⁺24, SA16, ZBCC23]. **Multi-Chip** [CXL⁺24]. **Multi-core** [AB20, JXA20]. **Multi-Cores** [SA16]. **Multi-GPU** [BNSPP20, ZBCC23]. **Multi-GPUs** [GWWL16, LHL⁺24]. **Multi-Granularity** [KN17]. **Multi-Interval** [AN22]. **Multi-level** [CAL20]. **Multi-threaded** [FF20]. **Multi-Vectors** [DK20]. **Multichip** [RB14]. **Multicore** [CB16, CDPN19, RB14]. **Multicore/Multichip** [RB14]. **Multicores** [CR17]. **Multidimensional** [MHLK18]. **Multigrid** [KL19, MHSK23]. **Multimedia** [NT22]. **Multiphysics** [SSSS23]. **Multiplatform** [SMM⁺16]. **Multiple** [BOU16, BHB⁺15, CB16, FJRH24, KP15]. **Multiplication** [ASA18, ABB⁺20, BDKS16]. **Multiported** [SG15]. **Multiprocessor** [SS19]. **Multisplit** [ADMO17]. **Multithreaded** [ALB⁺18]. **Multiway** [GNC⁺17]. **Mutex** [JJ21]. **Mutual** [AH19, KD19].

Narrow [YSS⁺19]. **Near** [GG21, JMNY15, Kha19]. **Near-linear** [GG21]. **Near-Optimal** [JMNY15]. **Nearest** [LPY18]. **Need** [NLE⁺20]. **Neighbor** [LPY18]. **Nested** [EV21]. **Nests** [DMB16]. **Network** [BGLP16, FF21, FJR24, MSA⁺18]. **Network-on-Chip** [MSA⁺18]. **Networks** [AKPM20, KKM23, KS21, LKP23, SG15, TJK15, YNM16]. **Neural** [FJR24]. **NoC** [MKPSA20]. **Node** [LBGO23]. **Node-aware** [LBGO23]. **Nodes** [RB14]. **Noise** [HSS15]. **Noise-Tolerant** [HSS15]. **Non** [BPRV24, IKQP23, LMT⁺21, SSSS23]. **Non-clairvoyant** [IKQP23]. **Non-Memoryless** [BPRV24]. **Non-overlapping** [SSSS23]. **Non-preemptive** [LMT⁺21]. **Nonblocking** [IS17]. **Nonuniform** [HSS15]. **Novel** [AKPM20, BBT⁺23, LHL⁺24]. **NUMA** [CAL20, DMS15, MG17]. **Number** [AG18]. **Numerical** [AA23].

O [AGL19, BBPS19, PSFB19]. **Objects** [KH15]. **Oblivious** [CR17, UALK19]. **Off** [TJK15]. **On-Chip** [XZZY15]. **On-the-Fly** [LLS⁺15]. **On/Off** [TJK15]. **Online** [LMT⁺21, PS24]. **Open** [GZ15]. **OpenCL** [WYH⁺21]. **OpenMP** [KH15]. **OpenSHMEM** [NLE⁺20]. **Operations** [KA22]. **Operators** [DK20]. **Optical** [AKS⁺20]. **Optimal** [AQ22, JMNY15, Kha19, LBGO23, MSFH22, SS19]. **Optimization** [GWWL16, LQX⁺24, MCGL23, PSFB19, RB14, SA16, XZC⁺24, ZWS23]. **Optimizations** [MG17]. **Optimizing** [AB20, BBPS19, WYO⁺23]. **Order** [BOU16, KL19, MK21]. **Orthogonal** [AHF23]. **Overhead** [DD24]. **overlapping** [SSSS23].

Packing [AV19]. **PageRank** [GCF⁺20]. **Pagoda** [YSS⁺19]. **Paradigm** [FJR24]. **Parallel** [ASA18, AB22, AKPM20, AB23, AKMW18, ADMO17, BDE⁺21, BGHS16, BAI23, BFS22, BGA⁺16, BWB⁺19, CZS⁺17, CXL⁺22, DSMT20, DK20, DBS21, EDMSV15, GG21, Gib14, JLHH22, JMT16, Kha19, KX16, LKP23, LQX⁺24, LLC⁺24, LAVB24, LSE⁺19, MK21, MP15, MHM⁺21, RBJ⁺19, SLL⁺20, SSSB20, SSSS23, WYO⁺23, BG24, SB14, WMP14, NLE⁺20]. **Parallelism** [AA23, AHF23, CXL⁺24, EV21, FJR24, JXA20, LLS⁺15, RBJ⁺19, SML19]. **Parallelizability** [IMPT16]. **Parallelization** [MHLK18, REP⁺14]. **Parallelized** [LYH⁺24]. **Parallelizing** [MMM16]. **Parameters** [LYH⁺24]. **Part** [LRSL20, RLSL19, FBG21b, FBG21a, TPFH20a, TPFH20b]. **Partial** [GLZ19, ST19]. **Particle** [BBT⁺23]. **Partitioning** [ASA18, BDKS16, CSC⁺18, SLL⁺20]. **Parts** [LKPP20]. **Passing** [PRS16]. **Path** [YNM16]. **Pattern** [RHR⁺21]. **patterned** [ST19]. **PDAM** [BCFC⁺21]. **Peeling** [JMT16, LKP23]. **Perfect** [SLL⁺20]. **Performance** [BBPS19, DAC⁺16, HKL⁺14, JCG⁺14, KH15, LBGO23, MGG15, MCGL23, MA18, RB14, SA16, ABL⁺22]. **Periodic** [AGL19]. **Personalized** [SS19]. **Petascale** [DAC⁺16, THC⁺16]. **Physical** [AKS⁺20]. **Physics** [KH15]. **Pipeline** [LLS⁺15]. **Pipelines** [JPK⁺15]. **place** [AWFS22, SLL⁺20]. **Placement** [KR18]. **Platform** [LQX⁺24]. **Platforms** [BPRV24, CXL⁺22]. **POETS** [BBT⁺23]. **Pointer** [WYH⁺21]. **Pointer-Based** [WYH⁺21]. **Polar** [LSE⁺19]. **Polylogarithmic** [SSS15]. **Portable** [MG17]. **Post** [DAC⁺16, HSY⁺20]. **Post-Moore** [HSY⁺20]. **Post-Petascale** [DAC⁺16]. **Power** [JCG⁺14, TJK15]. **POWER7** [JCG⁺14]. **PowerEN** [HKL⁺14]. **PowerLyra** [CSC⁺18]. **PPoPP** [BHHL17a, BHHL17b, LRSL20, RLSL19]. **PPoPP'12** [PRS15]. **PPoPP'14** [LDML16].

PPoPP'15 [Gro17]. **Precise** [KUCT15]. **Precision** [GCF+20]. **Preconditioned** [GWWL16]. **Prediction** [MA18]. **Predictions** [IKQP23]. **Preemption** [AAB21]. **preemptive** [LMT+21]. **Preferential** [AKPM20]. **Prefetching** [HJWdM20, JCG+14]. **Preserving** [MK21, SSSB20]. **Price** [AAB21]. **Primal** [AG18]. **Probabilistic** [KR18]. **Problem** [BBT+23, FH19, MP15]. **Problems** [CGT+17, DKKM15, ZWS23]. **Process** [HSS15, SLD+21]. **Process-Level** [SLD+21]. **Processes** [AKS+20, BWB+19, CB16]. **Processing** [BNSPP20, BOU16, LKPP20, SG18]. **Processor** [HKL+14, UALK19]. **Processor-Oblivious** [UALK19]. **Processors** [KP15, KL19]. **Product** [ACYC+20]. **Production** [MA18]. **Profiling** [DD24]. **Profitable** [KP15]. **Programming** [BNSPP20, CGT+17, HEY+20, HDT+15, MMM16]. **Programs** [RBJ+19, WYH+21]. **Protocol** [CAL20, LTL+18]. **Pruning** [SMM+16]. **Purpose** [BCRS16].

QoS [MMF+15, MKPSA20]. **Quality** [AB22, BDA+18, SLD+21]. **Quality-of-Service** [SLD+21]. **Queue** [MIPQ24, MSKL+22]. **Queues** [KA22, VN19].

Race [DVS18, KUCT15, LS18]. **Radio** [EGMP21]. **Random** [CRR19, DPRR15, MSFH22, MRR18]. **Randomized** [FF21, LPY18]. **Rank** [ABL+22, MMM16]. **Rapidly** [LTL+18]. **Rates** [HSS15]. **Real** [BBB+20, BWB+19]. **Real-Time** [BWB+19, BBB+20]. **Reclamation** [ALMS18]. **Reconfigurable** [AKS+20, MSA+18, NT22]. **Reconfigurable-Allocator** [MSA+18]. **Record** [UALK19]. **Recurrent** [BWB+19]. **Recursive** [ABB+20, CGT+17, RBJ+19, SML19]. **Reducer** [LS18]. **Reduction** [BDK15, DR15]. **Redzone** [BG24]. **Refined** [MHSK23]. **Reinforcement** [ZWS23]. **Rejections** [LMT+21]. **Relaxed** [KA22]. **Relaxing** [CZS+17]. **Release** [HHA17]. **Remote** [BDE+21, HDT+15]. **removing** [BG24]. **Replay** [UALK19]. **Representation** [SML19]. **Representations** [KS21]. **Requirements** [MMF+15]. **Resilient** [DSD+20, MIPQ24]. **Resource** [AG18, CR17, JPK+15]. **Resources** [AA23]. **Right** [AQ22, AQ23]. **Right-sizing** [AQ22, AQ23]. **RMR** [JJ21]. **Robot** [DKKM15]. **Robust** [ES15, KR18]. **ROC** [AKS+20]. **Roofline** [LWB+22]. **Root** [BGA+16]. **Routers** [XZZY15]. **routine** [SG18]. **Routing** [MWF+19, YNM16]. **Runtime** [CZS+17, DMB16, JPK+15, TJK15, YSS+19]. **SAT** [EV21]. **Scalability** [CDG17]. **Scalable** [ALMS18, BBB+20, DBS21, DSD+20, GGRSY17, Gre21, KUCT15, KP15, LKPP20, MGG15, PSFB19, RHR+21]. **Scale** [AKPM20, AHF23, BGA+16, PRS21, TJK15, BNSPP20]. **Scale-free** [AKPM20]. **Scaling** [ASA18, HHA17]. **Schedule** [SS19]. **Schedulers** [SBF+16, TDB16]. **Scheduling** [AKMW18, AGL19, CXL+24, DMB16, EDMSV15, IMPT16, IKQP23, JMNY15, KD19, KHSL16, KP15, LLC+24, LMT+21, PS24]. **Scheme** [MK21]. **Schemes** [EGMP21, SSSB20, SSSS23]. **Scientific** [HSY+20]. **SciPAL** [KH15]. **Search** [LPY18, MP15, NRM20, WSJ21]. **Second** [MK21]. **Second-order** [MK21]. **Section** [Gro17]. **Segmentation** [GCF+20]. **Selecting** [BOU16]. **Selector** [XZC+24]. **Semantic** [GGRSY17]. **Sensitive** [JMNY15, KS21]. **Sequence** [SLL+20, SMM+16]. **Server** [FH19]. **Service** [SLD+21]. **Set** [BDA+18]. **Sets** [BGHS16]. **Shape** [MP15]. **Shared**

