A Bibliography of Supercomputing '89

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

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

E-mail: beebe@math.utah.edu (Internet)
WWW URL: http://www.math.utah.edu/~beebe/

07 August 2013
Version 1.04

Abstract

This bibliography records articles presented at the Supercomputing '89 conference.

Title word cross-reference

^{2} [MA89].

/MP [MA89].

10 [Fat89]. **10-Q** [Fat89]. **1024-processor** [GBSS89].

2 [Fat89]. **29-state** [Sig89].

3/SX [WMT89]. **3090** [AG89a].

64-bit [KM89].

'89 [ACM89].

academic [MKYK89]. **acoustics** [LSS89]. **activation** [YHKM89]. **administration** [BAC+89]. **aerothermodynamics** [Dei89]. **AHEAD** [dEV89]. **algorithm** [Bis89a, LC89, PC89, ZWM89]. **algorithms** [AG89a, CP89, GD89b, Iye89, OS89, PBP89, Sha89]. **alignment** [Iye89]. **allocation** [JCC89]. **among** [Cha89]. **analysis** [Cal89, EGP89, Fat89, HK89, MJ89]. **analytical** [AG89b]. **approach** [JCC89]. **architectural** [BCS+89]. **architecture** [SMCG89, WMT89]. **architectures** [And89, LC89, Mv89]. **area** [Lek89]. **array** [GD89b, SHO+89]. **assembly** [WW89]. **assignment** [BNR89, PC89]. **assisted** [Par89]. **associated** [PRWB89]. **associative** [PWY+89]. **atmospheric** [JH89]. **Automatic** [BNR89, TKA89]. **Automatically** [NE89]. **automaton** [Sig89].

balance [WL89]. **balancing** [CP89]. **based** [GD89a, Hei89]. **Benchmark** [CHK89, BCS+89]. **beyond** [DSOZ89]. **bit** [KM89]. **block** [Bak89, Bis89a]. **blocking** [Hei89]. **bound** [Par89]. **Building** [AG89b].

C [MA89]. **cache** [MA89]. **cache-coherent** [MA89]. **calculations** [CHK89]. **can** [Sig89]. **capabilities** [Kut89]. **Capability** [FT89]. **Carlo** [BCS+89, WW89]. **case** [Sig89]. **cellular** [Sig89]. **channel** [OJ89]. **character** [TKA89]. **characteristics** [Iye89]. **Chare** [SK89]. **Chare-Kernel** [SK89]. **checksums** [Che89]. **chemistry** [FHS89]. **Cholesky** [AG89a]. **chromodynamics** [SHO+89]. **circuit** [FYH89, Hei89, PBP89]. **circuit-switched** [Hei89]. **circulant** [Bak89]. **code** [Car89]. **code-methods** [Car89]. **coherent** [MA89]. **Combining** [RJ89]. **Communication** [Gro89, SR89]. **communities** [MKYK89]. **Comparative** [Hei89]. **Comparison** [NE89]. **Compilers** [NE89]. **complex** [RS89, Sig89]. **composition** [CT89]. **computation** [CC89]. **Computational** [Dei89, Kut89, FT89, LSS89]. **Computations** [GML89, Mv89]. **computer** [CHK89, Par89, PWY+89, ZRV89]. **computers** [HK89, Hua89]. **Computing** [BW89]. **concepts** [Cro89]. **concerns** [Car89]. **concurrency** [Cha89]. **Concurrent** [WW89, CT89]. **conflict** [Cal89]. **conflicts** [TM89]. **conjugate** [MJ89]. **connected** [CC89]. **Connection** [Dag89, ESH89, JHM89, JKFM89, BBGJ89]. **Construction** [MKYK89]. **constructs** [Mv89]. **consume** [RJ89]. **convergence** [MJ89]. **cost** [BW89]. **coupled** [Mv89]. **Cray** [Bak89, Fat89, KC89]. **Cray-2** [Bak89, Fat89]. **crossbar** [HT89]. **cube** [CC89, JCC89]. **cubes** [GD89a]. **current** [FT89, Kut89].

