

Call for Papers
STOC 2018
TheoryFest
June 25-29, 2018
Los Angeles, CA, USA

Submission Deadline: Friday, November 3, 2017 4:59pm EDT, 9:59pm CET

The 50th ACM Symposium on Theory of Computing (STOC 2018), sponsored by the ACM Special Interest Group on Algorithms and Computation Theory ([SIGACT](#)), will be held in **Los Angeles, CA, USA**. STOC will be part of TheoryFest, an expanded program of invited talks, tutorials, poster sessions, and workshops from **Monday, June 25 to Friday, June 29, 2018**. Papers presenting new and original research on the theory of computation are sought. Topics of interest include, but are not limited to: algorithms and data structures, computational complexity, randomness in computing, algorithmic graph theory and combinatorics, approximation algorithms, cryptography, computational learning theory, economics and computation, parallel and distributed algorithms, quantum computing, algorithmic coding theory, computational geometry, computational applications of logic, optimization, algebraic algorithms, and theoretical aspects of areas such as networks, privacy, computational biology, and databases. Papers that extend the reach of the theory of computing, or raise important problems that can benefit from theoretical investigation and analysis, are encouraged. The program committee will make every effort to consider a broad range of areas.

Submission format: Authors should submit a 10-page extended abstract, but are strongly encouraged to provide an appendix containing either the additional material that complements the 10-page submission, or the entire "full version" of their paper, or a link to a full version publicly available on an open repository such as Arxiv. The submission should start with a title page consisting of the title, authors' names, affiliation, and email address, and an abstract of 1 – 2 paragraphs. This should then be followed by a clear technical presentation of the merits of the paper, including a discussion of the paper's importance within the context of prior work and a description of the key technical and conceptual ideas used to achieve its main claims. The title page and the references do not have to be part of these 10 pages. The submission should be addressed to a broad spectrum of theoretical computer science researchers. Proofs must be provided which can enable the main mathematical claims of the paper to be fully verified, either in the main body or in the appendix. Material other than the first 10 pages will be read at the committee's discretion. The submission should be typeset using 11-point or larger fonts, in a single-column, single-space (between lines) format with ample spacing throughout and 1-inch margins all around, on letter-size (8 1/2 x 11 inch) paper. Submissions deviating significantly from these guidelines risk rejection without consideration of their merits.

Submission Instructions: Authors are required to submit their papers electronically, in PDF (without security restrictions on copying or printing). The submission server will be available by early October; at <https://stoc18.hotcrp.com/>

Authors are encouraged to also make full versions of their submissions freely accessible in an on-line repository such as the [arXiv](#), [ECCC](#), or the [Cryptology ePrint archive](#). (Papers that are not written well enough for public dissemination are probably also not ready for submission to STOC.) It is expected that authors of accepted papers will make their full papers, with proofs, publicly available by the camera-ready deadline.

Prior and Simultaneous Submissions: The conference will follow SIGACT's policy on prior publication and simultaneous submissions. Work that has been previously published in another conference proceedings or journal, or which is scheduled for publication prior to July 2018, will not be considered for acceptance at STOC 2018. The only exceptions to this policy are prior or simultaneous publications appearing in the journals Science and Nature. SIGACT policy does not allow simultaneous submissions of the same (or essentially the same) material to another conference with published proceedings. The program committee may consult with program chairs of other (past or future) conferences to find out about closely related submissions.

Dates:

Extended Abstract Submission: Friday, November 3, 2017, 9:59pm CET, 4:59pm EDT.

Attention: On Nov 3, North America is still using daylight savings time, Europe is not.

Notification: by email on or before Friday, February 9, 2018.

Deadline for accepted papers: A camera-ready copy of each accepted paper is required by Monday, April 2, 2018.

STOC talks: Monday morning June 25 to Friday afternoon June 29, 2018

TheoryFest activities: tba

Publication Date

AUTHORS TAKE NOTE: The official publication date is the date the proceedings are made available in the ACM Digital Library. This date may be up to two weeks prior to the first day of your conference. The official publication date affects the deadline for any patent filings related to published work. (For those rare conferences whose proceedings are published in the ACM Digital Library after the conference is over, the official publication date remains the first day of the conference.)

Presentation of Accepted Papers: One author of each accepted paper will be expected to present the work in the form of a talk at the conference. In addition, one or more authors will be expected to present the work in an evening poster session.

Best Paper Award: The program committee may designate up to three papers accepted to the conference as STOC Best Papers. Every submission is automatically eligible for this award. Rules for the award can be found at <http://www.sigact.org/Prizes/BestPaper>.

Danny Lewin Best Student Paper Award: A prize of \$500 will be given to the author(s) of the best student authored paper (or split between more than one paper if there is a tie). A paper is eligible if all of its authors are full-time students at the time of submission. To inform the program committee about a paper's eligibility, check the appropriate box in the web form

on the submission server. The list of past winners can be found at <http://www.sigact.org/Prizes/Student>.

Program Committee:

Dimitris Achlioptas (University of California, Santa Cruz)
Dorit Aharonov (Hebrew University, Israel)
Susanne Albers (Technical University of Munich, Germany)
Eric Allender (Rutgers University)
Sayan Bhattacharya (University of Warwick, UK)
Richard Cole (New York University)
Vitaly Feldman (IBM)
Uriel Feige (Weizmann Institute, Israel)
Sanjam Garg (University of California, Berkeley)
Ashish Goel (Stanford University)
Parikshit Gopalan (VMware)
Monika Henzinger (chair) (University of Vienna, Austria)
Giuseppe Italiano (University of Rome Tor Vergata, Italy)
Robert Kleinberg (Cornell University)
Claire Mathieu (The National Center for Scientific Research, France)
Ankur Moitra (Massachusetts Institute of Technology)
Danupon Nanongkai (KTH Royal Institute of Technology, Sweden)
Michal Pilipczuk (University of Warsaw, Poland)
Krzysztof Pietrzak (Institute of Science and Technology Austria)
Aaron Sidford (Stanford University)
Christian Sohler (TU Dortmund University, Germany)
Kunal Talwar (Google)
Prasad Tetali (Georgia Institute of Technology)
Luca Trevisan (University of California, Berkeley)
Thomas Vidick (California Institute of Technology)
Emo Welzl (ETH Zurich, Switzerland)
Philipp Woelfel (University of Calgary, Canada)
David Woodruff (Carnegie Mellon University)
Mary Wootters (Stanford University)

General Co-Chairs: Ilias Diakonikolas (University of Southern California), David Kempe (University of Southern California)

The committee intends to provide registered attendees with internet access to the Proceedings on a password-protected site that will be available from about two weeks before the conference until the end of the conference. Authors can opt out of this online distribution by contacting the program committee chair by April 2, 2018.

SIGACT provides travel awards to students without available support, and researchers from developing countries. More information on the award process will be posted shortly.