

High Performance Computing 2004 University of Southern California, EEB 200C Los Angeles, CA 90089-2562 USA





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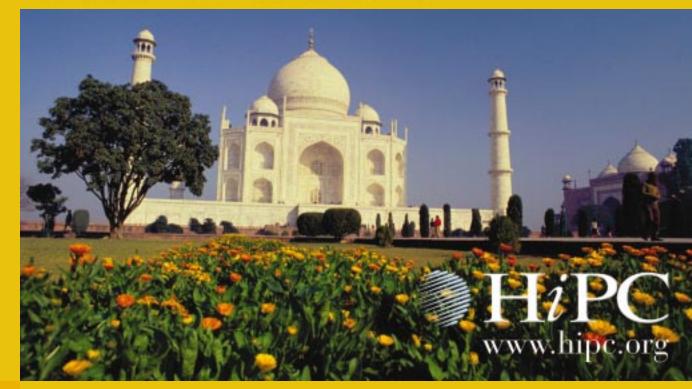
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Steering Committee 2004 membership also includes the general co-chairs, program chairs and vice general chairs from 2003, 2004, and 2005.



HiPC 2004

December 19 - 22, 2004 Bangalore, India



About Bangalore

Bangalore, a bustling metropolis, is the fifth largest city in India and the capital of the state of Karnataka. It is the main center of the Information Technology industry in India; almost every Indian and multinational IT company has a presence here. Bangalore is home to the Indian Institute of Science (11Sc), a premier research institute, and many other aerospace and high technology industries including the Centre for Development of Advanced Computing. Karnataka is home of many ancient Indian architectural marvels, wildlife sanctuaries, rain forests (the Western Ghats), pristine beaches, and rich and hoary cultural traditions.













MEETING COSPONSORED BY

Indian Institute of Information Technology, Bangalore IEEE Computer Society Technical Committee on Parallel Processing

European Association for Theoretical Computer Science

IFIP Working Group on Concurrent Systems National Association of Software and Services Companies (NASSCOM) Manufacturers Association for Information Technology (MAIT)

HELD IN CO-OPERATION WITH

Indian Institutes of Technology Institute of Technology, Banaras Hindu University, Varanasi Software Technology Parks of India

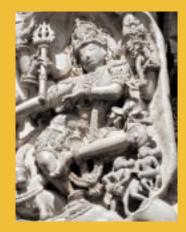
Tata Institute of Fundamental Research, India Centre for Artificial Intelligence

Research(CAIR), India

CSIR Centre for Mathematical Modeling and Computer Simulation, India

11th International Conference on High Performance Computing

December 19 - 22, 2004 • Bangalore, India



The 11th Annual International Conference on High Performance **Computing** (HiPC 2004) will be held in Bangalore, the Silicon Valley of India, during December 19-22, 2004. It will serve as a forum to present current work by researchers from around the world as well as highlight activities in Asia in the high performance computing area. The conference has a history of attracting participation from reputed researchers from all over the world.

The tenth meeting held in Hyderabad, India, in 2003 had 48 contributed papers that were selected from 164 submissions from 11 countries. The conference had tutorials on cutting edge topics in high

performance computing and related areas by leading researchers from academia and industry. The 9th HiPC Conference (HiPC 2002) held in Bangalore, India, in December 2002, had 57 contributed papers that were selected from 145 submissions from 12 countries and approximately 300 participants attended the meeting. Please refer to the website http://www.hipc.org for more information on previous meetings.

MEETING INFORMATION

The advance program will be available in July 2004. Check www.hipc.org for updated information.

CALL FOR PARTICIPATION

CALL FOR PAPERS

Authors are invited to submit original unpublished manuscripts that demonstrate current research in all areas of high performance computing including design and analysis of parallel and distributed systems, embedded systems, and their applications in scientific, engineering, and commercial areas. Topics of interest include but are not limited to:

- Wireless and Mobile Computing
- Communication Networks and Sensor Networks
- Web-based Meta/Grid/P2P Computing
- Scalable Servers and System Area Networks
- Scientific/Engineering Applications
- Commercial Applications and Workloads • High-speed Networks and Interconnection Networks
- Power-Efficient and Reconfigurable Architectures
- Superscalar, Speculative, VLIW, and SMT Microarchitectures
- Compiler Technology for Power-aware and High-performance Computing
- Parallel and Distributed Computing
- Heterogeneous Computing
- Network- and Cluster-based Computing
- Embedded Applications and Systems
- Network Processor and Router Architectures
- Scalable and Latency-tolerant Algorithms
- Parallel Languages and Programming Environments
- EPIC Compilers and Software Support for ILP and TLP
- Operating Systems for Scalable and High-performance Computing

Submitted manuscripts may not exceed 15 double-spaced pages of text using 12 point size type on 8.5 x 11 inch pages with margins of at least 1 inch on each of the four sides. References, figures, tables, etc. may be included in addition to the fifteen pages of text. Authors should submit a correct PostScript (level 2) file of their paper to be considered and make sure that the PostScript file will print on a PostScript printer that uses 8.5 x 11 inch size (letter size) paper. The official language of the meeting is English.