d [HJ89]. **DASP** [PWY+89]. **data** [BNR89, MJ89, ZWM89]. **data-level** [ZWM89]. **data/program** [BNR89]. **debuggers** [PU89]. **debugging** [Che89, EGP89]. **decomposition** [Bak89, CP89, CC89]. **depth** [Par89]. **digital** [Hua89]. **Dilation** [HJ89]. **dimensional** [OJ89]. **directions** [Kut89]. **dissipation** [OJ89]. **distributed** [BPA89, MA89, PWY+89, SR89]. **distributed-memory** [BPA89]. **due** [GML89]. **dynamic** [SK89]. **dynamical** [BBGJ89]. **dynamics** [FT89, Kut89].

editor [BKK+89]. **Effective** [KC89]. **effects** [HD89]. **Efficient** [CC89, PBP89]. **Element** [MJ89]. **elimination** [Lev89]. **embedding** [HJ89]. **environment** [Bis89b, GGJ89, NNIL89]. **equations** [OJ89]. **ETA** [Fat89]. **Euler** [OJ89]. **even** [Lev89]. **Event** [EGP89]. **evolution** [WW89]. **examples** [FHS89]. **experimentation** [GGJ89]. **external** [Bai89].

factorization [AG89a, Bis89a, SR89]. **fermions** [BBGJ89]. **FFT** [JKFM89]. **FFTs** [Bai89]. **File** [Cro89, NNIL89]. **flow** [CHK89, Dag89, JH89, OJ89]. **fluid** [FT89, Kut89]. **fluid-dynamics-current** [Kut89]. **FORTRAN** [dEV89, KKK89, NE89]. **framework** [HT89]. **function** [BW89]. **future** [Kut89]. **Futures** [Cha89].

'GAMTEB [BCS+89]. **general** [PWY+89]. **general-purpose** [PWY+89]. **generalized** [Lev89]. **geometric** [OS89]. **global** [JH89]. **gradient** [MJ89]. **graph** [YHKM89]. **grid** [CHK89]. **ground** [GML89]. **GTS** [ALTB89].

Hardware [WMT89]. **Harray** [YHKM89]. **HCN** [GD89a]. **HDB** [Che89]. **hierarchical** [Bai89]. **High**

[And89, NNIL89, Che89, HK89, SMCG89]. **high-speed** [HK89]. **HVDC** [GML89]. **hyper** [HJ89]. **hyper-pyramid** [HJ89]. **hypercube** [GBSS89, HJ89]. **hypersonic** [Dag89].

I/O [Cro89]. **i860** [KM89]. **IBM** [AG89a]. **implement** [Sig89]. **Implementation** [Dag89, CP89]. **Implementing** [GD89b]. **increasing** [WW89]. **inputs** [Par89]. **integrated** [CP89, HT89]. **interactive** [AG89b, BKK+89]. **interconnection** [GD89a]. **internet** [MKYK89]. **inverse** [LC89]. **issues** [Car89]. **iteration** [Wol89]. **iWarp** [Gro89].

Japanese [MKYK89].

K9 [BPA89]. **Kernel** [SK89]. **kinematics** [LC89]. **Knowledge** [ESH89].

language [Mv89]. **LANL** [BCS+89]. **Large** [dEV89, Car89]. **level** [Che89, ZWM89, Zia89]. **Limits** [BAC+89]. **linear** [GD89b]. **Load** [CP89]. **logic** [PBP89]. **loop** [WL89]. **loosely** [Mv89]. **lower** [Par89].

Machine [Dag89, ESH89, JHM89, JKFM89, CC89, Sig89, TM89, BBGJ89]. **Macrotasking** [Bak89]. **manipulations** [TKA89]. **mapping** [Zia89]. **matrices** [Bak89]. **Matrix** [JHM89, SR89]. **Measuring** [ZRV89]. **mechanism** [Cha89]. **Memory** [TM89, Bai89, BPA89, Cal89, MA89, RS89, RJ89, WWS89]. **mesh** [SR89]. **method** [MJ89]. **methodology** [RS89]. **methods** [Car89]. **microprocessor** [KM89]. **migration** [JCC89]. **MIMD** [JH89, PWY+89, SHO+89]. **Models** [PU89, AG89b, JH89]. **Monte** [BCS+89, WW89]. **MP** [Fat89, MA89]. **multi** [Zia89]. **multi-level** [Zia89]. **multicomputers** [RS89]. **Multiple** [HT89]. **multiplication** [JHM89]. **Multiprocessor** [MHHG89, JCC89, MA89, RJ89]. **multiprocessor-system** [MA89]. **multiprocessors** [GGJ89, RS89, WWS89].

n [CJ89, JCC89]. **N-cube** [JCC89]. **NEC** [WMT89]. **NERV** [MHHG89]. **network** [GD89a, HT89, WWS89]. **networking** [Lek89]. **networks** [Hei89, MHHG89, Par89]. **Neumann** [Sig89]. **Neural** [WWS89, MHHG89]. **Nevada** [ACM89]. **nine** [Par89]. **November** [ACM89]. **number** [WW89]. **numerical** [SHO+89].

