Call for Papers

STOC 2020

Theory Fest

June 22-26, 2020

Chicago, IL, USA

Submission Deadline: Monday, November 4, 2019, 11:59pm CST

The 52nd Annual ACM Symposium on the Theory of Computing (STOC 2020), sponsored by the ACM Special Interest Group on Algorithms and Computation Theory ([SIGACT](#)), will be held in Chicago, IL, USA. STOC will be part of Theory Fest, an expanded program of invited talks, tutorials, poster sessions, and workshops that will take place from **Monday, June 22** to **Friday, June 26, 2020.**

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: Submissions should start with a title page consisting of the title of the paper; each author's name, affiliation, and email address; and an abstract of 1-2 paragraphs summarizing the paper's contributions. There is no page limit and authors are encouraged to use the "full version" of their paper as the submission. The submission should contain, *within the initial ten pages* following the title page, a clear

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 contributions of the paper. 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. Although there is no bound on the length of a submission, material other than the abstract, references, and the first ten pages following the title page will be read at the committee's discretion. Authors are encouraged to put the references at the very end of the submission. 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 format (without security restrictions on copying or printing). The [submission server](#) is now open.

Authors are encouraged to make full versions of their submissions freely accessible in an online repository such as the [arXiv](#), [ECCC](#), or the [Cryptology ePrint archive](#). It is expected that authors of accepted papers will make their full papers, with complete proofs, publicly available by the camera-ready deadline.

Prior Publication and Simultaneous Submissions: The conference will follow ACM's policy on prior publication and simultaneous submissions that can be found [here](#). Work that has been previously published in another conference proceedings or journal, or which is scheduled for publication prior to July 2020, will not be considered for acceptance at STOC 2020. Work submitted to STOC 2020 may not be under review for another conference with published proceedings or a journal, until the acceptance or rejection decisions for STOC 2020 are sent to the authors. The only exception to this policy are prior or simultaneous publications appearing in the Science and Nature journals. 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: Monday, November 4, 2019 (11:59pm CST). Note: on Sunday November 3, Daylight Saving Time ends in the US.
Notification: by email on or before February 9, 2020.
Deadline for accepted papers: A camera-ready copy of each accepted paper is required by ~~Apr 10, 2020~~ Apr. 13, 2020.

STOC talks: from morning of Monday June 22 to afternoon of Friday June 26, 2020
Theory Fest activities: from morning of Monday June 22 to afternoon of Friday June 26, 2020

Camera-ready versions of accepted papers:
The camera-ready versions are due on Apr 13, 2020. The page limit is 14 pages. Final versions of accepted papers must adhere to the "sigconf" template, which is available (for both LaTeX and Word) from https://www.acm.org/publications/proceedings-template (LaTeX users, please use: \documentclass[sigconf,screen]{acmart}). Additional instructions will be sent directly to the authors of accepted papers.

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 a 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 https://www.sigact.org/prizes/best_paper.html.

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 https://www.sigact.org/prizes/student.html.

Program Committee:

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Sébastien Bubeck (Microsoft Research Redmond)
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Omri Weinstein (Columbia University)
Christian Wulff-Nilsen (University of Copenhagen)
Henry Yuen (University of Toronto)

General Co-Chairs: Konstantin Makarychev (Northwestern University), Yury Makarychev (Toyota Technological Institute at Chicago), Madhur Tulsiani (Toyota Technological Institute at Chicago).

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 March 16, 2020.

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