Manuscript submission procedures are available over the Web at http://www.hipc.org. Electronic submissions must be in the form of a readable postscript file. Authors unable to submit over the web can send an e-mail message to pc@hipc.org containing the following header information in ASCII form: title, author name(s) and affiliation, abstract, keyword or topic area, postal address, e-mail address, and telephone and fax numbers. The header (in ASCII) should be followed by the PostScript version of the complete manuscript (including title, author names, affiliation, and abstract). The subject line of the e-mail should include either one of the topic areas for the paper as given above or 5-10 keywords for the paper.

Hard copy submissions are permitted but electronic submissions are strongly encouraged. Like electronic submissions, hard copy submissions must be received by May 3, 2004. Please send six copies of the manuscript to the Program Chair. Fax submissions will not be considered.

Manuscripts must be received by May 3, 2004. All manuscripts will be reviewed. Submitted papers must not be currently under review for any other publication. Submissions received after the due date or exceeding the length limit may not be considered. Notification of review decisions will be mailed by July 12, 2004. Camera-ready papers are due August 16, 2004. Proceedings will be available at the conference and also on the Web after the conference.

PROGRAM CHAIR Luc Bouge, IRISA/ENS Cachan, France ENS Cachan/Bretagne Campus de Ker Lann F-35170 Bruz, France e-mail: Luc.Bouge@bretagne.ens-cachan.fr

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Thilo Kielmann, Vrije Universiteit, The Netherlands

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IMPORTANT DATES	
May 3, 2004	Conference Paper Due
May 10, 2004	Workshop Proposal Due
May 17, 2004	Tutorial Proposal Due
July 12, 2004	Notification of Acceptance/Rejection
August 16, 2004	Camera-Ready Paper Due
October 4, 2004	Poster/Presentation Summary Due

COMMUNICATION NETWORKS:

Bengt Ahlgren, SICS, Kista, Sweden Suman Banerjee, University of Maryland Erdal Cayirci, Istanbul Technical University, Turkey Sonia Fahmy, Purdue University Paul Havinga, University of Twente, The Netherlands Ahmed Helmy, University of Southern California Abhay Karandikar, IIT Bombay, India Amit Kumar, IIT Delhi, India Krishna Sivalingam, University of Maryland Baltimore County C. Siva Ram Murthy, IIT Madras, India Yoshito Tobe, Tokyo Denki University, Japan Yu-Chee Tseng, National Taiwan University, Taiwan Daniel Zappala, University of Oregon

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These awards, sponsored by Infosys, will be awarded to outstanding contributed papers in two areas: a) Algorithms and Applications and b) Systems.

AWARDS CHAIR: Arvind, MIT

Proposals are solicited for workshops to be held in conjunction with the main conference. Interested individuals should submit a proposal by May 10, 2004 to the Workshops Chair. For additional details and submission procedure visit http://www.hipc.org/hipc2004.

WORKSHOPS CHAIR: C. P. Ravikumar, Texas Instruments India e-mail: ravikumar@india.ti.com

POSTER/PRESENTATION SESSIONIn addition to the contributed papers session, a plenary poster/presentation session emphasizing novel applications of high performance computing is planned. It will offer brief presentation time for each poster and will be followed by a "walk-up and talk" setting. To be considered, send a 5 page summary of your work to the Poster/Presentation Chair by October 4, 2004. For additional details, contact the Poster/Presentation Chair.

POSTER/PRESENTATION CHAIR: Rajkumar Buyya, The University of Melbourne e-mail: rajkumar@buyya.com

TUTORIALS

Proposals are solicited for tutorials to be held at the meeting. Interested individuals should submit a proposal by May 17, 2004 to the Tutorials Chair. The proposal should include a brief description of the intended audience, a lecture outline, and a vita for each lecturer.

TUTORIALS CHAIR: Srinivas Aluru, Iowa State University e-mail: aluru@iastate.edu

EXHIBITS/VENDOR PRESENTATIONS

Companies and R&D laboratories are encouraged to present their exhibits at the meeting. In addition, a full day of vendor presentations is planned. For details, visit www.hipc.org/hipc2004/

INDUSTRY LIAISON CHAIR: Sudheendra Hangal, Sun Microsystems e-mail: sudheendra.hangal@sun.com

