

# A Bibliography of Supercomputing '99

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24 February 2000  
Version 1.00

## Abstract

This bibliography records articles presented at the Supercomputing '99 conference.

## Title word cross-reference

3 [AD99]. **\$7.3/Mflops** [KFM99].

**-D** [AD99].

**2** [AKL99]. **2000** [OSVW99].

**5** [KFM99].

**Accelerators** [QRHD99].

**Achieving** [AGK<sup>+</sup>99].

**Adaptive** [FSWB99, FL99, STY99].

**ADR** [KCS<sup>+</sup>99].

**Algorithms** [BG99, CH99, GC99, TF99].

**Alignments** [CH99]. **Analysis** [VR99].

**Application** [AGK<sup>+</sup>99, Joh99, OB99].

**Applications** [ABD<sup>+</sup>99, CEV99, FSWB99, HKK<sup>+</sup>99, KRC<sup>+</sup>99, WSN99].

**Approximate** [YGS99].

**Archipelago** [MKY<sup>+</sup>99].

**Architectural** [WMADC99].

**Architecture** [BLN<sup>+</sup>99, CEV99, GC99, HKK<sup>+</sup>99].

**Architecture-cognizant** [GC99].

**area** [GBST99]. **Array** [MMGL99].

**ASCII** [FJM<sup>+</sup>99]. **Astrophysical** [KFM99].

**Augmented** [Fuc99]. **Award** [Nor99].

**based** [HKK<sup>+</sup>99]. **Beam** [QRHD99].

**Benchmarks** [WMADC99]. **benefit** [VC99].

**Biological** [CH99]. **BIP** [GPT99].

**BIP-SMP** [GPT99]. **Bit** [ZZ99].

**Bit-reversals** [ZZ99]. **Blue** [FJM<sup>+</sup>99].

**Blue-Pacific** [FJM<sup>+</sup>99]. **Body** [KFM99].  
**Bottlenecks** [SLT99]. **Boulevard** [ACM99].  
**Bounded** [YGS99].  
**Bounded-error** [YGS99].

**Cache** [SS99]. **Cache-coherent** [SS99].  
**Caches** [RT99]. **Calculation** [HMM<sup>+</sup>99].  
**Calculations** [OSVW99]. **Cameras** [Fuc99].  
**Cell** [QRHD99]. **Center** [ACM99].  
**CFD** [AGK<sup>+</sup>99]. **Channel** [PTC<sup>+</sup>99].  
**Characteristics** [WKKR99].  
**Chip** [SHAS99].  
**Circulation** [DH99, MKY<sup>+</sup>99].  
**Climate** [HJDW99, HHA99].  
**Cluster** [GPT99, KEB<sup>+</sup>99].  
**Clustering** [MHK99].  
**Clusters** [GBST99, KRC<sup>+</sup>99, SvL99].  
**Code** [QRHD99]. **cognizant** [GC99].  
**coherent** [SS99]. **Collaborating** [PRY99].  
**collaboration** [Fuc99].  
**Collaboratory** [PRY99].  
**Collective** [MGF99]. **Collectives** [SvL99].  
**Combustion** [PRY99].  
**Commodity** [BLN<sup>+</sup>99, GPT99, MDD<sup>+</sup>99b].  
**Communication** [BLN<sup>+</sup>99, GGS99].  
**Community** [HJDW99].  
**Comparisons** [GGS99].  
**Compiler** [ABD<sup>+</sup>99].  
**Compiler-Supported** [ABD<sup>+</sup>99].  
**Compressible** [MCC<sup>+</sup>99].  
**Compression** [YGS99].  
**Computation** [HP99].  
**Computational** [Fuc99, WBK<sup>+</sup>99].  
**Computer** [HMM<sup>+</sup>99]. **Conquer** [GC99].  
**Constrained** [KRC<sup>+</sup>99, BG99].  
**Contrasts** [GGS99]. **Convention** [ACM99].  
**Cost** [VC99]. **Cost-benefit** [VC99].

**D** [AD99]. **Data** [SA99, DH99, FSWB99,  
 FL99, GBST99, HKK<sup>+</sup>99, KM99, MMGL99,  
 YGS99].  
**Data-intensive** [FSWB99, HKK<sup>+</sup>99].  
**Datasets** [KCS<sup>+</sup>99]. **DeepView** [PTC<sup>+</sup>99].  
**Design** [MDD<sup>+</sup>99a]. **Diagnosis** [KM99].

