

June 8–10, 2011 San Jose, California

Deadlines

Submission: Dec. 8, 2010, 19:59 ESTNotification: Feb. 18, 2011Final Copy: Mar. 11, 2011

Program Committee

Albert Atserias, UPC Barcelona
Richard Beigel, Temple U.
Dmitry Gavinsky, NEC Labs, US
Tali Kaufman, Bar-Ilan U. and Weizmann Inst.
Johannes Koebler, Humboldt U.
Toni Pitassi, U. of Toronto
Prasad Raghavendra, Georgia Tech
Anup Rao, U. of Washington
Ran Raz, Weizmann Institute
Omer Reingold (chair), MSR
Nitin Saxena, Hausdorff Center, Bonn

Local Organizing Chair

Peter Bro Miltersen, Aarhus U.

Conference Committee

Scott Aaronson, MIT
Manindra Agrawal, IIT Kanpur
Richard Beigel (publicity), Temple U.
Johan Håstad, KTH
Valentine Kabanets, Simon Fraser U.
Dieter van Melkebeek, U. of
Wisconsin
Peter Bro Miltersen (chair), Aarhus
U.
Ronen Shaltiel, U. of Haifa
Chris Umans, Caltech

The conference seeks original research papers in all areas of computational complexity theory, studying the absolute and relative power of computational models under resource constraints. Typical models include deterministic, nondeterministic, randomized, and quantum models; uniform and nonuniform models; Boolean, algebraic, and continuous models. Typical resource constraints involve time, space, randomness, program size, input queries, communication, and entanglement; worst-case as well as averagecase. Other, more specific, topics include: probabilistic and interactive proof systems, inapproximability, proof complexity, descriptive complexity, and complexity-theoretic aspects of cryptography and learning theory. The conference also encourages results from other areas of computer science and mathematics motivated by computational complexity theory.

Submission Papers must be submitted electronically via the conference web site at computationalcomplexity.org. The body of a submission can be up to 10 pages.

Presentation Authors of accepted papers are expected to present their work at the conference. The program committee will allocate slots ranging from 15 to 45 minutes.

Awards The conference offers awards for the best paper and the best student paper, as deemed by the program committee.

Publication Conference proceedings will be published by the IEEE Computer Society. This does not preclude subsequent journal publication of extended versions. The program committee will invite a select number of papers to a special journal issue dedicated to the conference.

FCRC 2011 The conference will take place as part of the 2011 Federated Computing Research Conference (FCRC 2011). More information on this appears below.

Computational Complexity: Additional Details

Simultaneous Submissions

Material which has been previously published in a journal or another conference proceedings, or which is scheduled for publication prior to July 2011 will not be considered for acceptance. Simultaneous submission of the same or essentially the same material to a journal or another conference with published proceedings (including STOC) is not allowed.

Authors are encouraged to submit their papers to the Electronic Colloquium on Computational Complexity at eccc.hpi-web.de/eccc.

Submission Format Guidelines

A submission consists of a title page (containing the title, author names and affiliations, and an abstract), a body of no more than 10 pages, a bibliography, and possible appendices. The paper should be in single-column format, use at least 11-point font, and have standard margins and spacing between lines. Submissions deviating from these guidelines risk summary rejection. In the body of the paper (i) explain what the major contributions are, (ii) convey why they are interesting, (iii) tell how they relate to prior work, and (iv) present the main ideas behind them. Use appendices to substantiate technical claims. The appendices will be read at the discretion of the Program Committee.

Final Copy Format Guidelines

The instructions for final copies will be communicated to the authors of accepted papers.

Special Issue

The special issue will appear in the journal Computational Complexity, published by Birkhäuser. It is scheduled to appear by the time of the next conference.

Best Paper Award

This award will be given to the most outstanding paper among all submissions. The program committee may decline to make the award or may split it among several papers.

Ronald V. Book Prize

This award will be given to the most outstanding submission that is written solely by one or more students. A paper is eligible if all authors are full-time students at the time of submission, which should be indicated in the submission registration. The program committee may decline to make the award or may split it among several papers.

FCRC 2011

This year the conference will be a part of the Federated Computing Research Conference (FCRC 2011). FCRC assembles a spectrum of affiliated research conferences and workshops into a week long coordinated meeting held at a common time in a common place. More information on FCRC 2011 can be found at http://www.acm.org/fcrc/.

Visas

A visa to the US may be needed for attending the conference, e.g., for citizens of China, India, and Russia. The web site travel.state.gov/visa has the exact rules. If a visa is needed, please get in touch with your local US consulate as soon as possible; the whole process may take several months. Feel free to contact the conference organizers if you need a letter to obtain your visa.

Sponsors

The conference is sponsored by the IEEE Computer Society Technical Committee for Mathematical Foundations of Computing in cooperation with ACM SIGACT and EATCS.