ICCS 2010: "Celebrating 10 years of Advancing Computational Thinking"

Computational Science
University of Amsterdam
The Netherlands
May 31 - June 2, 2010

In 2010 ICCS celebrates its 10th anniversary in Amsterdam.
For this great event we will have five world leading keynote speakers to give their vision on Computational Science now and in the future.

The **International Conference on Computational Science 2010** (ICCS 2010) aims to bring together researchers and scientists from mathematics and computer science as basic computing disciplines, researchers from various application areas who are pioneering advanced application of computational methods to sciences such as physics, chemistry, life sciences, and engineering, arts and humanitarian fields, along with software developers and vendors, to discuss problems and solutions in the area, to identify new issues, and to shape future directions for research, as well as to help industrial users apply various advanced computational techniques.

Besides our excellent keynote speakers, out of the submitted papers to main track and workshops, we have selected some 30% high-quality papers for presentation at the conference and publication in the proceedings, published by Elsevier in the Procedia in Computer Science series.

ICCS 2010 is the tenth in the series of highly successful conferences; for the previous nine very successful meetings see: http://www.iccs-meeting.org

Since its beginnings in 2001, ICCS has attracted increasingly higher quality and numbers of attendees and papers. Average attendance each year is about 400 participants. The proceedings series have become a major intellectual resource for computational science researchers and serve to both define and advance the state of the field.

The theme for ICCS 2010 in Amsterdam is "Advancing Computational Thinking", to mark several decades of progress in computational science theory and practice, leading to greatly improved applications in science. This conference will be a unique event focusing on recent developments in methods and modelling of complex systems for diverse areas of science, scalable scientific algorithms, advanced software tools, computational grids, advanced numerical methods, and novel application areas where the above novel models, algorithms and tools can be efficiently applied such as physical systems, computational and systems biology, environmental systems, finance, and others.

We look forward to welcoming you to this exciting event!

Sponsors

NWO Netherlands Organisation for Scientific Research	**ELSEVIER**
KNAW Royal Netherlands Academy of Arts and Sciences	UNIVERSITEIT VAN AMSTERDAM

Scientific Organisation

Scientific Chair	Peter Sloot
Workshop Chair	Dick van Albada
Scientific Co-chair	Jack Dongarra

Keynotes

Stephen Wolfram
Seth Lloyd
Anton Zeilinger
Peter Hunter
László Barabási
Ed Seidel

Venue

Royal Tropical Institute,
Amsterdam, The Netherlands

Conference themes

- Scientific Computing
- Problem Solving Environments
- Advanced Numerical Algorithms
- Complex Systems: Modeling and Simulation
- Hybrid Computational Methods
- Web- and Grid-based Simulation and Computing
- Parallel and Distributed Computing
- Advanced Computing Architectures and New Programming Models
- Visualization and Virtual Reality in Computational Science
- Applications of Computation as a Scientific Paradigm
- New Algorithmic Approaches to Computational Kernels and Applications
- Computational Humanities
- Education in Computational Science
- Large Scale Scientific Instruments