A Bibliography of Supercomputing '2005

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Abstract

This bibliography records articles presented at the Supercomputing '2005 conference.

Title word cross-reference

References

Akcelik:2005:DDD

[ABD+05] Volkan Akcelik, George Biros, Andrei Draganescu, Judith Hill, Omar Ghattas, and Bart van Bloemen Waanders. Dynamic data-driven inversion for terascale simulations: Real-time identification of airborne contaminants. In ACM [ACM05], page 43. ISBN 1-59593-061-2. LCCN ????

Allcock:2005:GSG

[ABKL05] William Allcock, John Bresnahan, Rajkumar Kettimuthu, and Michael Link. The Globus Striped GridFTP Framework and Server. In ACM [ACM05], page 54. ISBN 1-59593-061-2. LCCN ????

ACM:2005:PAI

[ACM05] ACM, editor. *Proceedings of the 2005 ACM/IEEE conference on Supercomputing 2005, Seattle, WA, November 12–18 2005.* ACM Press and IEEE Computer Society Press, New York, NY 10036, USA and 1109 Spring Street, Suite 300, Silver Spring, MD 20910, USA, 2005. ISBN 1-59593-061-2. LCCN ????

Abu-Ghazaleh:2005:DDO

[AGL05] Nayef Abu-Ghazaleh and Michael J. Lewis. Differential deserialization for optimized SOAP performance. In ACM [ACM05], page 21. ISBN 1-59593-061-2. LCCN ????

Andrews:2005:MHP

[AKJ05] Phil Andrews, Patricia Kovatch, and Christopher Jordan. Massive high-performance global file systems for Grid computing. In ACM [ACM05], page 53. ISBN 1-59593-061-2. LCCN ????

Barker:2005:FOC

[BBH+05] Kevin J. Barker, Alan Benner, Ray Hoare, Adolfy Hoisie, Alex K. Jones, Darren K. Kerbyson, Dan Li, Rami Melhem, Ram Rajamony, Eugen Schenfeld, Shuyi Shao, Craig Stunkel, and Peter Walker. On the feasibility of optical circuit switching for high performance computing systems. In ACM [ACM05], page 16. ISBN 1-59593-061-2. LCCN ????

Biswas:2005:ABP

[BDH+05] Rupak Biswas, M. Jahed Djomehri, Robert Hood, Haoqiang Jin, Cetin Kiris, and Subhash Saini. An application-based performance characterization of the Columbia Supercluster. In ACM [ACM05], page 26. ISBN 1-59593-061-2. LCCN ????

Bergen:2005:XUL

[BHR05] B. Bergen, F. Hulsemann, and U. Rude. Is 1.7×10^{10} unknowns the largest finite element system that can be solved today? In ACM [ACM05], page 5. ISBN 1-59593-061-2. LCCN ????

Cai:2005:ODL

[CAB05] Y. Dora Cai, Ruth Aydt, and Robert J. Brunner. Optimized data loading for a multi-terabyte sky survey repository. In ACM [ACM05], page 42. ISBN 1-59593-061-2. LCCN ????

Carrington:2005:HWC

[CCD05] Laura C. Carrington, Roy L. Campbell, and Larry P. Davis. How well can simple metrics represent the performance of HPC applications? In ACM [ACM05], page 48. ISBN 1-59593-061-2. LCCN ????

Cook:2005:TSA

[CCW+05] Andrew W. Cook, William H. Cabot, Peter L. Williams, Brian J. Miller, Bronis R.de Supinski, Robert K. Yates, and Michael L. Welcome. Terascalable algorithms for variable-density elliptic hydrodynamics with spectral accuracy. In ACM [ACM05], page 60. ISBN 1-59593-061-2. LCCN ????

Cavazos:2005:ATI

[CO05] John Cavazos and Michael F. P. O'Boyle. Automatic tuning of inlining heuristics. In ACM [ACM05], page 14. ISBN 1-59593-061-2. LCCN ????

denBurger:2005:BMH

[dBKB05] Mathijs den Burger, Thilo Kielmann, and Henri E. Bal. Balanced multicasting: High-throughput communication for Grid applications. In ACM [ACM05], page 46. ISBN 1-59593-061-2. LCCN ????

Downie:2005:TMM

[DF05] J. Stephen Downie and Joe Futrel. Terascale music mining. In ACM [ACM05], page 71. ISBN 1-59593-061-2. LCCN ????

Danalis:2005:TPC

[DKPS05] Anthony Danalis, Ki-Yong Kim, Lori Pollock, and Martin Swany. Transformations to parallel codes for communication-computation overlap. In ACM [ACM05], page 58. ISBN 1-59593-061-2. LCCN ????

