

# Call for Papers

# Computational Complexity

Nineteenth Annual IEEE Conference

<http://computationalcomplexity.org>

June 21–24, 2004

Amherst, Massachusetts

## Conference Committee

Lance Fortnow (chair), U. of Chicago  
Manindra Agrawal, Indian Inst. of  
Tech., Kanpur  
Harry Buhrman, CWI and U. of  
Amsterdam  
Peter Bro Miltersen, U. of Aarhus  
Toni Pitassi, U. of Toronto  
John Rogers, DePaul U.  
Michael Saks, Rutgers U.  
Avi Wigderson, Hebrew U. and IAS

## Program Committee

Russell Impagliazzo (chair), U. of  
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Shafi Goldwasser, MIT  
Subhash Khot, Georgia Tech and IAS  
Steven Rudich, CMU  
Chris Umans, Caltech  
Avi Wigderson, Hebrew U. and IAS

## Important Dates

Submissions Due: Nov. 26th, 2003  
Notification: Feb. 13th, 2004  
Final Copies Due: Apr. 9th, 2004

## Local Arrangements

David Mix Barrington, U. of  
Massachusetts, Amherst  
Neil Immerman, U. of Massachusetts,  
Amherst

The conference seeks original research papers in all areas of computational complexity theory. We also encourage results from other areas of computer science and mathematics motivated by topics in complexity theory.

The following list of possible topics is not exhaustive:

Complexity classes	Reducibility
Algebraic Complexity	Communication complexity
Proof complexity	Complexity and logic
Interactive proof systems	Nonapproximability
Circuits and other concrete computational models	Cryptographic complexity
Kolmogorov complexity	Complexity and learning
	Quantum computation

A submission must be received by **November 26th, 2003, 23:59 EST**, for consideration. The paper should not exceed 20 pages. For instructions on submitting, please see the web site [computationalcomplexity.org](http://computationalcomplexity.org).

Authors of accepted papers are expected to present their work at the conference. The program committee will determine time allocations for presentations (between 15 and 45 minutes). Conference proceedings will be published by the IEEE Computer Society. Publication in the conference proceedings does not preclude subsequent journal publication.

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

**More Information** Get more information at the web site, [computationalcomplexity.org](http://computationalcomplexity.org), or at this year's local arrangements web site, [www.cs.umass.edu/~barring/cc2004/](http://www.cs.umass.edu/~barring/cc2004/).

You may also contact the publicity chair: John Rogers, DePaul University, 243 S. Wabash, Chicago IL 60604, USA; E-mail: [jrogers@cs.depaul.edu](mailto:jrogers@cs.depaul.edu).

*The next page has more details.*

## Electronic Submissions

We prefer electronic submissions. Instructions can be found at the permanent conference web site [computationalcomplexity.org](http://computationalcomplexity.org).

## Submissions to other conferences

Abstract material which has been previously published in another conference proceedings or journal or which is simultaneously submitted to another conference with published proceedings may **not** be submitted to Computational Complexity 2004 and will **not** be considered for acceptance. Authors **are** encouraged to submit their papers to the Electronic Colloquium on Computational Complexity, found at the web site [www.eccc.uni-trier.de/eccc/](http://www.eccc.uni-trier.de/eccc/).

## Submission Guidelines

The conference has imposed a **firm** limitation of **twenty pages** (in 11 point or larger fonts) on submissions. This limit **includes** the bibliography and any technical appendices. Submissions deviating from these guidelines risk summary rejection. In your abstract (i) explain what the paper's major contributions are, (ii) convey why these contributions are interesting, and (iii) tell how these contributions relate to prior work.

Authors with no access to electronic submissions may contact Russell Impagliazzo, the program committee chair, by e-mail to [russell@cs.ucsd.edu](mailto:russell@cs.ucsd.edu) or by telephone at +1-858-534-1332.

## Final Copies

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

## Ronald V. Book Prize for Best Student Paper

This award will be given to the best paper written solely by one or more students. An abstract is eligible if all authors are full-time students at the time of submission. This should be indicated in the submission registration message or cover letter. The program committee may decline to make the award or may split it among several papers.

## Best Paper Award

This award will be given to the best paper submitted to the conference. This will be awarded by the program committee. The program committee may decline to make the award or may split it among several papers.

## Conference Abstracts

In conjunction with the conference, contributed short research abstracts will be collected and will be made available a few days before the conference. Attendance at the conference is *not* required to submit an abstract. For more details, check the conference web site or contact the abstracts editor: Stephen Fenner, Dept. of Computer Science and Engineering, U. of South Carolina, Columbia SC 29208 USA; E-mail: [fenner@cse.sc.edu](mailto:fenner@cse.sc.edu).

## The Conference Site

The conference will be held on the campus of the University of Massachusetts Amherst, in the beautiful Pioneer Valley of western Massachusetts. Amherst and nearby Northampton, each with a year-round population of about 20,000, are the centers of a region famous both for education (with four well-known undergraduate colleges as well as UMass) and agriculture. Historical sites, good restaurants, and recreational opportunities abound. Access by air is from Logan Airport in Boston (two hours drive) and Bradley Airport in Connecticut (one hour drive). Access by rail and bus is also possible.