**Diesel** [PRY99]. **dimensional** [KCS<sup>+</sup>99].  
**Direct** [KEB<sup>+</sup>99].  
**Distributed** [FSWB99, PTC<sup>+</sup>99].  
**DIVA** [HKK<sup>+</sup>99]. **Divide** [GC99].  
**DSM** [SS99, SLT99].  
**Dynamic** [KRC<sup>+</sup>99, OB99, VR99].  
**Dynamics** [QRHD99, WLMP99].

**Efficient** [BLN<sup>+</sup>99, HP99, OB99, WSN99].  
**Electromagnetic** [OSVW99].  
**Element** [AD99, TF99].  
**Environment** [MHK99, SDN99].  
**Environments** [LWF<sup>+</sup>99]. **error** [YGS99].  
**Evaluating** [ML99].  
**Evaluation** [FJM<sup>+</sup>99, HJDW99].  
**EveryWare** [WBK<sup>+</sup>99].  
**Execution** [STY99].  
**Experiences** [NvdP99].

**Fact** [KEB<sup>+</sup>99].  
**Fast** [STY99, WLMP99, ZZ99].  
**Fernbach** [Nor99]. **Fiction** [KEB<sup>+</sup>99].  
**Finite** [AD99]. **Flow** [EDW99].  
**Fluid** [EDW99]. **Fortran90** [RY99].  
**Fujitsu** [AKL99].

**General** [MKY<sup>+</sup>99]. **Generation** [TFP99].  
**Generic** [AKL99]. **Geographic** [MHK99].  
**Global** [MKY<sup>+</sup>99]. **Globus** [MHK99].  
**GRAPE** [KFM99]. **GRAPE-5** [KFM99].  
**Grid** [LWF<sup>+</sup>99, WBK<sup>+</sup>99].

**H** [MRW99]. **H-RMC** [MRW99].  
**Hairpin** [TFP99]. **Hardware** [SS99].  
**Heat** [EDW99].  
**Hierarchical** [SA99, YGS99].  
**High** [AGK<sup>+</sup>99, GPT99, HMM<sup>+</sup>99, Joh99,  
 MKY<sup>+</sup>99, SS99, VC99, ZZ99, MCC<sup>+</sup>99].  
**High-Performance** [Joh99].  
**High-resolution** [MKY<sup>+</sup>99].  
**High-speed** [HMM<sup>+</sup>99].  
**Historical** [KM99]. **Hybrid** [MRW99].

**I/O** [DH99, WSN99].

**IBM** [MCC<sup>+</sup>99, SHAS99]. **IBM-SP** [MCC<sup>+</sup>99]. **ILU** [HP99]. **Imaging** [MDD<sup>+</sup>99b]. **Immersive** [TFP99]. **Implementation** [AKL99, EDW99]. **Implementations** [TF99, WLMP99]. **Improved** [CH99]. **Improving** [KM99, PH99]. **Indonesian** [MKY<sup>+</sup>99]. **Industrial** [MDD<sup>+</sup>99b]. **Informatics** [PTC<sup>+</sup>99]. **Informed** [MGF99]. **Input** [MGF99]. **Input/Output** [MGF99]. **Instruction** [CEV99, MCFT99]. **Instruction-level** [MCFT99]. **Integrated** [MDD<sup>+</sup>99a]. **intensive** [FSWB99, HKK<sup>+</sup>99]. **Interactive** [RCLL99]. **Internet** [PRY99]. **Irregular** [HKK<sup>+</sup>99]. **Iterative** [WKKR99].

**Java** [GGS99, MMGL99]. **Java-MPI** [GGS99]. **Job** [FJM<sup>+</sup>99, LKK99]. **Jr** [ACM99].

**Kernel** [MRW99, AKL99]. **King** [ACM99].

**Large** [ABD<sup>+</sup>99, EDW99, FL99, HMM<sup>+</sup>99, KCS<sup>+</sup>99, SvL99, WLMP99]. **Large-scale** [EDW99, HMM<sup>+</sup>99, SvL99]. **Level** [RT99, GGS99, MCFT99, STY99]. **Lighting** [RCLL99]. **Linear** [QRHD99]. **Linux** [KEB<sup>+</sup>99, MRW99]. **Local** [GBST99]. **Locality** [RT99]. **Low** [GGS99]. **Low-level** [GGS99]. **Luther** [ACM99].