[AWFS22, DSMT20, DMB16]. **Shared-memory** [AWFS22, DSMT20]. **Sharing** [CB16]. **Shuffle** [SLL⁺20]. **Shuffling** [MSFH22]. **Silent** [BCRS16]. **SIMD** [JXA20, RBJ⁺19]. **Simple** [BAI23, KX16, LT22, XZZY15, SB14]. **Simulating** [AKS⁺20]. **Simulations** [DAC⁺16]. **Single** [FJR24, YNM16]. **Single-Path** [YNM16]. **situ** [DSD⁺20]. **Sixteen** [SA16]. **sizing** [AQ22, AQ23]. **Sketches** [RSB⁺22]. **Skewed** [CSC⁺18]. **Software** [BBT⁺23, HJWdM20, JPK⁺15, MMF⁺15]. **Solver** [KGS21]. **Solvers** [EV21]. **Solving** [CGT⁺17, ZWS23]. **Sorting** [AWFS22, CR17]. **SPAA** [Ber21, DH15, FBG21b, FBG21a, Gil18, MSS16]. **SPAA'15** [ALS18]. **SPAA'17** [BHL19]. **SPAA'21** [AS23]. **Space** [CB16, SBF⁺16, SLL⁺20]. **Space-Bounded** [SBF⁺16]. **Spanning** [JLHH22]. **Sparse** [ASA18, ABB⁺20, ACYC⁺20, BDKS16, DK20, Gre21, KS21, LHL⁺24, LQX⁺24]. **Sparsification** [KX16, SZ19]. **Special** [ALS18, AS23, BHHL17a, BHHL17b, BHL19, Ber21, DH15, FBG21b, FBG21a, Gil18, Gro17, LDML16, LRSLS20, MSS16, PRS15, RLSLS19, TPFH20a, TPFH20b]. **specifications** [WMP14]. **Spectral** [KX16]. **Speculation** [JXA20]. **Speed** [AB22, IS17, KP15]. **Speed-Scalable** [KP15]. **Speedup** [PS24]. **SpMSPV** [CXL⁺22]. **SpMV** [XZC⁺24]. **SpTTM** [WYO⁺23]. **Staging** [DSD⁺20]. **Standard** [HB23]. **Starved** [MHLK18]. **state** [JXA20]. **States** [BGA⁺16]. **Static** [DSMT20]. **Statistics** [BOU16]. **Stencil** [ACD⁺23, HSS15, MHLK18]. **Stochastic** [KKM23, LQX⁺24]. **Stop** [BCRS16]. **Strategies** [BPRV24, DKKM15, HEY⁺20]. **Strategy** [AGL19, LQX⁺24]. **Stream** [CXL⁺24, SG18, BG24, SG18]. **Streaming** [GNC⁺17, KMVV15]. **Strongly** [JLHH22]. **Structure** [Gre21, RB14]. **Structured** [ABL⁺22, HL16]. **Structures** [DK20, HHA17, ZLLD18]. **Study** [ADMO17, EV21, TDB16]. **Styles** [LAVB24]. **Subgraph** [LKP23]. **Successive** [BDK15]. **suffix** [SB14]. **Suite** [LAVB24]. **Sums** [ST19]. **Supernodal** [LYH⁺24]. **Supervised** [KKM23]. **Support** [CZS⁺17, HHA17, MKPSA20]. **Supporting** [MMF⁺15]. **SybilCast** [GZ15]. **Symmetric** [ABB⁺20]. **Synchronization** [PRS16]. **Synthesis** [FF20]. **System** [ES15, KGS21, YSS⁺19, ZWS23]. **Systems** [AB20, CXL⁺24, CAL20, CDPN19, KUUCT15, KS23, LSE⁺19, MG17, SS19, TJK15, TPFH20a, TPFH20b, ZBCC23, REP⁺14]. **Tables** [Gre21, MSD19]. **Tapir** [SML19]. **Task** [BWB⁺19, CXL⁺24, CDPN19, EDMSV15, PS24, RBJ⁺19]. **Task-Parallel** [RBJ⁺19]. **Tasks** [BMS23, IMPT16, LLC⁺24, SA16, YSS⁺19]. **Technique** [ABB⁺20, BSS18, DMS15, KN17, MKPSA20]. **Temperature** [SA16]. **Templates** [KH15]. **Temporal** [BAI23]. **Tensor** [MCGL23]. **Testing** [TDB16]. **Theoretically** [DBS21]. **Thread** [PRS16]. **threaded** [FF20]. **ThreadScan** [ALMS18]. **Throughput** [XZZY15, MHM⁺21]. **Tight** [AV19]. **Time** [BWB⁺19, CRR19, MMF⁺15, SLL⁺20, SSS15, BBB⁺20, BG24, DR15]. **Time-Based** [MMF⁺15]. **Time-space** [SLL⁺20]. **Time-Warp** [DR15]. **TLPGNN** [FJR24]. **Tolerance** [BHB⁺15]. **Tolerant** [HSS15, KGS21]. **Tolerate** [BPRV24]. **TOPC** [TPFH20a, TPFH20b]. **Torus** [SG15]. **Trace** [DD24]. **Tracking** [CZS⁺17]. **TRADE** [KUUCT15]. **Transactional** [DR15, KUUCT15, MMF⁺15, ZLLD18]. **Transactions** [Gib14]. **Transfers** [KA22]. **Transformation** [MA18, ZLLD18]. **Transforms** [ACD⁺23]. **Transparently** [CB16]. **Traversal** [MGG15]. **Tree** [MP15, NRM20, SB14]. **Trees**

[BFS22, EDMSV15, JLHH22, WSJ21].
Tridiagonal [KS23]. **Tridigpu** [KS23].
Two [DVS18, FJR24]. **Two-level**
 [FJR24]. **Types** [GNC+17].

Undirected [Kha19]. **Unit** [BOU16].
Universal [MWF+19]. **Unrelated**
 [LMT+21]. **Unstructured**
 [ABL+22, HJWdM20]. **Using**
 [ABL+22, Gre21, KHSL16, NLE+20, ST19,
 TDB16, ACD+23, AKPM20].

value [BBB+20]. **Variability** [DAC+16].
Vector [ACYC+20, ABB+20]. **Vectors**
 [DK20]. **via** [BDE+21, GGRSY17, MHM+21,
 PSFB19, RHR+21, SLD+21, WYO+23].
Virtual [XZZY15]. **Viterbi** [MHM+21].

Wait [BGA+16]. **Walk** [CRR19]. **Walks**
 [DPRR15, MRR18]. **Warp** [DR15]. **way**
 [SLL+20]. **Weather** [MA18]. **Weighted**
 [MKPSA20]. **Well** [HL16].
Well-Structured [HL16]. **Work**
 [AB23, GG21, SSS15]. **Work-Efficient**
 [SSS15]. **Workflows** [BPRS22, DSD+20].
Workload [AKMW18].

X10 [THC+16].

Young [BPRS22]. **Young/Daly** [BPRS22].

References

Aleeva:2023:IIP

[AA23] Valentina Aleeva and Rifkhat Aleev. Investigation and implementation of parallelism resources of numerical algorithms. *ACM Transactions on Parallel Computing (TOPC)*, 10(2): 8:1–8:??, June 2023. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (elec-

tronic). URL <https://dl.acm.org/doi/10.1145/3583755>.

Alon:2021:PBP

[AAB21] Noga Alon, Yossi Azar, and Mark Berlin. The price of bounded preemption. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):3:1–3:21, April 2021. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3434377>.

Aggarwal:2020:OLF

[AB20] Karan Aggarwal and Uday Bondhugula. Optimizing the linear fascicle evaluation algorithm for multi-core and many-core systems. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):22:1–22:45, December 2020. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418075>.

Alabandi:2022:ISQ

[AB22] Ghadeer Alabandi and Martin Burtscher. Improving the speed and quality of parallel graph coloring. *ACM Transactions on Parallel Computing (TOPC)*, 9(3):10:1–10:35, September 2022. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3543545>.

Anderson:2023:PMC

[AB23] Daniel Anderson and Guy E. Blelloch. Parallel minimum cuts

in $O(m \log_2 n)$ work and low depth. *ACM Transactions on Parallel Computing (TOPC)*, 10(4):18:1–18:??, December 2023. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3565557>.

Alappat:2020:RAC

- [ABB⁺20] Christie Alappat, Achim Baseremann, Alan R. Bishop, Holger Fehske, Georg Hager, Olaf Schenk, Jonas Thies, and Gerhard Wellein. A recursive algebraic coloring technique for hardware-efficient symmetric sparse matrix–vector multiplication. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):19:1–19:37, August 2020. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399732>.

Alomairy:2022:HPU

- [ABL⁺22] Rabab Alomairy, Wael Bader, Hatem Ltaief, Youssef Mesri, and David Keyes. High-performance 3D unstructured mesh deformation using rank structured matrix computations. *ACM Transactions on Parallel Computing (TOPC)*, 9(1):4:1–4:23, March 2022. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3512756>.

Ahmad:2023:FAA

- [ACD⁺23] Zafar Ahmad, Rezaul Chowd-

hury, Rathish Das, Pramod Ganapathi, Aaron Gregory, and Yimin Zhu. A fast algorithm for aperiodic linear stencil computation using Fast Fourier Transforms. *ACM Transactions on Parallel Computing (TOPC)*, 10(4):22:1–22:??, December 2023. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3606338>.