O [Cro89]. **objects** [Cha89]. **ocean** [LSS89]. **odd** [Lev89]. **odd-even** [Lev89]. **operations** [RJ89, TKA89]. **operators** [OJ89]. **Optical** [Hua89]. **Optimal** [Fre89, Par89]. **order** [MJ89].

PAGE [dEV89]. **PAGE-AHEAD** [dEV89]. **Parallel** [Iye89, JH89, LC89, Lev89, Mv89, OS89, Sha89, WL89, AG89a, And89, BKK+89, BPA89, CP89, Cro89, EGP89, FHS89, GD89b, MJ89, PU89, PC89, PWY+89, PBP89, PRWB89, SMCG89, YHKM89, ZWM89, ZRV89]. **parallelization** [ALTB89]. **Parallelizing** [Car89, RS89]. **ParaScope** [BKK+89]. **particle** [BCS+89, Dag89]. **particles** [WW89]. **partitioning** [BNR89, PBP89]. **Pascal** [TKA89]. **peak** [CJ89]. **pentadiagonal** [Lev89]. **Performance** [HK89, And89, AG89b, BW89, CJ89, Fat89, GGJ89, Hei89, NNIL89, Sha89, SMCG89, TM89]. **physics** [FHS89, WBP+89]. **pipelined** [RJ89]. **pivoting** [Bis89a]. **Practical** [FHS89]. **preceding** [YHKM89]. **prediction** [AG89b, ZWM89]. **principle** [BNR89]. **probability** [Hei89]. **problem** [PC89, Zia89]. **problems** [OS89]. **Proceedings** [ACM89]. **processing** [PWY+89, PRWB89, SMCG89, YHKM89]. **processor** [GBSS89, JCC89, SR89, WL89].

processors [BW89, BPA89, SHO+89]. **produce** [RJ89]. **product** [Mv89]. **program** [BNR89, GBSS89]. **programming** [BKK+89, JH89]. **Programs** [dEV89, CT89, EGP89, RS89]. **Protein** [ZWM89]. **purpose** [PWY+89]. **pyramid** [HJ89].

Q [Fat89]. **QCD** [BBGJ89]. **QCDPAX** [SHO+89]. **QR** [Bis89a]. **quadratic** [PC89]. **quantity** [BW89]. **quantum** [SHO+89].

radar [GBSS89]. **radix** [JKFM89]. **radix-2** [JKFM89]. **rank** [CJ89]. **rank-n** [CJ89]. **rarefied** [Dag89]. **rate** [MJ89]. **Realities** [PRWB89]. **reconfigurable** [SMCG89]. **recurrences** [ALTB89]. **reduction** [SR89]. **Refined** [KKK89]. **relational** [TKA89]. **relativistic** [HD89]. **Reno** [ACM89]. **representation** [ESH89]. **resource** [BAC+89]. **restricted** [Bis89a]. **results** [Cal89]. **return** [GML89]. **rise** [GML89]. **robot** [LC89].