**Machines** [STY99]. **Management** [STY99]. **Managing** [VR99]. **Manufacturing** [MDD<sup>+</sup>99a]. **Mapping** [HKK<sup>+</sup>99]. **Martin** [ACM99]. **Matrix** [CEV99, PH99]. **Matrix-vector** [PH99]. **Memory** [STY99, WKKR99]. **Mesh** [AGK<sup>+</sup>99]. **Message** [AKL99, GPT99]. **Metacomputing** [MHHK99].

**Methods** [SA99, WKKR99, YGS99]. **Microscopy** [PTC<sup>+</sup>99]. **Mining** [GBST99, MMGL99]. **Model** [DH99, HJDW99, MKY<sup>+</sup>99]. **MOE** [HMM<sup>+</sup>99]. **Molecular** [HMM<sup>+</sup>99, WLMP99]. **MOM** [CEV99]. **MPI** [WSN99, AKL99, GGS99, STY99, SDN99, SvL99]. **MPI-2** [AKL99]. **MTA** [ML99, OB99]. **Multi** [KCS<sup>+</sup>99, MCFT99, RT99]. **Multi-dimensional** [KCS<sup>+</sup>99]. **Multi-Level** [RT99]. **Multi-threading** [MCFT99]. **Multicast** [Joh99, MRW99]. **Multigrid** [AD99]. **Multimedia** [CEV99]. **Multiphase** [EDW99]. **Multiple** [LKK99]. **Multiplication** [PH99]. **Multipole** [WLMP99]. **Multiprocessors** [SS99, SLT99]. **Multiresolution** [FL99]. **Multivariate** [MHHK99].

**N** [KFM99]. **N-Body** [KFM99]. **NAS** [WMADC99]. **Network** [LWF<sup>+</sup>99]. **Nightmare** [Fuc99]. **Nirvana** [Fuc99]. **November** [ACM99]. **NREN** [Joh99]. **Numerical** [KEB<sup>+</sup>99, MKY<sup>+</sup>99, TFP99].

**O** [DH99, WSN99]. **Object** [QRHD99]. **Object-Oriented** [QRHD99]. **Ocean** [DH99, MKY<sup>+</sup>99]. **Octrees** [FL99]. **Online** [KM99]. **Optimization** [BG99, SvL99]. **Optimizations** [RT99]. **Orbital** [HMM<sup>+</sup>99]. **Oregon** [ACM99]. **Organization** [DH99]. **Oriented** [QRHD99]. **Origin** [OSVW99]. **Output** [MGF99].

**Pacific** [FJM<sup>+</sup>99]. **Package** [EDW99, MMGL99]. **Papyrus** [GBST99]. **Parallel** [AD99, ABD<sup>+</sup>99, BG99, CH99, DH99, EDW99, FJM<sup>+</sup>99, FL99, HJDW99, HMM<sup>+</sup>99, HP99, MMGL99, QRHD99, WSN99, WMADC99].

**Parallelism** [MCFT99]. **Parallelization** [OB99, RCLL99]. **Parallelizing** [RY99]. **Particle** [QRHD99, YGS99]. **Particle-in-Cell** [QRHD99]. **Passing** [AKL99, GPT99]. **PC** [KEB<sup>+</sup>99]. **PC/Linux** [KEB<sup>+</sup>99]. **PDE** [BG99]. **PDE-constrained** [BG99]. **Performance** [AGK<sup>+</sup>99, FSWB99, GPT99, GGS99, HJDW99, Joh99, KM99, LWF<sup>+</sup>99, NvdP99, PH99, SS99, VC99, VR99, ZZ99]. **Personal** [HHA99]. **PIM** [HKK<sup>+</sup>99]. **PIM-based** [HKK<sup>+</sup>99]. **Pinpointing** [SLT99]. **Portland** [ACM99]. **Preconditioners** [HP99]. **Prediction** [FSWB99]. **Predictive** [VC99]. **Prefetching** [MGF99, VC99]. **Preprocessor** [RY99]. **Presence** [LKK99]. **Prism** [SDN99]. **Problems** [AD99]. **Processors** [MCFT99]. **Programmable** [RY99]. **Programming** [SDN99]. **Programs** [ML99]. **Projection** [VR99]. **Projectors** [Fuc99]. **Protocol** [MRW99]. **Prototype** [Joh99, NvdP99]. **purpose** [HMM<sup>+</sup>99]. **Pursuit** [VR99].