Anzt:2020:LBS

- [ACYC⁺20] Hartwig Anzt, Terry Cojean, Chen Yen-Chen, Jack Dongarra, Goran Flegar, Pratik Nayak, Stanimire Tomov, Yuhsiang M. Tsai, and Weichung Wang. Load-balancing sparse matrix vector product kernels on GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):2:1–2:26, April 2020. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380930>.

Ashkiani:2017:GME

- [ADMO17] Saman Ashkiani, Andrew Davidson, Ulrich Meyer, and John D. Owens. GPU Multisplit: an extended study of a parallel algorithm. *ACM Transactions on Parallel Computing (TOPC)*, 4(1):2:1–2:??, October 2017. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).

Ahn:2018:ADN

- [AG18] Kook Jin Ahn and Sudipto Guha. Access to data and num-

- ber of iterations: Dual primal algorithms for maximum matching under resource constraints. *ACM Transactions on Parallel Computing (TOPC)*, 4(4):17:1–17:??, September 2018. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [AGL19] Guillaume Aupy, Ana Gainaru, and Valentin Le Fèvre. I/O scheduling strategy for periodic applications. *ACM Transactions on Parallel Computing (TOPC)*, 6(2):7:1–7:??, September 2019. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3338510.
- [AH19] Alex Aravind and Wim H. Hesselink. Group mutual exclusion by fetch-and-increment. *ACM Transactions on Parallel Computing (TOPC)*, 5(4):14:1–14:??, March 2019. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3309202.
- [AHF23] Andreas Alvermann, Georg Hager, and Holger Fehske. Orthogonal layers of parallelism in large-scale eigenvalue computations. *ACM Transactions on Parallel Computing (TOPC)*, 10(3):16:1–16:??, September 2023. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (elec-
- tronic). URL <https://dl.acm.org/doi/10.1145/3614444>.
- [AKMW18] Antonio Fernández Anta, Dariusz R. Kowalski, Miguel A. Mosteiro, and Prudence W. H. Wong. Scheduling dynamic parallel workload of mobile devices with access guarantees. *ACM Transactions on Parallel Computing (TOPC)*, 5(2):10:1–10:??, January 2018. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [AKPM20] Maksudul Alam, Maleq Khan, Kalyan S. Perumalla, and Madhav Marathe. Generating massive scale-free networks: Novel parallel algorithms using the preferential attachment model. *ACM Transactions on Parallel Computing (TOPC)*, 7(2):13:1–13:35, May 2020. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391446>.
- [AKS⁺20] Jeff Anderson, Engin Kayraklioglu, Shuai Sun, Joseph Crandall, Yousra Alkabani, Vikram Narayana, Volker Sorger, and Tarek El-Ghazawi. ROC: a reconfigurable optical computer for simulating physical processes. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):8:1–8:29, April 2020. CODEN ????? ISSN 2329-4949 (print),

Anta:2018:SDP

Aupy:2019:SSP

Alam:2020:GMS

Aravind:2019:GME

Anderson:2020:RRO

Alvermann:2023:OLP

2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380944>.

Amer:2018:LCM

[ALB⁺18] Abdelhalim Amer, Huiwei Lu, Pavan Balaji, Milind Chabbi, Yanjie Wei, Jeff Hammond, and Satoshi Matsuoka. Lock contention management in multi-threaded MPI. *ACM Transactions on Parallel Computing (TOPC)*, 5(3):12:1–12:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3275443.

Albers:2019:ECD

[Alb19] Susanne Albers. On energy conservation in data centers. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):13:1–13:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364210.

Alistarh:2018:TAS

[ALMS18] Dan Alistarh, William Leiserson, Alexander Matveev, and Nir Shavit. ThreadScan: Automatic and scalable memory reclamation. *ACM Transactions on Parallel Computing (TOPC)*, 4(4):18:1–18:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Agrawal:2018:ISI

[ALS18] Kunal Agrawal, I-Ting Angelina Lee, and Michael Spear. In-

roduction to special issue on SPAA'15. *ACM Transactions on Parallel Computing (TOPC)*, 4(4):16:1–16:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Anju:2022:MID

[AN22] M. A. Anju and Rupesh Nasre. Multi-interval DomLock: Toward improving concurrency in hierarchies. *ACM Transactions on Parallel Computing (TOPC)*, 9(3):12:1–12:27, September 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3543543>.

Albers:2022:OAR

[AQ22] Susanne Albers and Jens Quendenfeld. Optimal algorithms for right-sizing data centers. *ACM Transactions on Parallel Computing (TOPC)*, 9(4):15:1–15:??, December 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3565513>.

Albers:2023:ARS

[AQ23] Susanne Albers and Jens Quendenfeld. Algorithms for right-sizing heterogeneous data centers. *ACM Transactions on Parallel Computing (TOPC)*, 10(4):20:1–20:??, December 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3595286>.

- Azar:2023:ISI**
- [AS23] Yossi Azar and Julian Shun. Introduction to the special issue for SPAA’21. *ACM Transactions on Parallel Computing (TOPC)*, 10(4):17:1–17:??, December 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3630608>.
- Akbudak:2018:PMS**
- [ASA18] Kadir Akbudak, Oguz Selvitopi, and Cevdet Aykanat. Partitioning models for scaling parallel sparse matrix–matrix multiplication. *ACM Transactions on Parallel Computing (TOPC)*, 4(3):13:1–13:??, April 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Azar:2019:TBC**
- [AV19] Yossi Azar and Danny Vainstein. Tight bounds for clairvoyant dynamic bin packing. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):15:1–15:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364214.
- Axtmann:2022:EPS**
- [AWFS22] Michael Axtmann, Sascha Witt, Daniel Ferizovic, and Peter Sanders. Engineering in-place (shared-memory) sorting algorithms. *ACM Transactions on Parallel Computing (TOPC)*, 9(1):2:1–2:62, March 2022. CO-
- Bader:2019:EEC**
- [Bad19] David A. Bader. Editorial from the Editor-in-Chief. *ACM Transactions on Parallel Computing (TOPC)*, 6(1):1:1–1:??, June 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3325883.
- Blanusa:2023:FPA**
- [BAI23] Jovan Blanusa, Kubilay Atasu, and Paolo Ienne. Fast parallel algorithms for enumeration of simple, temporal, and hop-constrained cycles. *ACM Transactions on Parallel Computing (TOPC)*, 10(3):15:1–15:??, September 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3611642>.
- Basin:2020:KKV**
- [BBB+20] Dmitry Basin, Edward Bortnikov, Anastasia Braginsky, Guy Golan-Gueta, Eshcar Hillel, Idit Keidar, and Moshe Sulamy. KiWi: a key–value map for scalable real-time analytics. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):16:1–16:28, August 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399718>.
- DEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/doi/10.1145/3505286.**

- Behzad:2019:OPH**
- [BBPS19] Babak Behzad, Surendra Byna, Prabhat, and Marc Snir. Optimizing I/O performance of HPC applications with autotuning. *ACM Transactions on Parallel Computing (TOPC)*, 5(4):15:1–15:??, March 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3309205.
- Brown:2023:PED**
- [BBT⁺23] Andrew D. Brown, Jonathan R. Beaumont, David B. Thomas, Julian C. Shillcock, Matthew F. Naylor, Graeme M. Bragg, Mark L. Vousden, Simon W. Moore, and Shane T. Fleming. POETS: an event-driven approach to dissipative particle dynamics: Implementing a massively compute-intensive problem on a novel hard/software architecture. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):7:1–7:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3580372>.
- Bender:2021:EMD**
- [BCFC⁺21] Michael A. Bender, Alex Conway, Martín Farach-Colton, William Jannen, Yizheng Jiao, Rob Johnson, Eric Knorr, Sara Mcallister, Nirjhar Mukherjee, Prashant Pandey, Donald E. Porter, Jun Yuan, and Yang Zhan. External-memory dictionaries in the affine and PDAM models. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):15:1–15:20, September 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470635>.
- Benoit:2016:AGP**
- [BCRS16] Anne Benoit, Aurélien Cavellan, Yves Robert, and Hongyang Sun. Assessing general-purpose algorithms to cope with fail-stop and silent errors. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):13:1–13:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Burtscher:2018:HQF**
- [BDA⁺18] Martin Burtscher, Sindhu Devale, Sahar Azimi, Jayadharini Jaiganesh, and Evan Powers. A high-quality and fast maximal independent set implementation for GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 5(2):8:1–8:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Behnezhad:2021:MPC**
- [BDE⁺21] Soheil Behnezhad, Laxman Dhulipala, Hossein Esfandiari, Jakub Lacki, Vahab Mirrokni, and Warren Schudy. Massively parallel computation via remote memory access. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):13:1–13:25, September 2021. CODEN ???? ISSN 2329-4949 (print),

2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470631>.

Ballard:2015:ACS

- [BDK15] Grey Ballard, James Demmel, and Nicholas Knight. Avoiding communication in successive band reduction. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):11:1–11:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Ballard:2016:HPS

- [BDKS16] Grey Ballard, Alex Druinsky, Nicholas Knight, and Oded Schwartz. Hypergraph partitioning for sparse matrix–matrix multiplication. *ACM Transactions on Parallel Computing (TOPC)*, 3(3):18:1–18:??, December 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Berenbrink:2021:ISI

- [Ber21] Petra Berenbrink. Introduction to the special issue for SPAA 2019. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):12:1, September 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3477610>.

Blelloch:2022:JPB

- [BFS22] Guy Blelloch, Daniel Ferizovic, and Yihan Sun. Joinable parallel balanced binary trees.

ACM Transactions on Parallel Computing (TOPC), 9(2):7:1–7:41, June 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3512769>.

Bontes:2024:RSC

- [BG24] Johan Bontes and James Gain. Redzone stream compaction: removing k items from a list in parallel $O(k)$ time. *ACM Transactions on Parallel Computing (TOPC)*, 11(3):14:1–14:??, September 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3675782>.