scalability [ZRV89]. **scheduling** [SK89]. **scheme** [YHKM89]. **scientific** [Car89]. **searching** [OS89]. **security** [Bis89b]. **selection** [Fre89]. **sequence** [Iye89]. **service** [Lek89]. **shared** [RJ89, WWS89]. **shared-memory** [WWS89]. **SIMD** [CC89, CHK89, Sig89]. **simulation** [Dag89, FYH89, GBSS89, MHHG89, PBP89, SHO+89, WWS89, WW89]. **simulations** [WBP+89]. **simulator** [BPA89]. **single** [BNR89]. **singular** [Bak89, CC89]. **soil** [GML89]. **solution** [Lev89]. **solver** [CJ89, CHK89]. **Some** [Cal89]. **sorting** [GD89b, Par89]. **space** [HD89, Wol89]. **sparse** [SR89]. **speed** [BW89, HK89]. **spreading** [WL89]. **state** [Sig89]. **Static** [DSOZ89]. **strategy** [SK89]. **stress** [MJ89]. **string** [TKA89]. **structure** [ZWM89]. **Study** [NE89, BCS+89, OJ89, Sig89]. **super** [Sha89]. **supercomputer** [WMT89, WBP+89]. **Supercomputers** [LSS89, Fat89, FT89, KC89]. **Supercomputing** [ACM89, FYH89, Bis89b, FHS89, HT89, KM89, NNIL89]. **superconcurrency** [Fre89]. **switched** [Hei89]. **SX** [WMT89]. **SX-3** [WMT89]. **SX-3/SX-X** [WMT89]. **SX-X** [WMT89]. **synchronization** [DSOZ89, EGP89]. **system** [BAC+89, MA89, NNIL89, SK89, WMT89, YHKM89]. **system-Harray** [YHKM89]. **systems** [CP89, Gro89, Lev89, Zia89, ZRV89].

task [CP89, JCC89]. **techniques** [CP89]. **technology** [WMT89]. **temperature** [GML89]. **tensor** [Mv89]. **theory** [Fre89]. **three** [Fat89, OJ89]. **three-dimensional** [OJ89]. **tight** [ALTB89]. **tiling** [Wol89]. **time** [HD89]. **tool** [AG89b, BKK+89, Che89]. **transport** [BCS+89]. **transputers** [GD89b]. **Tuning** [CJ89]. **Type** [Lek89].

unfolding [YHKM89]. **UNIX** [BAC+89, Bis89b]. **unstructured** [CHK89]. **Update** [KKK89, CJ89]. **use** [KC89]. **Using** [dEV89, BNR89, Bis89a, BCS+89, Che89, Lev89, PWY+89].

value [Bak89, CC89]. **Vector** [AG89a, Fat89, SHO+89, WWS89]. **Vectorization** [BCS+89, ALTB89, TKA89]. **vectorized** [WW89]. **Vectorizing** [NE89]. **versatile** [GD89a]. **vision** [CP89]. **Visualization** [WBP+89, PU89]. **Visualizing** [HD89]. **VLIW** [DSOZ89]. **VLSI** [LC89].

wavefront [CJ89]. **wide** [Lek89].

X [WMT89].

Y-MP [Fat89].

References

ACM:1989:PSN

[ACM89] ACM, editor. *Proceedings, Supercomputing '89: November 13–17, 1989, Reno, Nevada*. ACM Press, New York, NY 10036, USA, 1989. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Agarwal:1989:VPA

[AG89a] R. C. Agarwal and F. G. Gustavson. Vector and parallel algorithms for Cholesky factorization on IBM 3090. In ACM [ACM89], pages 225–233. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ataputtu:1989:BAM

[AG89b] D. Ataputtu and D. Gannon. Building analytical models into an interactive performance prediction tool. In ACM [ACM89], pages 521–530. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ayguade:1989:GPV

[ALTB89] E. Ayguade, J. Labarta, J. Torres, and P. Borensztejn. GTS: parallelization and vectorization of tight recurrences. In ACM [ACM89], pages 531–539. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Anderson:1989:HPP

[And89] R. E. Anderson. High performance parallel architectures. In ACM [ACM89], pages 410–415. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Bettison:1989:LSU

[BAC+89] A. Bettison, F. Adcock, P. Chubb, A. Gollan, C. Maltby, and N. Russell. Limits — a system for UNIX resource administration. In ACM [ACM89], pages 686–692. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Bailey:1989:FEH

[Bai89] D. H. Bailey. FFTs in external or hierarchical memory. In ACM [ACM89], pages 234–242. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Baker:1989:MSV

[Bak89] J. R. Baker. Macrotasking the singular value decomposition of block circulant matrices on the cray-2. In ACM [ACM89], pages 243–247. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Baillie:1989:QDF

[BBGJ89] C. F. Baillie, R. G. Brickner, R. Gupta, and L. Johnsson. QCD with dynamical fermions on the Connection Machine. In ACM [ACM89], pages 2–9. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Burns:1989:VMC

