

Call for Papers

Twenty-fifth Annual IEEE Conference on Computational Complexity

June 9–12, 2010
Cambridge, Massachusetts

Deadlines

Submission: Dec. 15, 2009, 19:59 EST
Notification: Feb. 25, 2010
Final Copy: Mar. 19, 2010

Program Committee

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Conference Committee

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John Rogers (publicity), DePaul U.
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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 average-case. Other, more specific, topics include: probabilistic and interactive proof systems, inapproximability, proof complexity, descriptive complexity, and complexity-theoretic aspects of cryptography and machine learning. 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.

Colocation The conference will take place immediately after the 42nd ACM Symposium on Theory of Computing (STOC) and will overlap with the 11th ACM Conference on Electronic Commerce (EC), both of which will be held in Cambridge, MA.

More Information See the next page and the conference web site at computationalcomplexity.org. You may also contact the publicity chair, John Rogers <jrogers@cs.depaul.edu>.

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 2010 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.

Conference Site

The conference will be held on the campus of Harvard University. EC will also be held there, and STOC at the Hyatt Regency Cambridge. Lodging options include the STOC hotel, hotels in Harvard Square, and dormitories on the Harvard campus. For more information, see the local arrangements website at ccc2010.seas.harvard.edu.

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.