Duque:2005:VLS

[DL05] Earl P. N. Duque and Steve M. Legensky. Visualization of large-scale unsteady computational fluid dynamics datasets. In ACM [ACM05], page 73. ISBN 1-59593-061-2. LCCN ????

Dorojevets:2005:OCP

[Dor05] Mikail Dorojevets. Opportunities, challenges, and projections for superconductor RSFQ microprocessors. In ACM [ACM05], page 65. ISBN 1-59593-061-2. LCCN ????

Dumitrescu:2005:GDA

[DRF05] Catalin Dumitrescu, Ioan Raicu, and Ian Foster. DI-GRUBER: A distributed approach to Grid resource brokering. In ACM [ACM05], page 38. ISBN 1-59593-061-2. LCCN ????

Erez:2005:FTT

[EJKD05] Mattan Erez, Nuwan Jayasena, Timothy J. Knight, and William J. Dally. Fault tolerance techniques for the Merrimac Streaming Supercomputer. In ACM [ACM05], page 29. ISBN 1-59593-061-2. LCCN ????

Ge:2005:PCD

[GFC05] Rong Ge, Xizhou Feng, and Kirk W. Cameron. Performance-constrained distributed DVS scheduling for scientific applications on power-aware clusters. In ACM [ACM05], page 34. ISBN 1-59593-061-2. LCCN ????

Gu:2005:SCC

[GG05] Yunhong Gu and Robert L. Grossman. Supporting configurable congestion control in data transport services. In ACM [ACM05], page 31. ISBN 1-59593-061-2. LCCN ????

Galoppo:2005:LGE

[GGHM05] Nico Galoppo, Naga K. Govindaraju, Michael Henson, and Dinesh Manocha. LU-GPU: Efficient algorithms for solving dense linear systems on graphics hardware. In ACM [ACM05], page 3. ISBN 1-59593-061-2. LCCN ????

Gan:2005:CQC

[GH05] Zhengting Gan and Robert J. Harrison. Calibrating quantum chemistry: A multi-teraflop, parallel-vector, full-configuration interaction program for the Cray-X1. In ACM [ACM05], page 22. ISBN 1-59593-061-2. LCCN ????

Guo:2005:BMM

[GLG+05] Y. Guo, J. G. Liu, M. Ghanem, K. Mish, V. Curcin, C. Haselwimmer, D. Sotiriou, K. K. Muraleetharan, and L. Taylor. Bridging the macro and micro: A computing intensive earthquake study using Discovery Net. In ACM [ACM05], page 68. ISBN 1-59593-061-2. LCCN ????

Grossman:2005:RTC

[GSA+05] Robert Grossman, Michal Sabala, Anushka Aanand, Steve Eick, Leland Wilkinson, Pei Zhang, John Chaves, Steve Vejcik, John Dillenburg, Peter Nelson, Doug Rorem, Javid Alimohideen, Jason Leigh, Mike Papka, and Rick Stevens. Real time change detection and alerts from highway traffic data. In ACM [ACM05], page 69. ISBN 1-59593-061-2. LCCN ????

Gioiosa:2005:TIC

[GSJP05] Roberto Gioiosa, Jose Carlos Sancho, Song Jiang, and Fabrizio Petrini. Transparent, incremental checkpointing at kernel level: a foundation for fault tolerance for parallel computers. In ACM [ACM05], page 9. ISBN 1-59593-061-2. LCCN ????

Gygi:2005:LSF

[GYL+05] Francois Gygi, Robert K. Yates, Juergen Lorenz, Erik W. Draeger, Franz Franchetti, Christoph W. Ueberhuber, Bronis R.de Supinski, Stefan Kral, John A. Gunnels, and James C. Sexton. Large-scale first-principles molecular dynamics simulations on the BlueGene/L platform using the Qbox code. In ACM [ACM05], page 24. ISBN 1-59593-061-2. LCCN ????

Hochstein:2005:PPP

[HCS+05] Lorin Hochstein, Jeff Carver, Forrest Shull, Sima Asgari, and Victor Basili. Parallel programmer productivity: A case study of novice parallel programmers. In ACM [ACM05], page 35. ISBN 1-59593-061-2. LCCN ????

Head:2005:BSS

[HGS+05] Michael R. Head, Madhusudhan Govindaraju, Aleksander Slominski, Pu Liu, Nayef Abu-Ghazaleh, Robert van Engelen, Kenneth Chiu, and Michael J. Lewis. A benchmark suite for SOAP-based communication in Grid Web services. In ACM [ACM05], page 19. ISBN 1-59593-061-2. LCCN ????