[BCS+89] P. J. Burns, M. Christon, R. Schweitzer, O. M. Lubeck, H. J. Wasserman, M. L. Simmons, and D. V. Pryor. Vectorization of Monte Carlo particle transport: an architectural study using the LANL benchmark 'GAMTEB'. In ACM [ACM89], pages 10–20. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Bischof:1989:BQF

[Bis89a] C. H. Bischof. A block QR factorization algorithm using restricted pivoting. In ACM [ACM89], pages 248–256. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Bishop:1989:USS

[Bis89b] M. Bishop. UNIX security in a supercomputing environment. In ACM [ACM89], pages 693–698. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Balasundaram:1989:PEI

[BKK+89] V. Balasundaram, K. Kennedy, U. Kremer, K. McKinley, and J. Subhlok. The ParaScope editor: an interactive parallel programming tool. In ACM [ACM89], pages 540–550. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Bic:1989:ADP

[BNR89] L. Bic, M. D. Nagel, and J. M. A. Roy. Automatic data/program partitioning using the single assignment principle. In ACM [ACM89], pages 551–556. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Beadle:1989:KSD

[BPA89] P. Beadle, C. Pommerell, and M. Annaratone. K9: a simulator of distributed-memory parallel processors. In ACM [ACM89], pages 765–774. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Barton:1989:CPF

[BW89] M. L. Barton and G. R. Withers. Computing performance as a function of the speed, quantity, and cost of the processors. In ACM [ACM89], pages 759–764. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Calahan:1989:SRM

[Cal89] D. A. Calahan. Some results in memory conflict analysis. In ACM [ACM89], pages 775–778. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Carmona:1989:PLS

[Car89] E. A. Carmona. Parallelizing a large scientific code-methods, issues, and concerns. In ACM [ACM89], pages 21–31. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Chuang:1989:ECS

[CC89] H. Y. H. Chuang and L. Chen. Efficient computation of the singular value decomposition on cube connected SIMD machine. In ACM [ACM89], pages 276–282. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Chatterjee:1989:FMC

[Cha89] A. Chatterjee. Futures: a mechanism for concurrency among objects. In ACM [ACM89], pages 562–567. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Cheng:1989:HHL

[Che89] D. Y. Cheng. HDB — a high level debugging tool using check-

sums. In ACM [ACM89], pages 568–573. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Clary:1989:BCU

[CHK89] J. S. Clary, G. A. Howell, and S. L. Karman, Jr. Benchmark calculations with an unstructured grid flow solver on a SIMD computer. In ACM [ACM89], pages 32–41. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Chang:1989:TRU

[CJ89] S. Chang and M. A. Johnson. Tuning the rank-n update in a wavefront solver for peak performance. In ACM [ACM89], pages 257–265. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Choudhary:1989:LBT

[CP89] A. N. Choudhary and J. H. Patel. Load balancing and task decomposition techniques for parallel implementation of integrated vision systems algorithms. In ACM [ACM89], pages 266–275. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Crockett:1989:FCP

[Cro89] T. W. Crockett. File concepts for parallel I/O. In ACM [ACM89], pages 574–579. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Chandy:1989:CCP

[CT89] K. M. Chandy and S. Taylor. The composition of concurrent programs. In ACM [ACM89], pages 557–561. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Dagum:1989:IHR

[Dag89] L. Dagum. Implementation of a hypersonic rarefied flow particle simulation on the connection machine. In ACM [ACM89], pages 42–50. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Deiwart:1989:CA

[Dei89] G. S. Deiwart. Computational aerothermodynamics. In ACM [ACM89], pages 51–57. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

diAntonio:1989:UPA

[dEV89] R. di Antonio, J. Eilert, and M. Vitaletti. Using PAGE-AHEAD for large FORTRAN programs. In ACM [ACM89], pages 511–520. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Dietz:1989:SSB

[DSOZ89] H. Dietz, T. Schwederski, M. O'Keefe, and A. Zaafrani. Static synchronization beyond VLIW. In ACM [ACM89], pages 416–425. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Emrath:1989:ESA

[EGP89] P. A. Emrath, S. Ghosh, and D. A. Padua. Event synchronization analysis for debugging parallel programs. In ACM [ACM89], pages 580–588. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Evett:1989:KRC