Bohme:2016:IRC

- [BGA⁺16] David Böhme, Markus Geimer, Lukas Arnold, Felix Voigtlaender, and Felix Wolf. Identifying the root causes of wait states in large-scale parallel applications. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):11:1–11:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Bercea:2016:CMI

- [BGHS16] Ioana O. Bercea, Navin Goyal, David G. Harris, and Aravind Srinivasan. On computing maximal independent sets of hypergraphs in parallel. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):5:1–5:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Bilo:2016:LBN

- [BGLP16] Davide Bilò, Luciano Gualà, Stefano Leucci, and Guido Proietti. Locality-based network creation games. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):6:1–6:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Bouteiller:2015:ABF

- [BHB⁺15] Aurelien Bouteiller, Thomas Herault, George Bosilca, Peng Du, and Jack Dongarra. Algorithm-based fault tolerance for dense matrix factorizations, multiple failures and accuracy. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):10:1–10:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Ballard:2017:GEIa

- [BHHL17a] Grey Ballard, Mary Hall, Tim Harris, and Brandon Lucia. Guest Editor introduction PPOPP 2016, special issue 2 of 2. *ACM Transactions on Parallel Computing (TOPC)*, 4(1):1:1–1:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Ballard:2017:GEIb

- [BHHL17b] Grey Ballard, Mary Hall, Tim Harris, and Brandon Lucia. Guest Editor introduction PPOPP 2016, special issue 2 of 2. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):6:1–6:??, October 2017. CODEN

???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Bateni:2019:ISI

- [BHL19] Mohammed Hossein Bateni, Mohammad T. Hajiaghayi, and Silvio Lattanzi. Introduction to the special issue for SPAA'17. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):10:1–10:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3363417.

Baruah:2023:CCF

- [BMS23] Sanjoy Baruah and Alberto Marchetti-Spaccamela. The computational complexity of feasibility analysis for conditional DAG tasks. *ACM Transactions on Parallel Computing (TOPC)*, 10(3):14:1–14:??, September 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3606342>.

Ben-Nun:2020:GAM

- [BNSPP20] Tal Ben-Nun, Michael Sutton, Sreepathi Pai, and Keshav Pingali. Groute: Asynchronous multi-GPU programming model with applications to large-scale graph processing. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):18:1–18:27, August 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://>

dl.acm.org/doi/abs/10.1145/3399730.

Blanchard:2016:SMO

- [BOU16] Jeffrey D. Blanchard, Erik Opavsky, and Emircan Uysaler. Selecting multiple order statistics with a graphics processing unit. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):10:1–10:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Benoit:2022:CWY

- [BPRS22] Anne Benoit, Luca Perotin, Yves Robert, and Hongyang Sun. Checkpointing workflows à la Young/Daly is not good enough. *ACM Transactions on Parallel Computing (TOPC)*, 9(4):14:1–14:??, December 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3548607>.

Benoit:2024:CST

- [BPRV24] Anne Benoit, Lucas Perotin, Yves Robert, and Frédéric Vivien. Checkpointing strategies to tolerate non-memoryless failures on HPC platforms. *ACM Transactions on Parallel Computing (TOPC)*, 11(1):1:1–1:??, March 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3624560>.

Bilardi:2018:LBT

- [BSS18] Gianfranco Bilardi, Michele Scquizzato, and Francesco Sil-

vestri. A lower bound technique for communication in BSP. *ACM Transactions on Parallel Computing (TOPC)*, 4(3):14:1–14:??, April 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Bonifaci:2019:GPT

- [BWB⁺19] Vincenzo Bonifaci, Andreas Wiese, Sanjoy K. Baruah, Alberto Marchetti-Spaccamela, Sebastian Stiller, and Leen Stougie. A generalized parallel task model for recurrent real-time processes. *ACM Transactions on Parallel Computing (TOPC)*, 6(1):3:1–3:??, June 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322809.

Chabbi:2020:EAL

- [CAL20] Milind Chabbi, Abdelhalim Amer, and Xu Liu. Efficient abortable-locking protocol for multi-level NUMA systems: Design and correctness. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):17:1–17:32, August 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399728>.

Creech:2016:TSS

- [CB16] Timothy Creech and Rajeev Barua. Transparently space sharing a multicore among multiple processes. *ACM Transactions on Parallel Computing*

(*TOPC*), 3(3):17:1–17:??, December 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Chatzopoulos:2017:EES

[CDG17] Georgios Chatzopoulos, Aleksandar Dragojević, and Rachid Guerraoui. ESTIMA: Extrapolating Scalability of in-memory applications. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):10:1–10:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Cruz:2019:ETM

[CDPN19] Eduardo H. M. Cruz, Matthias Diener, Laércio L. Pilla, and Philippe O. A. Navaux. EagerMap: a task mapping algorithm to improve communication and load balancing in clusters of multicore systems. *ACM Transactions on Parallel Computing (TOPC)*, 5(4):17:1–17:??, March 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3309711.

Chowdhury:2017:AAD

[CGT⁺17] Rezaul Chowdhury, Pramod Ganapathi, Stephen Tschudi, Jesmin Jahan Tithi, Charles Bachmeier, Charles E. Leiserson, Armando Solar-Lezama, Bradley C. Kuszmaul, and Yuan Tang. Autogen: Automatic discovery of efficient recursive divide-&-conquer algorithms for solving dynamic programming

problems. *ACM Transactions on Parallel Computing (TOPC)*, 4(1):4:1–4:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Cole:2017:ROS

[CR17] Richard Cole and Vijaya Ramachandran. Resource oblivious sorting on multicores. *ACM Transactions on Parallel Computing (TOPC)*, 3(4):23:1–23:??, March 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Cooper:2019:NCT

[CRR19] Colin Cooper, Tomasz Radzik, and Nicolas Rivera. New cover time bounds for the coalescing-branching random walk on graphs. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):16:1–16:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364206.

Chen:2018:PDG

[CSC⁺18] Rong Chen, Jiaxin Shi, Yanzhe Chen, Binyu Zang, Haibing Guan, and Haibo Chen. PowerLyra: Differentiated graph computation and partitioning on skewed graphs. *ACM Transactions on Parallel Computing (TOPC)*, 5(3):13:1–13:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- [CXL+22] **Chen:2022:FFG** Yuedan Chen, Guoqing Xiao, Kenli Li, Francesco Piccialli, and Albert Y. Zomaya. fgSpMSPV: a fine-grained parallel SpMSPV framework on HPC platforms. *ACM Transactions on Parallel Computing (TOPC)*, 9(2): 8:1–8:29, June 2022. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3512770>.
- [CXL+24] **Cai:2024:AAB** Qinyun Cai, Guoqing Xiao, Shengle Lin, Wangdong Yang, Keqin Li, and Kenli Li. ABSS: an adaptive batch-stream scheduling module for dynamic task parallelism on chiplet-based multi-chip systems. *ACM Transactions on Parallel Computing (TOPC)*, 11(1):6:1–6:??, March 2024. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3643597>.
- [CZS+17] **Cao:2017:HRD** Man Cao, Minjia Zhang, Aritra Sengupta, Swarnendu Biswas, and Michael D. Bond. Hybridizing and relaxing dependence tracking for efficient parallel runtime support. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):9:1–9:??, October 2017. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).
- [DAC+16] **Dorier:2016:DAP** Matthieu Dorier, Gabriel Antoniu, Franck Cappello, Marc Snir, Robert Sisneros, Orcun Yildiz, Shadi Ibrahim, Tom Peterka, and Leigh Orf. Damaris: Addressing performance variability in data management for post-petascale simulations. *ACM Transactions on Parallel Computing (TOPC)*, 3(3):15:1–15:??, December 2016. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).
- [DBS21] **Dhulipala:2021:TEP** Laxman Dhulipala, Guy E. Blelloch, and Julian Shun. Theoretically efficient parallel graph algorithms can be fast and scalable. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):4:1–4:70, April 2021. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3434393>.
- [DD24] **Darche:2024:LOT** Sébastien Darche and Michel R. Dagenais. Low-overhead trace collection and profiling on GPU compute kernels. *ACM Transactions on Parallel Computing (TOPC)*, 11(2):9:1–9:??, June 2024. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3649510>.
- [DH15] **Dinitz:2015:ISI** Michael Dinitz and Torsten Hoefler. Introduction to the spe-

- cial issue on SPAA 2013. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):14:1–14:??, October 2015. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Davydov:2020:ADS**
- [DK20] Denis Davydov and Martin Kronbichler. Algorithms and data structures for matrix-free finite element operators with MPI-parallel sparse multi-vectors. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):20:1–20:30, August 2020. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399736>.
- Degener:2015:LCS**
- [DKKM15] Bastian Degener, Barbara Kempkes, Peter Kling, and Friedhelm Meyer Auf Der Heide. Linear and competitive strategies for continuous robot formation problems. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):2:1–2:??, May 2015. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Dathathri:2016:CAL**
- [DMB16] Roshan Dathathri, Ravi Teja Mullapudi, and Uday Bondhugula. Compiling affine loop nests for a dynamic scheduling runtime on shared and distributed memory. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):12:1–12:??, August 2016. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Dice:2015:LCG**
- [DMS15] David Dice, Virendra J. Marathe, and Nir Shavit. Lock cohorting: a general technique for designing NUMA locks. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):13:1–13:??, January 2015. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Dutta:2015:CBR**
- [DPRR15] Chinmoy Dutta, Gopal Pandurangan, Rajmohan Rajaraman, and Scott Roche. Coalescing-branching random walks on graphs. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):20:1–20:??, October 2015. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Diegues:2015:TWE**
- [DR15] Nuno Diegues and Paolo Romano. Time-Warp: Efficient abort reduction in transactional memory. *ACM Transactions on Parallel Computing (TOPC)*, 2(2):12:1–12:??, July 2015. CODEN ????
- ISSN 2329-4949 (print), 2329-4957 (electronic).
- Duan:2020:CSR**
- [DSD⁺20] Shaohua Duan, Pradeep Subedi, Philip Davis, Keita Teranishi, Hemanth Kolla, Marc Gamell, and Manish Parashar. CoREC: Scalable and resilient in-memory data staging for in-situ workflows. *ACM Trans-*

- actions on Parallel Computing (TOPC)*, 7(2):12:1–12:29, May 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391448>.
- [DSMT20] Apurba Das, Seyed-Vahid Saneih-Mehri, and Srikanta Tirthapura. Shared-memory parallel maximal clique enumeration from static and dynamic graphs. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):5:1–5:28, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380936>.
- [DVS18] Dimitar Dimitrov, Martin Vechev, and Vivek Sarkar. Race detection in two dimensions. *ACM Transactions on Parallel Computing (TOPC)*, 4(4):19:1–19:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [EDMSV15] Lionel Eyraud-Dubois, Loris Marchal, Oliver Sinnen, and Frédéric Vivien. Parallel scheduling of task trees with limited memory. *ACM Transactions on Parallel Computing (TOPC)*, 2(2):13:1–13:??, July 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [EGMP21] Faith Ellen, Barun Gorain, Avery Miller, and Andrzej Pelc. Constant-length labeling schemes for deterministic radio broadcast. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):14:1–14:17, September 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470633>.
- [ES15] Martina Eikel and Christian Scheideler. IRIS: a robust information system against insider DoS attacks. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):18:1–18:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [EV21] James Edwards and Uzi Vishkin. Study of fine-grained nested parallelism in CDCL SAT solvers. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):17:1–17:18, September 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470639>.
- [FBG21a] Jeremy Fineman, Aydin Buluc, and Seth Gilbert. Introduction to the special issue for SPAA 2018 — Part 2. *ACM Transactions on Parallel Computing (TOPC)*, 8(2):6:1, June 2021.