Hsu:2005:PAR

[hHcF05] Chung hsing Hsu and Wu chun Feng. A power-aware runtime system for high-performance computing. In ACM [ACM05], page 1. ISBN 1-59593-061-2. LCCN ????

Horn:2005:CSH

[HHH05] Daniel Reiter Horn, Mike Houston, and Pat Hanrahan. ClawHMMER: A streaming HMMer-search implementation. In ACM [ACM05], page 11. ISBN 1-59593-061-2. LCCN ????

Huck:2005:PPD

[HM05] Kevin A. Huck and Allen D. Malony. PerfExplorer: A performance data mining framework for large-scale parallel computing. In ACM [ACM05], page 41. ISBN 1-59593-061-2. LCCN ????

Humphrey:2005:ASS

[HWK+05] Marty Humphrey, Glenn Wasson, Yuliyan Kiryakov, Sang-Min Park, David Del Vecchio, and Norm Beekwilder. Alternative software stacks for OGSA-based Grids. In ACM [ACM05], page 20. ISBN 1-59593-061-2. LCCN ????

Ikegami:2005:FEC

[IIF+05] Tsutomu Ikegami, Toyokazu Ishida, Dmitri G. Fedorov, Kazuo Kitaura, Yuichi Inadomi, Hiroaki Umeda, Mitsuo Yokokawa, and Satoshi Sekiguchi. Full electron calculation beyond 20,000 atoms: Ground electronic state of photosynthetic proteins. In ACM

[ACM05], page 10. ISBN 1-59593-061-2. LCCN ????

Jha:2005:SSP

[JCH05] Shantenu Jha, Peter Coveney, and Matt Harvey. SPICE: Simulated Pore Interactive Computing Environment. In ACM [ACM05], page 70. ISBN 1-59593-061-2. LCCN ????

Jung:2005:DIM

[JSH+05] Hyungsoo Jung, Dongin Shin, Hyuck Han, Jai W. Kim, Heon Y. Yeom, and Jongsuk Lee. Design and implementation of multiple fault-tolerant MPI over Myrinet (M^3). In ACM [ACM05], page 32. ISBN 1-59593-061-2. LCCN ????

Krishnan:2005:MPC

[KAWN05] Manojkumar Krishnan, Yuri Alexeev, Theresa L. Windus, and Jarek Nieplocha. Multilevel parallelism in computational chemistry using common component architecture and global arrays. In ACM [ACM05], page 23. ISBN 1-59593-061-2. LCCN ????

Kappiah:2005:JTD

[KFL05] Nandini Kappiah, Vincent W. Freeh, and David K. Lowenthal. Just in time dynamic voltage scaling: Exploiting internode slack to save energy in MPI programs. In ACM [ACM05], page 33. ISBN 1-59593-061-2. LCCN ????

Karavanic:2005:IDT

[KMM+05] Karen L. Karavanic, John May, Kathryn Mohror, Brian Miller, Kevin Huck, Rashawn Knapp, and Brian Pugh. Integrating database technology with comparison-based parallel performance diagnosis: The PerfTrack performance experiment management tool. In ACM [ACM05], page 39. ISBN 1-59593-061-2. LCCN ????

Kamal:2005:SVT

[KPW05] Humaira Kamal, Brad Penoff, and Alan Wagner. SCTP versus TCP for MPI. In ACM [ACM05], page 30. ISBN 1-59593-061-2. LCCN ????

Kamil:2005:MSC

[KSY05] Amir Kamil, Jimmy Su, and Katherine Yelick. Making sequential consistency practical in Titanium. In ACM [ACM05], page 15. ISBN 1-59593-061-2. LCCN ????

Lin:2005:VMB

[LD05] Bin Lin and Peter A. Dinda. VSched: Mixing batch and interactive virtual machines using periodic real-time scheduling. In ACM [ACM05], page 8. ISBN 1-59593-061-2. LCCN ????

Luijten:2005:VOE

[LMH+05] Ronald Luijten, Cyriel Minkenberg, Roe Hemenway, Michael Sauer, and Richard Grzybowski. Viable opto-electronic HPC interconnect fabrics. In ACM [ACM05], page 18. ISBN 1-59593-061-2. LCCN ????

Mavriplis:2005:HRA

[MAB05] Dimitri J. Mavriplis, Michael J. Aftosmis, and Marsha Berger.

High resolution aerospace applications using the NASA Columbia Supercomputer. In ACM [ACM05], page 61. ISBN 1-59593-061-2. LCCN ????

