



General Chairs:

Indranil Sen Gupta

IIT Kharagpur, India

Rolf Drechsler

University of Bremen/DFKI, Germany

Program Chairs:

Iain Phillips

Imperial College, London, UK

Hafizur Rahaman

IIST Shibpur, India

Organizing Chair:

Amlan Chakrabarti

University of Calcutta, India

Research in reversible computation has drawn the attention of researchers over the years. Reversible computation has a growing number of promising application areas such as low power design, testing and verification, database recovery, discrete event simulation, reversible specification formalisms, reversible programming languages, process algebras, quantum computation, etc. Initial implementations of reversible and quantum circuits have been reported recently and are seen as promising alternatives to CMOS technology.

The conference will bring together researchers, academicians and students from computer science, electrical engineering, mathematics, and physics to discuss new developments and directions for future research in reversible computation. This particularly includes applications of reversibility in quantum computation. Research papers, tool demonstrations, work-in-progress reports and poster presentations are within the scope of the conference. Invited talks by leading international experts will complete the program. A summer school will be conducted on July 5, 2017 specifically targetted to the beginners in this area.

Contributions, not necessarily restricted to the following topics, in Reversible Computation are invited from prospective authors:

- Architectures
- Algorithms
- Circuit Design
- Debugging
- Fault Tolerance and Error Correction
- Hardware
- Information Theory
- Physical Realizations
- Programming Languages
- Quantum Computation
- Software
- Synthesis
- Theoretical Results
- Testing
- Verification

Interested researchers are invited to submit full research papers (16 pages maximum), as well as work-in-progress or tool demonstration papers (6 pages maximum) in Springer LNCS format. Some of the submissions can be accepted for poster presentation as well, and will appear in the proceedings with 4 pages maximum. All submitted papers will be peer-reviewed by at least three reviewers for technical merit, originality, significance and relevance to the scope of the conference. All accepted papers will be included in the conference proceedings and published by Springer as an Lecture Notes in Computer Science (LNCS) volume.

Important Dates (tentative):

- Abstract Submission: Tue February 14th, 2017 (EXTENDED)
- Submission Deadline: Mon February 20th, 2017 (EXTENDED)
- Notification to Authors: Mon March 20th, 2017
- Final Version Due: Mon April 10th, 2017
- Conference: Thu-Fri, July 6th and 7th, 2017

Further information about the conference:

<http://www.reversible-computation.org>
info@reversible-computation.org

Call for Papers