[ESH89] M. Evett, L. Spector, and J. Hendler. Knowledge representation on the connection machine. In ACM [ACM89], pages 283–293. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Fatoohi:1989:VPA

[Fat89] R. A. Fatoohi. Vector performance analysis of three supercomputers: Cray-2, Cray Y-MP, and ETA 10-Q. In ACM [ACM89], pages 779–788. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Fox:1989:PPS

[FHS89] G. C. Fox, P. Hipes, and J. Salmon. Practical parallel supercomputing: examples from chemistry and physics. In ACM [ACM89], pages 58–70. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Freund:1989:OST

[Fre89] R. F. Freund. Optimal selection theory for superconcurrency. In ACM [ACM89], pages 699–703. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Fuji:1989:CCS

[FT89] K. Fuji and Y. Tamura. Capability of current supercomputers for the computational fluid dynamics. In ACM [ACM89], pages 71–80. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Fukui:1989:SCS

[FYH89] Y. Fukui, H. Yoshida, and S. Higono. Supercomputing of circuit simulation. In ACM [ACM89], pages 81–85. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Gustafson:1989:RSP

[GBSS89] J. L. Gustafson, R. E. Benner, M. P. Sears, and T. D. Sullivan. A radar simulation program for a 1024-processor hypercube. In ACM [ACM89], pages 96–105. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ghose:1989:HVI

[GD89a] K. Ghose and K. R. Desai. The HCN: a versatile interconnection network based on cubes. In ACM [ACM89], pages 426–435. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Goodwin:1989:IPS

[GD89b] W. P. Goodwin, IV and S. K. Das. Implementing parallel sorting algorithms on a linear array of transputers. In ACM [ACM89], pages 789–796. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Gaur:1989:EPE

[GGJ89] Y. Gaur, V. A. Guarna, Jr., and D. Jablonowski. An environment for performance experimentation on multiprocessors. In ACM [ACM89], pages 589–596. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Greiss:1989:CST

[GML89] H. Greiss, D. Mukhedkar, and P. J. Lagace. Computations of soil temperature rise due to HVDC ground

return. In ACM [ACM89], pages 86–95. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Gross:1989:CIS

[Gro89] T. Gross. Communication in iWarp systems. In ACM [ACM89], pages 436–445. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Hsiung:1989:VRE

[HD89] P.-K. Hsiung and R. H. P. Dunn. Visualizing relativistic effects in space time. In ACM [ACM89], pages 597–606. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Hein:1989:CPC

[Hei89] C. Hein. Comparative performance of circuit-switched networks based on blocking probability. In ACM [ACM89], pages 704–712. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ho:1989:DDE

[HJ89] C.-T. Ho and S. L. Johnsson. Dilation d embedding of a hyperpyramid into a hypercube. In ACM [ACM89], pages 294–303. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Helin:1989:PAH

[HK89] J. Helin and K. Kaski. Performance analysis of high-speed computers. In ACM [ACM89], pages 797–808. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Hoebelheinrich:1989:MCN

[HT89] R. Hoebelheinrich and R. Thomsen. Multiple crossbar network integrated supercomputing framework. In ACM [ACM89], pages 713–720. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Huang:1989:ODC

[Hua89] A. Huang. Optical digital computers. In ACM [ACM89], pages 446–449. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Iyengar:1989:PCS

[Iye89] A. K. Iyengar. Parallel characteristics of sequence alignment algorithms. In ACM [ACM89], pages 304–313. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Jang:1989:NAP

[JCC89] J. E. Jang, S. W. Choi, and W. K. Cho. A new approach to processor allocation and task migration in an N-cube multiprocessor. In ACM [ACM89], pages 314–325. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Jakob:1989:PMP

[JH89] R. Jakob and J. J. Hack. Parallel MIMD programming for global models of atmospheric flow. In ACM [ACM89], pages 106–112. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Johnsson:1989:MMC

[JHM89] S. L. Johnsson, T. Harris, and K. K. Mathur. Matrix multiplication on the connection machine. In ACM [ACM89], pages 326–332. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Johnsson:1989:RFC

[JKFM89] S. L. Johnsson, R. L. Krawitz, R. Frye, and D. MacDonald. A radix-2 FFT on the connection machine. In ACM [ACM89], pages 809–819. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Kramer:1989:EUC

[KC89] W. T. C. Kramer and J. M. Craw. Effective use of Cray supercomputers. In ACM [ACM89], pages 721–731. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Klappholz:1989:RFU