**Quantifying** [SLT99]. **Querying** [KCS<sup>+</sup>99].

**Radiance** [RCLL99]. **Real** [RCLL99]. **Real-time** [RCLL99]. **Reality** [Fuc99]. **Recipient** [Nor99]. **Reliable** [MRW99]. **Requests** [MGF99]. **Requirements** [LKK99, WMADC99]. **Research** [HHA99]. **Researchers** [PRY99]. **Resolution** [MCC<sup>+</sup>99, MKY<sup>+</sup>99]. **Resource** [LKK99]. **reversals** [ZZ99]. **RMC** [MRW99]. **RS** [SHAS99]. **RS/6000** [SHAS99]. **Running** [WBK<sup>+</sup>99].

**SC'99** [ACM99]. **Scal** [SLT99]. **Scal-Tool** [SLT99]. **Scalability** [SLT99, WMADC99]. **Scalable** [OSVW99].

**Scale** [WLMP99, EDW99, HMM<sup>+</sup>99, SvL99]. **Scattering** [OSVW99]. **Scheduling** [FJM<sup>+</sup>99, KRC<sup>+</sup>99, LKK99, SB99]. **Scheme** [VC99]. **Seas** [Fuc99]. **Seismic** [MDD<sup>+</sup>99b]. **Sequential** [CH99]. **Set** [CEV99]. **Sets** [FL99]. **SGI** [OSVW99]. **Shared** [STY99]. **Sidney** [Nor99]. **SIMD** [CEV99]. **Simulated** [MKY<sup>+</sup>99]. **Simulation** [ABD<sup>+</sup>99, KEB<sup>+</sup>99, KFM99, MCC<sup>+</sup>99, QRHD99, TFP99]. **Simulations** [EDW99, WLMP99]. **Simultaneous** [MCFT99]. **SMP** [GPT99]. **SMPs** [GPT99, SvL99]. **Software** [EDW99]. **Solver** [AD99]. **Sorting** [SS99]. **SP** [MCC<sup>+</sup>99, SHAS99]. **Sparse** [PH99]. **Special** [HMM<sup>+</sup>99]. **Special-purpose** [HMM<sup>+</sup>99]. **Spectral** [TF99]. **speed** [HMM<sup>+</sup>99]. **SPMD** [ML99]. **SQP** [BG99]. **Statistical** [VR99]. **Stochastic** [SB99]. **String** [CH99]. **Structure** [SA99]. **Sun** [NvdP99, WSN99]. **Super** [GBST99]. **Super-clusters** [GBST99]. **Supercomputer** [HHA99]. **Supercomputers** [BLN<sup>+</sup>99, MDD<sup>+</sup>99b]. **Support** [SDN99]. **Supported** [ABD<sup>+</sup>99]. **Sustained** [AGK<sup>+</sup>99]. **Switch** [SHAS99]. **System** [GBST99, MCC<sup>+</sup>99]. **Systems** [SHAS99, ZZ99].

**Tele** [Fuc99]. **Tele-collaboration** [Fuc99]. **Tera** [ML99, OB99]. **Terascale** [TF99]. **Testbed** [Joh99]. **Thread** [MCFT99, STY99]. **Thread-level** [MCFT99]. **threading** [MCFT99]. **time** [RCLL99]. **Titanium** [ML99]. **Tool** [LWF<sup>+</sup>99, SLT99]. **TOUGH2** [EDW99]. **Tree** [CH99]. **Treecode** [KFM99]. **Tuning** [HJDW99]. **Tunnel** [MKY<sup>+</sup>99]. **Turbulence** [KEB<sup>+</sup>99, MCC<sup>+</sup>99]. **Two** [STY99]. **Two-level** [STY99].

**Unifying** [SA99].

**Unstructured** [AD99, AGK<sup>+</sup>99, OB99].

**Use** [KM99].

**Using** [FL99, Joh99, MHHK99, MMGL99]. [AGK<sup>+</sup>99]

**vector** [PH99].

**Very** [ABD<sup>+</sup>99, KCS<sup>+</sup>99, MCC<sup>+</sup>99].

**Visualization** [FL99, RCLL99, TFP99].

**Vortex** [TFP99]. **vs** [MCFT99].

**Walking** [CH99]. **Walkthroughs** [RCLL99].

**Wide** [GBST99]. **Wide-area** [GBST99].

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