Ellen:2021:CLL**Das:2020:SMP****Eikel:2015:IRI****Dimitrov:2018:RDT****Edwards:2021:SFG****Eyraud-Dubois:2015:PST****Fineman:2021:IS1b**

- CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3463366>. [FH19]
- Fineman:2021:ISIA**
- [FBG21b] Jeremy Fineman, Aydin Buluc, and Seth Gilbert. Introduction to the special issue for SPAA 2018: Part 1. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):3e:1, April 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3456774>.
- Fezzardi:2020:ABD**
- [FF20] Pietro Fezzardi and Fabrizio Ferrandi. Automated bug detection for high-level synthesis of multi-threaded irregular applications. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):27:1–27:26, December 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418086>.
- Feuilleley:2021:RLN**
- [FF21] Laurent Feuilloley and Pierre Fraigniaud. Randomized local network computing: Derandomization beyond locally checkable labelings. *ACM Transactions on Parallel Computing (TOPC)*, 8(4):18:1–18:25, December 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470640>. [FO19]
- Feldkord:2019:MSP**
- Björn Feldkord and Friedhelm Meyer Auf Der Heide. The mobile server problem. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):14:1–14:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364204.
- Fu:2024:TLT**
- [FJRH24] Qiang Fu, Yuede Ji, Thomas Rolinger, and H. Howie Huang. TLPGNN: a lightweight two-level parallelism paradigm for graph neural network computation on single and multiple GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 11(2):7:1–7:??, June 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3644712>.
- Feldman:2015:HCG**
- [FLEN15] Moran Feldman, Liane Lewin-Eytan, and Joseph (Seffi) Naor. Hedonic clustering games. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):4:1–4:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Fraigniaud:2019:DDC**
- Pierre Fraigniaud and Dennis Olivetti. Distributed detection of cycles. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):12:1–12:??, October 2019.

- CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322811. [Gib14]
- Grutmacher:2020:APC**
- [GCF⁺20] Thomas Grutmacher, Terry Co-jean, Goran Flegar, Hartwig Anzt, and Enrique S. Quintana-Ortí. Acceleration of PageRank with customized precision based on mantissa segmentation. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):4:1–4:19, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380934>. [Gil18]
- Geissmann:2021:PMC**
- [GG21] Barbara Geissmann and Lukas Gianinazzi. Parallel minimum cuts in near-linear work and low depth. *ACM Transactions on Parallel Computing (TOPC)*, 8(2):8:1–8:20, June 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3460890>. [GLZ19]
- Golan-Gueta:2017:ASA**
- [GGRSY17] Guy Golan-Gueta, G. Ramalingam, Mooly Sagiv, and Eran Yahav. Automatic scalable atomicity via semantic locking. *ACM Transactions on Parallel Computing (TOPC)*, 3(4):21:1–21:??, March 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Gibbons:2014:ATP**
- Phillip B. Gibbons. ACM Transactions on Parallel Computing: an introduction. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):1:1–1:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Gilbert:2018:ISI**
- Seth Gilbert. Introduction to the special issue for SPAA 2016. *ACM Transactions on Parallel Computing (TOPC)*, 5(1):1:1–1:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Guha:2019:DPC**
- Sudipto Guha, Yi Li, and Qin Zhang. Distributed partial clustering. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):11:1–11:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322808.
- Gulisano:2017:EDS**
- [GNC⁺17] Vincenzo Gulisano, Yiannis Nikolakopoulos, Daniel Cederman, Marina Papatriantafilou, and Philippas Tsigas. Efficient data streaming multiway aggregation through concurrent algorithmic designs and new abstract data types. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):11:1–11:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- Green:2021:HSH**
- [Gre21] Oded Green. HashGraph — scalable hash tables using a sparse graph data structure. *ACM Transactions on Parallel Computing (TOPC)*, 8(2):11:1–11:17, June 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3460872>.
- Grove:2017:ISS**
- [Gro17] David Grove. Introduction to the special section on PPOPP'15. *ACM Transactions on Parallel Computing (TOPC)*, 3(4):19:1–19:??, March 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Gao:2016:AOM**
- [GWWL16] Jiaquan Gao, Yu Wang, Jun Wang, and Ronghua Liang. Adaptive optimization modeling of preconditioned conjugate gradient on multi-GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 3(3):16:1–16:??, December 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Gilbert:2015:SBO**
- [GZ15] Seth Gilbert and Chaodong Zheng. SybilCast: Broadcast on the open airwaves. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):16:1–16:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Hesselink:2023:MLS**
- [HB23] Wim H. Hesselink and Peter A. Buhr. MCSH, a lock with the standard interface. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):11:1–11:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3584696>.
- Hoefler:2015:RMA**
- [HDT⁺15] Torsten Hoefler, James Dinan, Rajeev Thakur, Brian Barrett, Pavan Balaji, William Gropp, and Keith Underwood. Remote memory access programming in MPI-3. *ACM Transactions on Parallel Computing (TOPC)*, 2(2):9:1–9:??, July 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Herlihy:2015:GEI**
- [Her15] Maurice Herlihy. Guest Editor introduction. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):1:1–1:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Hein:2020:PSI**
- [HEY⁺20] Eric R. Hein, Srinivas Eswar, Abdurrahman Yasar, Jiajia Li, Jeffrey S. Young, Thomas M. Conte, Ümit V. Çatalyürek, Richard Vuduc, Jason Riedy, and Bora Uçar. Programming strategies for irregular algorithms on the Emu Chick. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):25:1–

- 25:25, December 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418077>. [HL16]
- [HHA17] Syed Kamran Haider, William Hasenplaugh, and Dan Alistarh. Lease/Release: Architectural support for scaling contended data structures. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):8:1–8:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [HJWdM20] Ioan Hadade, Timothy M. Jones, Feng Wang, and Luca di Mare. Software prefetching for unstructured mesh applications. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):3:1–3:23, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380932>.
- [HKL⁺14] Timothy Heil, Anil Krishna, Nicholas Lindberg, Farnaz Toussi, and Steven Vanderwiel. Architecture and performance of the hardware accelerators in IBM’s PowerEN processor. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):5:1–5:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [Herlihy:2016:WSF] Maurice Herlihy and Zhiyu Liu. Well-structured futures and cache locality. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):22:1–22:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [HSS15] Adam Hammouda, Andrew R. Siegel, and Stephen F. Siegel. Noise-tolerant explicit stencil computations for nonuniform process execution rates. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):7:1–7:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [HSY⁺20] Kathleen E. Hamilton, Catherine D. Schuman, Steven R. Young, Ryan S. Bennink, Neena Imam, and Travis S. Humble. Accelerating scientific computing in the post-Moore’s era. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):6:1–6:31, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380940>.
- [IKQP23] Sungjin Im, Ravi Kumar, Mahshid Montazer Qaem, and Manish Purohit. Non-clairvoyant scheduling with predictions.
- [Im:2023:NCS]
- [Hadade:2020:SPU]
- [Haider:2017:LRA]
- [Hamilton:2020:ASC]
- [Hammouda:2015:NTE]

- ACM Transactions on Parallel Computing (TOPC)*, 10(4):19:1–19:??, December 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3593969>. [JJ21]
- Im:2016:CST**
- [IMPT16] Sungjin Im, Benjamin Moseley, Kirk Pruhs, and Eric Torng. Competitively scheduling tasks with intermediate parallelizability. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):4:1–4:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Izraelevitz:2017:GSN**
- [IS17] Joseph Izraelevitz and Michael L. Scott. Generality and speed in nonblocking dual containers. *ACM Transactions on Parallel Computing (TOPC)*, 3(4):22:1–22:??, March 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Jimenez:2014:APP**
- [JCG⁺14] Víctor Jiménez, Francisco J. Cazorla, Roberto Gioiosa, Alper Buyuktosunoglu, Pradip Bose, Francis P. O’Connell, and Bruce G. Mealey. Adaptive prefetching on POWER7: Improving performance and power consumption. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):4:1–4:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Jayanti:2021:DCA**
- Prasad Jayanti and Siddhartha Jayanti. Deterministic constant-amortized-RMR abortable mutex for CC and DSM. *ACM Transactions on Parallel Computing (TOPC)*, 8(4):22:1–22:26, December 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3490559>.
- Ji:2022:IPI**
- [JLHH22] Yuede Ji, Hang Liu, Yang Hu, and H. Howie Huang. iSpan: Parallel identification of strongly connected components with spanning trees. *ACM Transactions on Parallel Computing (TOPC)*, 9(3):13:1–13:27, September 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3543542>.
- Jain:2015:NOS**
- [JMNY15] Navendu Jain, Ishai Menache, Joseph (Seffi) Naor, and Jonathan Yaniv. Near-optimal scheduling mechanisms for deadline-sensitive jobs in large computing clusters. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):3:1–3:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Jiang:2016:PPA**
- [JMT16] Jiayang Jiang, Michael Mitzenmacher, and Justin Thaler. Par-