Nakazawa:2005:MEM

[NLZ05] Mario Nakazawa, David K. Lowenthal, and Wendou Zhou. The MHETA execution model for heterogeneous clusters. In ACM [ACM05], page 7. ISBN 1-59593-061-2. LCCN ????

Nakashima:2005:MTR

[NNS+05] Hiroshi Nakashima, Hiroshi Nakamura, Mitsuhisa Sato, Taisuke Boku, Satoshi Matsuoka, Daisuke Takahashi, and Yoshihiko Hotta. MegaProto: 1 TFlops/10kW rack is feasible even with only commodity technology. In ACM [ACM05], page 28. ISBN 1-59593-061-2. LCCN ????

Oliker:2005:LCM

[OCW+05] Leonid Oliker, Jonathan Carter, Michael Wehner, Andrew Canning, Stephane Ethier, Art Mirin, David Parks, Patrick Worley, Shigemune Kitawaki, and Yoshinori Tsuda. Leading computational methods on scalar and vector HEC platforms. In ACM [ACM05], page 62. ISBN 1-59593-061-2. LCCN ????

Odom:2005:UDT

[OHD+05] Jeffrey Odom, Jeffrey K. Hollingsworth, Luiz DeRose, Kattamuri Ekanadham, and Simone Sbaraglia. Using dynamic tracing sampling to measure long running programs. In ACM [ACM05], page 59. ISBN 1-59593-061-2. LCCN ????

Petrou:2005:SST

[PGG05] David Petrou, Garth A. Gibson, and Gregory R. Ganger. Scheduling speculative tasks in a compute farm. In ACM [ACM05], page 37. ISBN 1-59593-061-2. LCCN ????

Popovici:2005:PSU

[PW05] Florentina I. Popovici and John Wilkes. Profitable services in an uncertain world. In ACM [ACM05], page 36. ISBN 1-59593-061-2. LCCN ????

Silver:2005:STH

[Sil05] Arnold H. Silver. Superconductor technology for high-end computing system issues and technology roadmap. In ACM [ACM05], page 64. ISBN 1-59593-061-2. LCCN ????

Shalf:2005:AUS

[SKOS05] John Shalf, Shoaib Kamil, Leonid Oliker, and David Skinner. Analyzing ultra-scale application communication requirements for a reconfigurable hybrid interconnect. In ACM [ACM05], page 17. ISBN 1-59593-061-2. LCCN ????

Sahoo:2005:ILO

[SKPS05] Swarup Kumar Sahoo, Sriram Krishnamoorthy, Rajkiran Panuganti, and P. Sadayappan. Integrated loop optimizations for data locality enhancement of tensor contraction expressions. In ACM [ACM05], page 13. ISBN 1-59593-061-2. LCCN ????

Sanfilippo:2005:AVA

[SMD+05] Antonio Sanfilippo, Richard May, Gary Danielson, Bob Baddeley, Rick Riensche, Skip Kirby, Sharon Collins, Susan Thornton, Kenneth Washington, Matt Schrager, Jamie Van Randwyk, Bob Borchers, and Doug Gatchell. An adaptive visual analytics platform for mobile devices. In ACM [ACM05], page 74. ISBN 1-59593-061-2. LCCN ????

Smith:2005:SBF

[Smi05] Burton J. Smith. System balance and fast clocks. In ACM [ACM05], page 67. ISBN 1-59593-061-2. LCCN ????

Strohmaier:2005:AMG

[SS05] Erich Strohmaier and Hongzhang Shan. Apex-Map: A global data access benchmark to analyze HPC systems and parallel programming paradigms. In ACM [ACM05], page 49. ISBN 1-59593-061-2. LCCN ????

Sterling:2005:TTA

[Ste05] Thomas Sterling. Towards a technology and architecture hybrid? In ACM [ACM05], page 63. ISBN 1-59593-061-2. LCCN ????

Siddiqui:2005:GGA

[SVHF05] Mumtaz Siddiqui, Alex Villazon, Jurgen Hofer, and Thomas Fahringer. GLARE: A Grid activity registration, deployment and provisioning framework. In ACM [ACM05], page 52. ISBN 1-59593-061-2. LCCN ????

Stockinger:2005:NTA

[SWC+05] Kurt Stockinger, Kesheng Wu, Scott Campbell, Stephen Lau, Mike Fisk, Eugene Gavrilov, Alex Kent, Christopher E. Davis, Rick Olinger, Rob Young, Jim Prewett, Paul Weber, Thomas P. Caudell, E. Wes Bethel, and Steve Smith. Network traffic analysis with query driven visualization SC 2005 HPC analytics results. In ACM [ACM05], page 72. ISBN 1-59593-061-2. LCCN ????