[KKK89] D. Klappholz, X. Kong, and A. D. Kallis. Refined Fortran: An update. In ACM [ACM89], pages 607–615. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Kohn:1989:ISM

[KM89] L. Kohn and N. Margulis. The i860 64-bit supercomputing microprocessor. In ACM [ACM89], pages 450–456. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Kutler:1989:CFC

[Kut89] P. Kutler. Computational fluid-dynamics-current capabilities and directions for the future. In ACM [ACM89], pages 113–122. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Lai:1989:PAV

[LC89] J. Z. C. Lai and Ming Chao. Parallel algorithm and VLSI architectures for a robot's inverse kinematics. In ACM [ACM89], pages 123–132. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Lekashman:1989:TSW

[Lek89] J. Lekashman. Type of service wide area networking. In ACM [ACM89], pages 732–736. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Levit:1989:PSP

[Lev89] C. Levit. Parallel solution of pentadiagonal systems using generalized odd-even elimination. In ACM [ACM89], pages 333–336. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Lee:1989:SCO

[LSS89] D. Lee, M. H. Schultz, and F. Saied. Supercomputers in computational ocean acoustics. In ACM [ACM89], pages 133–140. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Marquardt:1989:CSM

[MA89] D. E. Marquardt and H. S. AlKhatib. C^2 /MP: a cache-coherent, distributed memory multiprocessor-system. In ACM [ACM89], pages 466–475. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Manner:1989:MSN

[MHHG89] R. Manner, H. Horner, R. Hauser, and A. Genthner. Multiprocessor simulation of neural networks with NERV. In ACM [ACM89],

pages 457–465. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Mathur:1989:EOC

[MJ89] K. K. Mathur and S. L. Johnsson. Element order and convergence rate of the conjugate gradient method for data parallel stress analysis. In ACM [ACM89], pages 337–343. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Murai:1989:CIJ

[MKYK89] J. Murai, H. Kusumoto, S. Yamaguchi, and A. Kato. Construction of internet for Japanese academic communities. In ACM [ACM89], pages 737–746. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Mehrotra:1989:PLC

[Mv89] P. Mehrotra and J. van Rosendale. Parallel language constructs for tensor product computations on loosely coupled architectures. In ACM [ACM89], pages 616–626. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Nobayashi:1989:CSA

[NE89] H. Nobayashi and C. Eoyang. A comparison study of automatically vectorizing Fortran compilers. In ACM [ACM89], pages 820–825. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Nishino:1989:HPF

[NNIL89] H. Nishino, S. Naka, K. Ikumi, and W. Leslie. High performance file system for supercomputing environment. In ACM [ACM89], pages 747–756. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Olsson:1989:SDO

[OJ89] P. Olsson and S. L. Johnsson. A study of dissipation operators for the Euler equations and a three-dimensional channel flow. In ACM [ACM89], pages 141–151. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Oh:1989:PAG

[OS89] S.-J. Oh and M. Suk. Parallel algorithms for geometric searching problems. In ACM [ACM89], pages 344–350. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Parberry:1989:CAO

[Par89] I. Parberry. A computer assisted optimal depth lower bound for sorting networks with nine inputs. In ACM [ACM89], pages 152–161. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Patil:1989:ECP

[PBP89] S. Patil, P. Banerjee, and C. D. Polychronopoulos. Efficient circuit partitioning algorithms for parallel logic simulation. In ACM [ACM89], pages 361–370. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Pardalos:1989:PAQ

[PC89] P. M. Pardalos and J. V. Crouse. A parallel algorithm for the quadratic assignment problem. In ACM

[ACM89], pages 351–360. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Platt:1989:RAP

[PRWB89] D. E. Platt, A. R. Rossi, J. W. Wells, and J. Becker. Realities associated with parallel processing. In ACM [ACM89], pages 162–174. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Pancake:1989:MVP

[PU89] C. M. Pancake and S. Utter. Models for visualization in parallel debuggers. In ACM [ACM89], pages 627–636. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Park:1989:DGM

[PWY+89] Y. K. Park, C. Walter, H. Yee, T. Roden, and S. Berkovich. DASP: a general-purpose MIMD parallel computer using distributed associative processing. In ACM [ACM89], pages 476–484. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Rodriguez:1989:CPC

