



INTERNATIONAL
CENTRE *for*
THEORETICAL
SCIENCES

TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Scientific Discovery Through Intensive Data Exploration

02–11
February
2011



Jawaharlal Nehru Centre for
Advanced Scientific Research
Bangalore, India.

This meeting is a program of the International Centre for Theoretical Sciences (ICTS) on a topic of immense contemporary importance, the use of massive data-sets and computations for scientific explorations. The main aim is to bring together experts working on scientific questions using vast amounts of observational, experimental, and/or numerical data, along with experts working on the mathematical and computer-scientific aspects of storing, curing, accessing, visualising, and analysing such large data-sets. The meeting will consist of keynote lectures, research talks, a public lecture, and a pedagogical workshop component which will include hands-on computational laboratories. It is hoped that both the keynote and research talks will outline the important problems in their respective areas, discuss how data based discovery is leading to significant contributions in resolving these problems, point the way to future avenues for research, and be accessible to a wide section of scientists from the following fields that will be represented at the meeting.

- Technology and Statistical Methods
- Life and Health Sciences
- Astronomy
- Earth Sciences
- High Energy Physics
- Materials Science and Chemistry

ORGANIZING COMMITTEE

Amit Apte, Centre for Applicable Mathematics, Tata Institute of Fundamental Research, Bangalore
Vivek Borkar, School of Technology and Computer Science, Tata Institute of Fundamental Research, Mumbai
Vijay Chandru, Strand Life Sciences, Bangalore
Ravi Kannan, Microsoft Research Labs, Bangalore
Ravi Nanjundiah, Centre for Atmospheric and Oceanic Sciences, Indian Institute of Sciences, Bangalore
Roddam Narasimha, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore
J. Srinivasan, Centre for Atmospheric and Oceanic Sciences, Indian Institute of Sciences, Bangalore
Spenta Wadia, ICTS, Tata Institute of Fundamental Research, Mumbai / Bangalore.

Keynote Speakers

Tony Cass, CERN, Geneva
Ian Foster, Argonne National Laboratory
Michael Mahoney, Stanford University
Tim Palmer, European Centre for Medium-Range Weather Forecasts
Ram Sasisekharan, Massachusetts Institute of Technology, USA

Invited Speakers

Srinivas Aluru, Iowa State University Ames
Soumen Chakrabarti, Indian Institute of Technology Bombay, India
Vijay Chandru, Strand Life Sciences
Vipin Chaudhary, Computational Research Laboratories, Pune India
Alok Choudhary, Northwestern University
Andreas Dress, Shanghai Institutes for Biological Sciences, China
Yashwant Gupta, National Centre for Radio Astronomy TIFR, Pune, India
Ramesh Hariharan, Strand Life Sciences
Jayant Haritsa, Indian Institute of Science, Bangalore, India
Ravi Kannan, Microsoft Research
T.N. Krishnamurti, Florida State University Tallahassee
Eckart Meiburg, University of California, Santa Barbara
Niranjan Nagarajan, Genome Institute of Singapore
Sandeep Sirothia, National Centre for Radio Astronomy TIFR, Pune, India
J. Srinivasan, Indian Institute of Science, Bangalore India
Umesh Waghmare, JNCASR, Bangalore

For participation and additional information, please visit
<http://www.icts.res.in/program/DataSci2011> or send an email to datasci2011@gmail.com