

Call for Papers

39th International Symposium on Symbolic and Algebraic Computation (ISSAC 2014)

<http://www.issac-symposium.org/2014/>
July 23–25 2014, Kobe, Japan

The International Symposium on Symbolic and Algebraic Computation is the premier conference for research in symbolic computation and computer algebra. ISSAC 2014 is the 39th meeting in the series. The conference traditionally presents a range of invited speakers, tutorials, poster sessions and software demonstrations with a centre-piece of contributed research papers.

ISSAC 2014 is held July 23–25, 2014 at Kobe University, Japan. ISSAC 2014 is affiliated with “Kobe Computing Week 2014”, an event of Academic Exchange Weeks, Graduate School of Human Development and Environment, Kobe University.

ISSAC 2014 is one of satellite conferences of ICM 2014 (International Congress of Mathematicians), Korea. Also, SNC 2014 (Symbolic-Numeric Computation), Shanghai, China, is a satellite conference of ISSAC 2014.

Important Dates

Event:

- Workshops and tutorials: July 21–22, 2014
- ISSAC 2014 conference: July 23–25, 2014

Regular papers:

- Paper abstract submission: January 12, 2014
- Full paper submission deadline: January 19, 2014
- Notification of acceptance/rejection: March 30, 2014
- Final version due: April 30, 2014

Posters and Software presentations:

- Abstract submission: April 20, 2014
- Notification: May 16, 2014
- Final version: June 6, 2014

Conference Topics:

ISSAC 2014 invites the submission of original research contributions to be considered for publication and presentation at the conference. All areas of computer algebra and symbolic mathematical computation are of interest. These include, but are not limited to:

Algorithmic aspects:

- Exact and symbolic linear, polynomial and differential algebra
- Symbolic-numeric, homotopy, perturbation and series methods
- Computational algebraic geometry, group theory and number theory

- Computer arithmetic
- Summation, recurrence equations, integration, solution of ODEs & PDEs
- Symbolic methods in other areas of pure and applied mathematics
- Complexity of algebraic algorithms and algebraic complexity

Software aspects:

- Design of symbolic computation packages and systems
- Language design and type systems for symbolic computation
- Data representation
- Considerations for modern hardware
- Algorithm implementation and performance tuning
- Mathematical user interfaces

Application aspects:

Applications that stretch the current limits of computer algebra algorithms or systems, use computer algebra in new areas or new ways, or apply it in situations with broad impact.

Invited Speakers:

Nokiko Arai, David Stoutemyer, and Bernd Sturmfels

Organizers:

General Chairs: Kosaku Nagasaka and Franz Winkler

PC Chair: Agnes Szanto

Local Chair: Kosaku Nagasaka

Publicity: Ekaterina Shemyakova

Treasurer: Akira Terui

Poster Chair: Wen-shin Lee

Software Presentations Chair: Daniel Lichtblau

Tutorial Chair: Tetsu Yamaguchi

Workshop Chair: Takuya Kitamoto

Webmaster: Masaru Sanuki

Program Committee: Shaoshi Chen (Chinese Academy of Sciences, China), Carlos D'Andrea (U. Barcelona, Spain), Wayne Eberly (U. Calgary, Canada), Ioannis Emiris (U. Athens, Greece), Jean-Charles Faugere (INRIA, France), Mark Giesbrecht (U. Waterloo, Canada), Jonathan Hauenstein (North Carolina State University, USA), Evelyne Hubert (INRIA, France), Alexander Hulpke (Colorado State University, USA), Gabor Ivanyos (MTA SZTAKI, Hungary), Joseph Maurice Rojas (Texas A&M University, USA), Julio Rubio (Universidad de La Rioja, Spain), Mohab Safey el Din (Univ. Pierre and Marie Curie, France), Tateaki Sasaki (University of Tsukuba, Japan), Yosuke Sato (Tokyo U. of Science, Japan), Josef Schicho (RISC, Austria), Michael Singer (North Carolina State University, USA), Elena Smirnova (Texas Instruments, USA), Agnes Szanto (North Carolina State University, USA), Chee Yap (NYU, USA)