- allel peeling algorithms. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):7:1–7:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [JPK⁺15] Janmartin Jahn, Santiago Pagan, Sebastian Kobbe, Jian-Jia Chen, and Jörg Henkel. Runtime resource allocation for software pipelines. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):5:1–5:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [JXA20] Peng Jiang, Yang Xia, and Gagan Agrawal. Combining SIMD and many/multi-core parallelism for finite-state machines with enumerative speculation. *ACM Transactions on Parallel Computing (TOPC)*, 7(3):15:1–15:26, August 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3399714>.
- [KA22] Giorgos Kappes and Stergios V. Anastasiadis. A family of relaxed concurrent queues for low-latency operations and item transfers. *ACM Transactions on Parallel Computing (TOPC)*, 9(4):16:1–16:??, December 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (elec-
- tronic). URL <https://dl.acm.org/doi/10.1145/3565514>.
- [KDG19] Dimitri Kagaris and Sourav Dutta. Scheduling mutual exclusion accesses in equal-length jobs. *ACM Transactions on Parallel Computing (TOPC)*, 6(2):8:1–8:??, September 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3342562.
- [KGS21] Xuejiao Kang, David F. Gleich, Ahmed Sameh, and Ananth Grama. Adaptive erasure coded fault tolerant linear system solver. *ACM Transactions on Parallel Computing (TOPC)*, 8(4):21:1–21:19, December 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3490557>.
- [KH15] Stephan C. Kramer and Johannes Hagemann. SciPAL: Expression templates and composition closure objects for high performance computational physics with CUDA and OpenMP. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):15:1–15:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- Khan:2019:NOP**
- [Kha19] Shahbaz Khan. Near optimal parallel algorithms for dynamic DFS in undirected graphs. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):18:1–18:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364212.
- Kaler:2016:EDD**
- [KHSL16] Tim Kaler, William Hasenplaugh, Tao B. Schardl, and Charles E. Leiserson. Executing dynamic data-graph computations deterministically using chromatic scheduling. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):2:1–2:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Kamenev:2023:FSA**
- [KKM23] Aleksandar Kamenev, Dariusz R. Kowalski, and Miguel A. Mosteiro. Faster supervised average consensus in adversarial and stochastic anonymous dynamic networks. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):13:1–13:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://doi.org/10.1145/3593426>.
- Kronbichler:2019:MMF**
- [KL19] Martin Kronbichler and Karl Ljungkvist. Multigrid for matrix-free high-order finite element computations on graphics processors. *ACM Transactions on Parallel Computing (TOPC)*, 6(1):2:1–2:??, June 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3322813.
- Kumar:2015:FGA**
- [KMVV15] Ravi Kumar, Benjamin Moseley, Sergei Vassilvitskii, and Andrea Vattani. Fast greedy algorithms in MapReduce and streaming. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):14:1–14:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Kalikar:2017:DNM**
- [KN17] Saurabh Kalikar and Rupesh Nasre. DomLock: a new multi-granularity locking technique for hierarchies. *ACM Transactions on Parallel Computing (TOPC)*, 4(2):7:1–7:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Kling:2015:PSM**
- [KP15] Peter Kling and Peter Pietrzyk. Profitable scheduling on multiple speed-scalable processors. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):19:1–19:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- [KR18] **Korupolu:2018:RPF**
 Madhukar Korupolu and Rajmohan Rajaraman. Robust and probabilistic failure-aware placement. *ACM Transactions on Parallel Computing (TOPC)*, 5(1):5:1–5:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [KS21] **Kaplan:2021:DRS**
 Haim Kaplan and Shay Solomon. Dynamic representations of sparse distributed networks: a locality-sensitive approach. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):5:1–5:26, April 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3434395>.
- [KS23] **Klein:2023:TGL**
 Christoph Klein and Robert Strzodka. Tridigpu: a GPU library for block tridiagonal and banded linear equation systems. *ACM Transactions on Parallel Computing (TOPC)*, 10(1):4:1–4:??, March 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3580373>.
- [KUCT15] **Kestor:2015:TPD**
 Gokcen Kestor, Osman S. Unsal, Adrian Cristal, and Serdar Tasiran. TRADE: Precise dynamic race detection for scalable transactional memory systems. *ACM Transactions on Parallel Computing (TOPC)*, 2(2):11:1–11:??, July 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [KX16] **Koutis:2016:SPD**
 Ioannis Koutis and Shen Chen Xu. Simple parallel and distributed algorithms for spectral graph sparsification. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):14:1–14:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [LAVB24] **Liu:2024:IPG**
 Yiqian Liu, Noushin Azami, Avery Vanausdal, and Martin Burtscher. Indigo3: a parallel graph analytics benchmark suite for exploring implementation styles and common bugs. *ACM Transactions on Parallel Computing (TOPC)*, 11(3):13:1–13:??, September 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3665251>.
- [LBGO23] **Lockhart:2023:PAO**
 Shelby Lockhart, Amanda Bienz, William Gropp, and Luke Olson. Performance analysis and optimal node-aware communication for enlarged conjugate gradient methods. *ACM Transactions on Parallel Computing (TOPC)*, 10(1):2:1–2:??, March 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

tronic). URL <https://dl.acm.org/doi/10.1145/3580003>.

Larus:2016:ISI

- [LDML16] James Larus, Sandhya Dwarkadas, José Moreira, and Andrew Lumsdaine. Introduction to the special issue on PPOPP'14. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):21:1–21:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Li:2024:CNS

- [LHL⁺24] Zixuan Li, Yikun Hu, Mengquan Li, Wangdong Yang, and Kenli Li. cuFastTucker: a novel sparse FastTucker decomposition for HHLST on multi-GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 11(2):12:1–12:??, June 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3661450>.

Lilja:2014:I

- [Lil14] David J. Lilja. Introduction. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):2:1–2:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Lakhotia:2023:PPB

- [LKP23] Kartik Lakhotia, Rajgopal Kannan, and Viktor Prasanna. Parallel peeling of bipartite networks for hierarchical dense subgraph discovery. *ACM Transactions on Parallel Computing*

(*TOPC*), 10(2):5:1–5:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3583084>.

Lakhotia:2020:GSC

- [LKPP20] Kartik Lakhotia, Rajgopal Kannan, Sourav Pati, and Viktor Prasanna. GPOP: a scalable cache- and memory-efficient framework for graph processing over parts. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):7:1–7:24, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3380942>.

Li:2024:DSD

- [LLC⁺24] Ziyang Li, Dongsheng Li, Yingwen Chen, Kai Chen, and Yiming Zhang. Decentralized scheduling for data-parallel tasks in the cloud. *ACM Transactions on Parallel Computing (TOPC)*, 11(2):10:1–10:??, June 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3651858>.

Lee:2015:FPP

- [LLS⁺15] I-Ting Angelina Lee, Charles E. Leiserson, Tao B. Schardl, Zhunping Zhang, and Jim Sukha. On-the-fly pipeline parallelism. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):17:1–17:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- [LMT⁺21] Giorgio Lucarelli, Benjamin Moseley, Nguyen Kim Thang, Abhinav Srivastav, and Dennis Trystram. Online non-preemptive scheduling on unrelated machines with rejections. *ACM Transactions on Parallel Computing (TOPC)*, 8(2): 9:1–9:22, June 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3460880>.
- [LRSLS20] Jaejin Lee, Lawrence Rauchw-
erger, Armando Solar-Lezama,
and Guy Steele. Introduction
to the special issue on PPOPP
2017 (part 2). *ACM Trans-
actions on Parallel Computing
(TOPC)*, 7(3):14:1–14:2, August
2020. CODEN ???? ISSN
2329-4949 (print), 2329-4957
(electronic). URL [https://
dl.acm.org/doi/abs/10.1145/
3407185](https://dl.acm.org/doi/abs/10.1145/3407185).
- [LPY18] Mingmou Liu, Xiaoyin Pan,
and Yitong Yin. Random-
ized approximate nearest neigh-
bor search with limited adaptiv-
ity. *ACM Transactions on Par-
allel Computing (TOPC)*, 5(1):
3:1–3:??, September 2018. CO-
DEN ???? ISSN 2329-4949
(print), 2329-4957 (electronic).
- [LQX⁺24] Zixuan Li, Yunchuan Qin,
Qi Xiao, Wangdong Yang, and
Kenli Li. cuFasterTucker: a
stochastic optimization strategy
for parallel sparse FastTucker de-
composition on GPU platform.
*ACM Transactions on Paral-
lel Computing (TOPC)*, 11(2):
8:1–8:??, June 2024. CODEN
???? ISSN 2329-4949 (print),
2329-4957 (electronic). URL
[https://dl.acm.org/doi/10.
1145/3648094](https://dl.acm.org/doi/10.1145/3648094).
- [LS18] I-Ting Angelina Lee and Tao B.
Schardl. Efficient race detection
for reducer hyperobjects. *ACM
Transactions on Parallel Com-
puting (TOPC)*, 4(4):20:1–20:??,
September 2018. CODEN ????
ISSN 2329-4949 (print), 2329-
4957 (electronic).
- [LSE⁺19] Hatem Ltaief, Dalal Sukkari,
Aniello Esposito, Yuji Nakat-
sukasa, and David Keyes. Mas-
sively parallel polar decomposi-
tion on distributed-memory sys-
tems. *ACM Transactions on
Parallel Computing (TOPC)*, 6
(1):4:1–4:??, June 2019. CO-
DEN ???? ISSN 2329-4949
(print), 2329-4957 (electronic).
URL [https://dl.acm.org/ft_
gateway.cfm?id=3328723](https://dl.acm.org/ft_gateway.cfm?id=3328723).
- [LT22] Sixue Cliff Liu and Robert En-
dre Tarjan. Simple concu-
rent connected components algo-
rithms. *ACM Transactions on*

- Parallel Computing (TOPC)*, 9(2):9:1–9:26, June 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3543546>.
Liu:2018:APR
- [LTL⁺18] Junhong Liu, Guangming Tan, Yulong Luo, Jiajia Li, Zeyao Mo, and Ninghui Sun. An autotuning protocol to rapidly build autotuners. *ACM Transactions on Parallel Computing (TOPC)*, 5(2):9:1–9:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
Leinhauser:2022:MDI
- [LWB⁺22] Matthew Leinhauser, René Widera, Sergei Bastrakov, Alexander Debus, Michael Bussmann, and Sunita Chandrasekaran. Metrics and design of an instruction roofline model for AMD GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 9(1):1:1–1:14, March 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3505285>.
Leidel:2020:TME
- [LWWC20] John D. Leidel, Xi Wang, Brody Williams, and Yong Chen. Toward a microarchitecture for efficient execution of irregular applications. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):26:1–26:24, December 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418082>.
Lin:2024:HCH
- [LYH⁺24] Shengle Lin, Wangdong Yang, Yikun Hu, Qinyun Cai, Minlu Dai, Haotian Wang, and Kenli Li. HPS Cholesky: Hierarchical parallelized supernodal Cholesky with adaptive parameters. *ACM Transactions on Parallel Computing (TOPC)*, 11(1):3:1–3:??, March 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3630051>.
Muller:2018:NHP
- [MA18] Michel Müller and Takayuki Aoki. New high performance GPGPU code transformation framework applied to large production weather prediction code. *ACM Transactions on Parallel Computing (TOPC)*, 5(2):7:1–7:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
Maus:2023:DGC
- [Mau23] Yannic Maus. Distributed graph coloring made easy. *ACM Transactions on Parallel Computing (TOPC)*, 10(4):21:1–21:??, December 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3605896>.