Thain:2005:IBN

[Tha05] Douglas Thain. Identity boxing: A new technique for consistent global identity. In ACM [ACM05], page 51. ISBN 1-59593-061-2. LCCN ????

Tripp:2005:PHS

[THGM05] Justin L. Tripp, Anders A. Hanson, Maya Gokhale, and Henning Mortveit. Partitioning hardware and software for reconfigurable supercomputing applications: A case study. In ACM [ACM05], page 27. ISBN 1-59593-061-2. LCCN ????

Thain:2005:SAR

[TKW+05] Douglas Thain, Sander Klous, Justin Wozniak, Paul Brenner, Aaron Striegel, and Jesus Izaguirre. Separating abstractions from resources in a tactical storage system. In ACM [ACM05], page 55. ISBN 1-59593-061-2. LCCN ????

Tzeng:2005:IFE

[TM05] Fan-Yin Tzeng and Kwan-Liu Ma. Intelligent feature extraction and tracking for visualizing large-scale 4D flow simulations. In ACM [ACM05], page 6. ISBN 1-59593-061-2. LCCN ????

Tipparaju:2005:OAA

[TN05] Vinod Tipparaju and Jarek Nieplocha. Optimizing all-to-all collective communication by exploiting concurrency in modern networks. In ACM [ACM05], page 46. ISBN 1-59593-061-2. LCCN ????

Tu:2005:SPO

[TOG05] Tiankai Tu, David R. O'Hallaron, and Omar Ghattas. Scalable parallel octree meshing for terascale applications. In ACM [ACM05], page 4. ISBN 1-59593-061-2. LCCN ????

Tabatabaee:2005:PPT

[TTH05] Vahid Tabatabaee, Ananta Tiwari, and Jeffrey K. Hollingsworth. Parallel parameter tuning for applications with performance variability. In ACM [ACM05], page 57. ISBN 1-59593-061-2. LCCN ????

VanDuzer:2005:CMR

[Van05] T. Van Duzer. Cryogenic memories for RSFQ ultra-high-speed processor. In ACM [ACM05], page 66. ISBN 1-59593-061-2. LCCN ????

Vazhkudai:2005:FSD

[VMF+05] Sudharshan S. Vazhkudai, Xiaosong Ma, Vincent W. Freeh, Jonathan W. Strickland, Nandan Tammineedi, and Stephen L. Scott. Freeloader: Scavenging desktop storage resources for scientific data. In ACM [ACM05], page 56. ISBN 1-59593-061-2. LCCN ????

Wu:2005:PMT

[WKWZ05] Meng-Shiou Wu, Ricky A. Kendall, Kyle Wright, and Zhao Zhang. Performance modeling and tuning strategies of mixed mode collective communications. In ACM [ACM05], page 45. ISBN 1-59593-061-2. LCCN ????

Weinberg:2005:QLM

[WMSS05] Jonathan Weinberg, Michael O. McCracken, Erich Strohmaier, and Allan Snavely. Quantifying locality in the memory access patterns of HPC applications. In ACM [ACM05], page 50. ISBN 1-59593-061-2. LCCN ????

Yoo:2005:SDP

[YCH+05] Andy Yoo, Edmond Chow, Keith Henderson, William McLendon, Bruce Hendrickson, and Umit Catalyurek. A scalable distributed parallel breadth-first search algorithm on BlueGene/L. In ACM [ACM05], page 25. ISBN 1-59593-061-2. LCCN ????

Yamada:2005:TBD

[YIM05] Susumu Yamada, Toshiyuki Imamura, and Masahiko Machida. 16.447 TFlops and 159-billion-dimensional exact-diagonalization for trapped Fermion–Hubbard model on the Earth Simulator. In

ACM [ACM05], page 44. ISBN 1-59593-061-2. LCCN ????

Yang:2005:CPP

[YMM05] Leo T. Yang, Xiaosong Ma, and Frank Mueller. Cross-platform performance prediction of parallel applications using partial execution. In ACM [ACM05], page 40. ISBN 1-59593-061-2. LCCN ????

Zhang:2005:GSC

[ZAKB+05] Yun Zhang, Faisal N. Abu-Khzam, Nicole E. Baldwin, Elissa J. Chesler, Michael A. Langston, and Nagiza F. Samatova. Genome-scale computational approaches to memory-intensive applications in systems biology. In ACM [ACM05], page 12. ISBN 1-59593-061-2. LCCN ????

Zhuo:2005:HPL

[ZP05] Ling Zhuo and Viktor K. Prasanna. High performance linear algebra operations on reconfigurable systems. In ACM [ACM05], page 2. ISBN 1-59593-061-2. LCCN ????