



हाइपीसी HiPC

17TH INTERNATIONAL CONFERENCE ON HIGH PERFORMANCE COMPUTING

Dec 19-22, 2010, Goa, India

PROGRAM HIGHLIGHTS

The 17th International Conference on High Performance Computing (HiPC 2010), to be held in Goa, India, during December 19-22, 2010, will serve as a forum for presenting current work by researchers from around the world as well as to highlight activities in Asia, in the area of high performance computing.

KEYNOTE SPEAKERS

➤ **RICHARD W. LINDERMAN**

Chief Scientist, Information Directorate, Air Force Research Laboratory, Rome, NY, USA
[Moving Towards Interactive, Green HPC](#)

➤ **EDWARD H. SEIDEL**

Director of Louisiana State University's Center for Computation & Technology
Assistant Director, Directorate of Mathematical and Physical Science, US National Science Foundation & Floating Point Systems Professor in Louisiana State University's Departments of Physics & Astronomy and Computer Science, USA
[The Data and Compute-Driven Transformation of Modern Science](#)

➤ **MARC SNIR**

Michael Faiman and Saburo Muroga Professor in the Department of Computer Science at UIUC, USA
[Software for Future Exascale Systems](#)

CONTRIBUTED PAPERS

The technical program will consist of 40 contributed papers chosen from 208 submissions from 22 countries. The papers will be presented in 9 sessions covering important and timely topics such as performance consistency, virtualization, fault tolerance and power management for large scale HPC and Cloud infrastructures, routing, reliability and scheduling for mobile and sensor networks, and programming support, shared memory abstractions and applications for multi-core and GPU systems.

STUDENT RESEARCH SYMPOSIUM

The conference will feature the third student research symposium on High Performance Computing on Sunday, December 19th, aimed at stimulating and fostering student research, and providing an international forum to highlight student research accomplishments. The one-day symposium will feature brief presentations by student authors on their research and a poster exhibit, and will be followed by a reception and industry-student mixer.

WORKSHOPS

As part of the conference, 3 workshops will be hosted on Sunday, December 19th, 2010.

- Workshop on Hybrid Multicore Computing
- Workshop on Energy Efficient High-Performance Computing
- Reaching Exascale in this Decade



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INDUSTRY USER SYMPOSIUM

The symposium will bring together providers and users of HPC to provide a forum for presenting the state-of-the-art in HPC platforms and technologies, for discussing best practices and for exchanging experiences. This one-day symposium, to be held on Tuesday, December 21st, will feature three special sessions with presentations from international experts focused on the role of HPC in **Climate and Weather Modeling**, **Challenges and Best Practices in HPC Applications Development** with an emphasis on **Nano and Material Sciences** domains, and an industry led session on **Computing Futures - Experiences and Challenges**.

INDUSTRY/RESEARCH EXHIBITS

This two-day exhibition session, to be held on Monday, December 20th and Tuesday, December 21st, will consist of exhibits/presentations from vendor companies and R&D laboratories.

CONFERENCE REGISTRATION

Conference registration includes attendance at all workshops and technical sessions and a copy of the HiPC 2010 proceedings. The early registration deadline for discounted fees is November 16th. International attendees are advised to start the process for their registration and application for a travel visa as soon as possible. Visit the conference website for further details.

INFORMATION FOR INDIA-BASED PARTICIPANTS

Registration at reduced rates is made possible for India-based faculty, students, and researchers through sponsorships from India based industries and organizations. Travel scholarships for India-based students are available on a merit basis to promote HPC research in India.

SPONSORSHIP OPPORTUNITIES

The HiPC conference is annually sponsored by several Indian and international organizations, institutions, and companies. For sponsorship opportunities, contact the Industry Co-Chairs at industry@hipc.org.

For further details on any of the above, visit the conference website at www.hipc.org.

CONFERENCE ORGANIZATION

GENERAL CO-CHAIRS

MANISH PARASHAR, Rutgers University, USA
RAJEEV MURALIDHAR, Intel, India

PROGRAM CHAIR

FRANCK CAPPELLO
INRIA, France and Univ. of Illinois at Urbana-Champaign, USA

STEERING COMMITTEE CHAIR

VIKTOR K. PRASANNA, Univ. of Southern California, USA

PROGRAM VICE CHAIRS

ALGORITHMS:
YVES ROBERT, ENS Lyon & Institut Universitaire de France

APPLICATIONS:
ESMOND G. NG, Lawrence Berkeley National Laboratory USA

ARCHITECTURE:
TONI COSTES, Barcelona Supercomputing Center, Spain

COMMUNICATION NETWORKS:
RAJEEV THAKUR, Argonne National Lab., USA

MOBILE AND SENSOR COMPUTING:
SAJAL K. DAS, Univ. of Texas at Arlington & NSF, USA
SUSHIL K. PRASAD, Georgia State University, USA

SYSTEMS SOFTWARE:
LAXMIKANT KALE, Univ. of Illinois at Urbana-Champaign, USA

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IN COOPERATION WITH



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