Miao:2023:PIT

- [MCGL23] Zheng Miao, Jon C. Calhoun, Rong Ge, and Jiajia Li. Performance implication of tensor irregularity and optimization for distributed tensor decomposition. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):10:1–10:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3580315>.

Majo:2017:LPC

- [MG17] Zoltan Majo and Thomas R. Gross. A library for portable and composable data locality optimizations for NUMA systems. *ACM Transactions on Parallel Computing (TOPC)*, 3(4):20:1–20:??, March 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Merrill:2015:HPS

- [MGG15] Duane Merrill, Michael Garland, and Andrew Grimshaw. High-performance and scalable GPU graph traversal. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):14:1–14:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Muller:2024:MAE

- [MH24] Stefan K. Muller and Jan Hoffmann. Modeling and analyzing evaluation cost of CUDA kernels. *ACM Transactions on Parallel Computing (TOPC)*, 11

(1):5:1–5:??, March 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3639403>.

Malas:2018:MIP

- [MHLK18] Tareq M. Malas, Georg Hager, Hatem Ltaief, and David E. Keyes. Multidimensional intratile parallelization for memory-starved stencil computations. *ACM Transactions on Parallel Computing (TOPC)*, 4(3):12:1–12:??, April 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Monfared:2021:HTP

- [MHM+21] Saleh Khalaj Monfared, Omid Hajihassani, Vahid Mohsseni, Dara Rahmati, and Saeid Gorgin. A high-throughput parallel Viterbi algorithm via bit-slicing. *ACM Transactions on Parallel Computing (TOPC)*, 8(4):19:1–19:25, December 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470642>.

Munch:2023:EDM

- [MHSK23] Peter Munch, Timo Heister, Laura Prieto Saavedra, and Martin Kronbichler. Efficient distributed matrix-free multi-grid methods on locally refined meshes for FEM computations. *ACM Transactions on Parallel Computing (TOPC)*, 10(1):3:1–3:??, March 2023. CODEN ???? ISSN 2329-

4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3580314>.

Marotta:2024:CRL

- [MIPQ24] Romolo Marotta, Mauro Ianni, Alessandro Pellegrini, and Francesco Quaglia. A conflict-resilient lock-free linearizable calendar queue. *ACM Transactions on Parallel Computing (TOPC)*, 11(1):4:1–4:??, March 2024. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3635163>.

Maier:2021:EPC

- [MK21] Matthias Maier and Martin Kronbichler. Efficient parallel 3D computation of the compressible Euler equations with an invariant-domain preserving second-order finite-element scheme. *ACM Transactions on Parallel Computing (TOPC)*, 8(3):16:1–16:30, September 2021. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470637>.

Monemi:2020:EDW

- [MKPSA20] Alireza Monemi, Farshad Khunjush, Maurizio Palesi, and Hamid Sarbazi-Azad. An enhanced dynamic weighted incremental technique for QoS support in NoC. *ACM Transactions on Parallel Computing (TOPC)*, 7(2):9:1–9:31, May 2020. CODEN ????. ISSN 2329-4949 (print), 2329-4957

(electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391442>.

Maldonado:2015:STB

- [MMF⁺15] Walther Maldonado, Patrick Marlier, Pascal Felber, Julia Lawall, Gilles Muller, and Etienne Rivière. Supporting time-based QoS requirements in software transactional memory. *ACM Transactions on Parallel Computing (TOPC)*, 2(2):10:1–10:??, July 2015. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).

Maleki:2016:LRM

- [MMM16] Saeed Maleki, Madanlal Musuvathi, and Todd Mytkowicz. Low-rank methods for parallelizing dynamic programming algorithms. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):26:1–26:??, March 2016. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).

McCreesh:2015:SST

- [MP15] Ciaran McCreesh and Patrick Prosser. The shape of the search tree for the maximum clique problem and the implications for parallel branch and bound. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):8:1–8:??, May 2015. CODEN ????. ISSN 2329-4949 (print), 2329-4957 (electronic).

Mitzenmacher:2018:BBC

- [MRR18] Michael Mitzenmacher, Rajmohan Rajaraman, and Scott

- Roche. Better bounds for coalescing-branching random walks. *ACM Transactions on Parallel Computing (TOPC)*, 5(1):2:1–2:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Mirhosseini:2018:BBA**
- [MSA⁺18] Amirhossein Mirhosseini, Mohammad Sadrosadati, Fatemeh Aghamohammadi, Mehdi Modarressi, and Hamid Sarbazi-Azad. BARAN: Bimodal adaptive reconfigurable-allocator network-on-chip. *ACM Transactions on Parallel Computing (TOPC)*, 5(3):11:1–11:??, January 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Maier:2019:CHT**
- [MSD19] Tobias Maier, Peter Sanders, and Roman Dementiev. Concurrent hash tables: Fast and general(!) *ACM Transactions on Parallel Computing (TOPC)*, 5(4):16:1–16:??, March 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3309206.
- Mitchell:2022:BOR**
- [MSFH22] Rory Mitchell, Daniel Stokes, Eibe Frank, and Geoffrey Holmes. Bandwidth-optimal random shuffling for GPUs. *ACM Transactions on Parallel Computing (TOPC)*, 9(1):3:1–3:20, March 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3505287>.
- Milman-Sela:2022:BLF**
- [MSKL⁺22] Gal Milman-Sela, Alex Kogan, Yossi Lev, Victor Luchangco, and Erez Petrank. BQ: a lock-free queue with batching. *ACM Transactions on Parallel Computing (TOPC)*, 9(1):5:1–5:49, March 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3512757>.
- MeyeraufderHeide:2016:ISI**
- [MSS16] Friedhelm Meyer auf der Heide, Peter Sanders, and Nodari Sitchinava. Introduction to the special issue on SPAA 2014. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):1:1–1:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- Mollah:2019:MUG**
- [MWF⁺19] Md Atiqul Mollah, Wenqi Wang, Peyman Faizian, MD Shafayat Rahman, Xin Yuan, Scott Pakin, and Michael Lang. Modeling universal globally adaptive load-balanced routing. *ACM Transactions on Parallel Computing (TOPC)*, 6(2):9:1–9:??, September 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3349620.

- [NLE⁺20] **Namashivayam:2020:MFI** Naveen Namashivayam, Bill Long, Deepak Eachempati, Bob Cernohous, and Mark Pagel. A modern Fortran interface in OpenSHMEM need for interoperability with Parallel Fortran using coarrays. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):24:1–24:25, December 2020. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418084>.
- [NRM20] **Natarajan:2020:FLL** Aravind Natarajan, Arunmoezhi Ramachandran, and Neeraj Mittal. FEAST: a lightweight lock-free concurrent binary search tree. *ACM Transactions on Parallel Computing (TOPC)*, 7(2):10:1–10:64, May 2020. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391438>.
- [NT22] **Nguyen:2022:DIC** Hung K. Nguyen and Xuan-Tu Tran. Design and implementation of a coarse-grained dynamically reconfigurable multimedia accelerator. *ACM Transactions on Parallel Computing (TOPC)*, 9(3):11:1–11:23, September 2022. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3543544>.
- [PRS15] **Pingali:2015:ISI** Keshav Pingali, J. Ramanujam, and P. Sadayappan. Introduction to the special issue on PPOPP’12. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):9:1–9:??, January 2015. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [PRS16] **Petrovic:2016:LHM** Darko Petrović, Thomas Ropars, and André Schiper. Leveraging hardware message passing for efficient thread synchronization. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):24:1–24:??, March 2016. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [PRS18] **Pandurangan:2018:FDA** Gopal Pandurangan, Peter Robinson, and Michele Scquizzato. Fast distributed algorithms for connectivity and MST in large graphs. *ACM Transactions on Parallel Computing (TOPC)*, 5(1):4:1–4:??, September 2018. CODEN ????? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [PRS21] **Pandurangan:2021:DCL** Gopal Pandurangan, Peter Robinson, and Michele Scquizzato. On the distributed complexity of large-scale graph computations. *ACM Transactions on Parallel Computing (TOPC)*, 8(2):7:1–7:28, June 2021. CODEN ????? ISSN 2329-4949 (print),

2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3460900>.

Perotin:2024:IOS

- [PS24] Lucas Perotin and Hongyang Sun. Improved online scheduling of moldable task graphs under common speedup models. *ACM Transactions on Parallel Computing (TOPC)*, 11(1):2:1–2:??, March 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3630052>.

Pumma:2019:SDL

- [PSFB19] Sarunya Pumma, Min Si, Wu-Chun Feng, and Pavan Balaji. Scalable deep learning via I/O analysis and optimization. *ACM Transactions on Parallel Computing (TOPC)*, 6(2):6:1–6:??, September 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3331526.

Rane:2014:EPO

- [RB14] Ashay Rane and James Browne. Enhancing performance optimization of multicore/multichip nodes with data structure metrics. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):3:1–3:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Ren:2019:ESP

- [RBJ+19] Bin Ren, Shruthi Balakrishna,

Youngjoon Jo, Sriram Krishnamoorthy, Kunal Agrawal, and Milind Kulkarni. Extracting SIMD parallelism from recursive task-parallel programs. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):24:1–24:??, December 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Ravishankar:2014:APC

- [REP+14] Mahesh Ravishankar, John Eisenlohr, Louis-Noël Pouchet, J. Ramanujam, Atanas Rountev, and P. Sadayappan. Automatic parallelization of a class of irregular loops for distributed memory systems. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):7:1–7:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Reza:2021:SPM

- [RHR+21] Tahsin Reza, Hassan Halawa, Matei Ripeanu, Geoffrey Sanders, and Roger A. Pearce. Scalable pattern matching in metadata graphs via constraint checking. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):2:1–2:45, April 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3434391>.