[RJ89] B. J. Rodriguez and H. F. Jordan. Combining produce and consume operations in a pipelined shared memory multiprocessor. In ACM [ACM89], pages 485–495. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ramunujam:1989:MPP

[RS89] J. Ramunujam and P. Sadayappan. A methodology for parallelizing programs for multicomputers and complex memory multiprocessors. In ACM [ACM89], pages 637–646. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Shakshober:1989:PAS

[Sha89] D. J. Shakshober. Parallel algorithms for super performance. In ACM [ACM89], pages 380–388. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Shirakawa:1989:QMA

[SHO+89] T. Shirakawa, T. Hoshino, Y. Oyanagi, Y. Iwasaki, T. Yoshie, K. Kanaya, S. Ichii, and T. Kawai. QCDPAX — an MIMD array of vector processors for the numerical simulation of quantum chromodynamics. In ACM [ACM89], pages 495–504. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Signorini:1989:HSM

[Sig89] J. Signorini. How a SIMD machine can implement a complex cellular automaton? a case study: von Neumann's 29-state cellular automaton. In ACM [ACM89], pages 175–186. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Shu:1989:DSS

[SK89] W. Shu and L. V. Kale. A dynamic scheduling strategy for the charekernel system. In ACM [ACM89], pages 389–398. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Shively:1989:HPR

[SMCG89] R. R. Shively, E. B. Morgan, T. W. Copley, and A. L. Gorin. A high

performance reconfigurable parallel processing architecture. In ACM [ACM89], pages 505–509. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Sadayappan:1989:CRD

[SR89] P. Sadayappan and S. K. Rao. Communication reduction for distributed sparse matrix factorization on a processor mesh. In ACM [ACM89], pages 371–379. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Tsuda:1989:AVC

[TKA89] T. Tsuda, Y. Kunieda, and P. Atipas. Automatic vectorization of character string manipulations and relational operations in pascal. In ACM [ACM89], pages 187–196. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Tang:1989:MCM

[TM89] P. Tang and R. H. Mendez. Memory conflicts and machine performance. In ACM [ACM89], pages 826–831. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Watson:1989:VSS

[WBP+89] V. Watson, G. Bancroft, T. Plessel, F. Merritt, Walatka, and P. P. Visualization of supercomputer simulations in physics. In ACM [ACM89], pages 647–654. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Wu:1989:PPB

[WL89] Y. Wu and T. Lewis. Parallel processor balance through loop spreading. In ACM [ACM89], pages 665–674. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Watanabe:1989:HTA

[WMT89] T. Watanabe, H. Matsumoto, and P. D. Tannenbaum. Hardware technology and architecture of the NEC SX-3/SX-X supercomputer system. In ACM [ACM89], pages 842–846. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Wolfe:1989:MIS

[Wol89] M. Wolfe. More iteration space tiling. In ACM [ACM89], pages 655–664. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Wu:1989:CVM

[WW89] C.-H. Wu and C.-J. Wang. Concurrent and vectorized Monte Carlo simulation of the evolution of an assembly of particles increasing in number. In ACM [ACM89], pages 205–214. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Wang:1989:NNS

[WWS89] C.-J. Wang, C.-H. Wu, and S. Sivasundaram. Neural network simulation on shared-memory vector multiprocessors. In ACM [ACM89], pages 197–204. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Yamana:1989:PAS

[YHKM89] H. Yamana, T. Hagiwara, J. Kohdate, and Y. Muraoka. A preceding activation scheme with graph unfolding for the parallel processing system-harray. In ACM [ACM89],

pages 675–684. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Ziavras:1989:MPM

[Zia89] S. G. Ziavras. On the mapping problem for multi-level systems. In ACM [ACM89], pages 399–408. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Zorbas:1989:MSP

[ZRV89] J. R. Zorbas, D. J. Reble, and R. E. VanKooten. Measuring the scalability of parallel computer systems. In ACM [ACM89], pages 832–841. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.

Zhang:1989:PSP

[ZWM89] X. Zhang, D. Waltz, and J. P. Mesirov. Protein structure prediction by a data-level parallel algorithm. In ACM [ACM89], pages 215–223. ISBN 0-89791-341-8. LCCN QA 76.5 S87 1989. IEEE 89CH2802-7.