ICALP 2019 – First Call for Papers

https://icalp2019.upatras.gr/

The 46th International Colloquium on Automata, Languages, and Programming (ICALP) will take place in Patras, Greece, on 8-12 July 2019. ICALP is the main conference and annual meeting of the European Association for Theoretical Computer Science (EATCS). As usual, ICALP will be preceded by a series of workshops, which will take place on 8 July 2019.

Important Dates

Submission deadline: Monday 18 February 2019, 23:59 AoE
Notification: Friday 19 April 2019
Final manuscript due: Monday 29 April 2019
Early registration deadline: Thursday 30 May 2019

Deadlines are firm; late submissions will not be considered.

Invited Speakers

- Michal Feldman (Tel-Aviv University, Israel)

- Martin Grohe (RWTH Aachen, Germany)

- Ola Svensson (EPFL, Switzerland)

- Frits Vaandrager (Radboud University, The Netherlands)

- Mihalis Yannakakis (Columbia University,USA)

Submissions and Proceedings

ICALP proceedings are published in the Leibniz International Proceedings in Informatics (LIPIcs) series. This is a series of high-quality conference proceedings across all fields in informatics established in cooperation with Schloss Dagstuhl - Leibniz Center for Informatics. LIPIcs volumes are published according to the principle of Open Access, i.e., they are available online and free of charge.

Submission Guidelines. Authors are invited to submit an extended abstract of no more than 12 pages, excluding references presenting original research on the theory of computer science. All submissions must be formatted in the LIPIcs style (https://www.dagstuhl.de/en/publications/lipics/instructions-for-authors/) and submitted via Easychair to the appropriate track of the conference. The use of pdflatex and the LIPIcs style are mandatory: papers that deviate significantly from the required format may be rejected without consideration of merit. No prior publication and no simultaneous submission to other publication outlets (either a conference or a journal) is allowed.

Technical details necessary for a proper scientific evaluation of a submission must be included in the 12-page submission or in a clearly labelled appendix, to be consulted at the discretion of program committee members. Authors are strongly encouraged to also make full versions of their submissions freely accessible in an on-line repository such as ArXiv, HAL, ECCC.

Best Paper Awards. As in previous editions of ICALP, there will be best paper and best student paper awards for each track of the conference. In order to be eligible for a best student paper award, a paper should be authored only by students and should be marked as such upon submission.

Topics

Papers presenting original research on all aspects of theoretical computer science are sought. Typical but not exclusive topics of interest are:

Track A: Algorithms, Complexity and Games

- Approximation Algorithms

- Combinatorial Optimization

- Combinatorics in Computer Science

- Computational Biology

- Computational Complexity

- Computational Geometry

- Cryptography

- Data Structures

- Design and Analysis of Algorithms

- Foundations of Algorithmic Game Theory

- Machine Learning

- Parallel, Distributed and External Memory Computing

- Quantum Computing

- Randomness in Computation

Track B: Automata, Logic, Semantics, and Theory of Programming

- Algebraic and Categorical Models

- Automata, Games, and Formal Languages

- Emerging and Non-standard Models of Computation

- Databases, Semi-Structured Data and Finite Model Theory

- Logic in Computer Science, Theorem Proving and Model Checking

- Models of Concurrent, Distributed, and Mobile Systems

- Models of Reactive, Hybrid and Stochastic Systems

- Principles and Semantics of Programming Languages

- Program Analysis and Transformation

- Specification, Refinement, Verification and Synthesis

- Type Systems and Theory, Typed Calculi

Track C: Foundations of Networks and Multi-Agent Systems: Models, Algorithms and Information Management

- Algorithmic Aspects of Networks and Networking

- Algorithmic Game Theory

- Formal Methods for Network Information Management

- Foundations of Privacy, Trust and Reputation in Networks

- Foundations of Complex Networks

- Message-Passing Models of Distributed Computing

- Mobile and Wireless Networks and Communication

- Network Economics and Incentive-Based Computing Related to Networks

- Networks of Low Capability Devices

- Network Mining and Analysis

- Overlay Networks and P2P Systems

- Specification, Semantics, Synchronization of Networked Systems

- Theory of Security in Networks

Focus of track C. The aim for Track C is to be the leading venue for theory papers motivated by networking applications, and/or proposing theoretical results relevant to networking, certified analytically.

ICALP 2019 Programme Committee Chairs

- Track A: Algorithms, Complexity and Games

    - Stefano Leonardi, chair (Sapienza University of Rome, Italy)

- Track B: Automata, Logic, Semantics, and Theory of Programming

    - Christel Baier, chair (TU Dresden, Germany)

- Track C: Foundations of Networks and Multi-Agent Systems: Models, Algorithms and Information Management

    - Paola Flocchini, chair (University of Ottawa, Canada)

ICALP 2019 Proceedings Chair

- Ioannis Chatzigiannakis (Sapienza University of Rome, Italy)

- Emanuela Merelli (University of Camerino, Italy)

ICALP 2019 Organizing Committee

- Efstratios Gallopoulos (University of Patras, Greece)

- John Garofalakis (University of Patras and CTI, Greece)

- Christos Kaklamanis (University of Patras and CTI, Greece)

- Sotiris Nikoletseas (University of Patras and CTI, Greece)
  Conference Co-Chair

- Christos Zaroliagis (University of Patras and CTI, Greece)
  Conference Co-Chair