Rauchwerger:2019:ISI

- [RLSLS19] Lawrence Rauchwerger, Jaejin Lee, Armando Solar-Lezama, and Guy Steele. Introduction to the special issue on PPOPP 2017

- (part 1). *ACM Transactions on Parallel Computing (TOPC)*, 6(4):19:1–19:??, December 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [RSB⁺22] Arik Rinberg, Alexander Spiegelman, Edward Bortnikov, Eshcar Hillel, Idit Keidar, Lee Rhodes, and Hadar Serviansky. Fast concurrent data sketches. *ACM Transactions on Parallel Computing (TOPC)*, 9(2):6:1–6:35, June 2022. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3512758>.
- [SA16] Hafiz Fahad Sheikh and Ishfaq Ahmad. Sixteen heuristics for joint optimization of performance, energy, and temperature in allocating tasks to multicores. *ACM Transactions on Parallel Computing (TOPC)*, 3(2):9:1–9:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SB14] Julian Shun and Guy E. Blelloch. A simple parallel Cartesian tree algorithm and its application to parallel suffix tree construction. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):8:1–8:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SBF⁺16] Harsha Vardhan Simhadri, Guy E. Blelloch, Jeremy T. Fineman, Phillip B. Gibbons, and Aapo Kyrola. Experimental analysis of space-bounded schedulers. *ACM Transactions on Parallel Computing (TOPC)*, 3(1):8:1–8:??, August 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SG15] Paul Sack and William Gropp. Collective algorithms for multiported torus networks. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):12:1–12:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SG18] Semih Sahin and Bugra Gedik. C-Stream: a co-routine-based elastic stream processing engine. *ACM Transactions on Parallel Computing (TOPC)*, 4(3):15:1–15:??, April 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SLD⁺21] Lee Savoie, David K. Lowenthal, Bronis R. De Supinski, Kathryn Mohror, and Nikhil Jain. Mitigating inter-job interference via process-level quality-of-service. *ACM Transactions on Parallel Computing (TOPC)*, 8(1):1:1–1:26, April 2021. CODEN ???? ISSN 2329-

4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3434397>.

Salah:2020:TSE

[SLL⁺20] Ahmad Salah, Kenli Li, Qing Liao, Mervat Hashem, Zhiyong Li, Anthony T. Chronopoulos, and Albert Y. Zomaya. A time-space efficient algorithm for parallel k -way in-place merging based on sequence partitioning and perfect shuffle. *ACM Transactions on Parallel Computing (TOPC)*, 7(2):11:1–11:23, May 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3391443>.

Schardl:2019:TER

[SML19] Tao B. Schardl, William S. Moses, and Charles E. Leiserson. Tapir: Embedding recursive fork-join parallelism into LLVM’s intermediate representation. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):19:1–19:??, December 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3365655.

Sandes:2016:MMA

[SMM⁺16] Edans F. De O. Sandes, Guillermo Miranda, Xavier Martorell, Eduard Ayguade, George Teodoro, and Alba C. M. A. De Melo. MASA: a multiplatform architecture for sequence aligners with block pruning. *ACM*

Transactions on Parallel Computing (TOPC), 2(4):28:1–28:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Saha:2019:OSA

[SS19] Dibakar Saha and Koushik Sinha. Optimal schedule for all-to-all personalized communication in multiprocessor systems. *ACM Transactions on Parallel Computing (TOPC)*, 6(1):5:1–5:??, June 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3329867.

Sanders:2015:WEM

[SSS15] Peter Sanders, Jochen Speck, and Raoul Steffen. Work-efficient matrix inversion in polylogarithmic time. *ACM Transactions on Parallel Computing (TOPC)*, 2(3):15:1–15:??, October 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Sengupta:2020:HAP

[SSSB20] Tapan K. Sengupta, Prasanna-balaji Sundaram, Vajjala K. Suman, and Swagata Bhau-mik. A high accuracy preserving parallel algorithm for compact schemes for DNS. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):21:1–21:32, December 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3418073>.

- [SSSS23] **Sundaram:2023:NOH**
 Prasannabalaaji Sundaram, Aditi Sengupta, Vajjala K. Suman, and Tapan K. Sengupta. Non-overlapping high-accuracy parallel closure for compact schemes: Application in multiphysics and complex geometry. *ACM Transactions on Parallel Computing (TOPC)*, 10(1):1:1–1:??, March 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3580005>.
- [ST17] **Steele:2017:AAC**
 Guy L. Steele Jr. and Jean-Baptiste Tristan. Adding approximate counters. *ACM Transactions on Parallel Computing (TOPC)*, 4(1):5:1–5:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [ST19] **Steele:2019:UBP**
 Guy L. Steele Jr. and Jean-Baptiste Tristan. Using butterfly-patterned partial sums to draw from discrete distributions. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):22:1–22:??, November 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [SZ19] **Sun:2019:DGC**
 He Sun and Luca Zanetti. Distributed graph clustering and sparsification. *ACM Transactions on Parallel Computing (TOPC)*, 6(3):17:1–17:??, October 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [TDB16] **Thomson:2016:CTU**
 Paul Thomson, Alastair F. Donaldson, and Adam Betts. Concurrency testing using controlled schedulers: an empirical study. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):23:1–23:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3364208.
- [THC⁺16] **Tardieu:2016:XAP**
 Olivier Tardieu, Benjamin Herta, David Cunningham, David Grove, Prabhanjan Kambadur, Vijay Saraswat, Avraham Shinnar, Mikio Takeuchi, Mandana Vaziri, and Wei Zhang. X10 and APGAS at petascale. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):25:1–25:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).
- [TJK15] **Totoni:2015:PME**
 Ehsan Totoni, Nikhil Jain, and Laxmikant V. Kale. Power management of extreme-scale networks with on/off links in runtime systems. *ACM Transactions on Parallel Computing (TOPC)*, 1(2):16:1–16:??, January 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

- [TPFH20a] Antonino Tumeo, Fabrizio Petrini, John Feo, and Mahantesh Halappanavar. Introduction to the TOPC special issue on innovations in systems for irregular applications, Part 1. *ACM Transactions on Parallel Computing (TOPC)*, 7(1):1:1–1:2, April 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/abs/10.1145/3383318>. [VN19]
- [TPFH20b] Antonino Tumeo, Fabrizio Petrini, John Feo, and Mahantesh Halappanavar. Introduction to the TOPC special issue on innovations in systems for irregular applications, Part 2. *ACM Transactions on Parallel Computing (TOPC)*, 7(4):23:1–23:2, December 2020. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3419771>. [WMP14]
- [UALK19] Robert Utterback, Kunal Agrawal, I-Ting Angelina Lee, and Milind Kulkarni. Processor-oblivious record and replay. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):20:1–20:??, December 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL https://dl.acm.org/ft_gateway.cfm?id=3365659. [WPD⁺17]
- Hans Vandierendonck and Dimitrios S. Nikolopoulos. Hyperqueues: Design and implementation of deterministic concurrent queues. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):23:1–23:??, November 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). [Wu:2014:MAG]
- Xing Wu, Frank Mueller, and Scott Pakin. A methodology for automatic generation of executable communication specifications from parallel MPI applications. *ACM Transactions on Parallel Computing (TOPC)*, 1(1):6:1–6:??, September 2014. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). [Wang:2017:GGG]
- Yangzihao Wang, Yuechao Pan, Andrew Davidson, Yuduo Wu, Carl Yang, Leyuan Wang, Muhammad Osama, Chenshan Yuan, Weitang Liu, Andy T. Riffel, and John D. Owens. Gunrock: GPU graph analytics. *ACM Transactions on Parallel Computing (TOPC)*, 4(1):3:1–3:??, October 2017. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). [Winblad:2021:LFC]
- Kjell Winblad, Konstantinos Sagonas, and Bengt Jonsson. Lock-free contention adapting search trees. *ACM Transactions on Parallel Computing*

(*TOPC*), 8(2):10:1–10:38, June 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3460874>.

Wang:2021:PBD

- [WYH⁺21] Shao-Chung Wang, Lin-Ya Yu, Li-An Her, Yuan-Shin Hwang, and Jenq-Kuen Lee. Pointer-based divergence analysis for OpenCL 2.0 programs. *ACM Transactions on Parallel Computing (TOPC)*, 8(4):20:1–20:23, December 2021. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3470644>.

Wang:2023:HPC

- [WYO⁺23] Haotian Wang, Wangdong Yang, Renqiu Ouyang, Rong Hu, Kenli Li, and Keqin Li. A heterogeneous parallel computing approach optimizing SpTTM on CPU-GPU via GCN. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):9:1–9:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3584373>.

Xiao:2024:MLB

- [XZC⁺24] Guoqing Xiao, Tao Zhou, Yuedan Chen, Yikun Hu, and Kenli Li. Machine learning-based kernel selector for SpMV optimization in graph analysis. *ACM Transactions on Parallel Computing (TOPC)*, 11(2):

11:1–11:??, June 2024. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3652579>.

Xu:2015:SVC

- [XZZY15] Yi Xu, Bo Zhao, Youtao Zhang, and Jun Yang. Simple virtual channel allocation for high-throughput and high-frequency on-chip routers. *ACM Transactions on Parallel Computing (TOPC)*, 2(1):6:1–6:??, May 2015. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Yuan:2016:FCN

- [YNM16] Xin Yuan, Wickus Nienaber, and Santosh Mahapatra. On folded-Clos networks with deterministic single-path routing. *ACM Transactions on Parallel Computing (TOPC)*, 2(4):27:1–27:??, March 2016. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Yeh:2019:PGR

- [YSS⁺19] Tsung Tai Yeh, Amit Sabne, Putt Sakdhnagool, Rudolf Eigenmann, and Timothy G. Rogers. Pagoda: a GPU runtime system for narrow tasks. *ACM Transactions on Parallel Computing (TOPC)*, 6(4):21:1–21:??, November 2019. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Zamani:2023:GEE

- [ZBCC23] Hadi Zamani, Laxmi Bhuyan, Jieyang Chen, and Zizhong Chen. GreenMD: Energy-efficient matrix decomposition on heterogeneous multi-GPU systems. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):12:1–12:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3583590>.

Zhang:2018:LFT

- [ZLLD18] Deli Zhang, Pierre Laborde, Lance Lebanoff, and Damian Dechev. Lock-free transactional transformation for linked data structures. *ACM Transactions on Parallel Computing (TOPC)*, 5(1):6:1–6:??, September 2018. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic).

Zheng:2023:DGD

- [ZWS23] Weijian Zheng, Dali Wang, and Fengguang Song. A distributed-GPU deep reinforcement learning system for solving large graph optimization problems. *ACM Transactions on Parallel Computing (TOPC)*, 10(2):6:1–6:??, June 2023. CODEN ???? ISSN 2329-4949 (print), 2329-4957 (electronic). URL <https://dl.acm.org/doi/10.1145/3589188>.