

**Call-for-Papers:**  
**The 42nd International Colloquium on Automata, Languages, and Programming**  
**(ICALP 2015)**

<http://www.kurims.kyoto-u.ac.jp/icalp2015/>

The 42nd International Colloquium on Automata, Languages, and Programming (ICALP) will take place in the period 6-10 July 2015 in Kyoto, Japan. The conference will co-locate with LICS 2015, the 30th ACM/IEEE Symposium on Logic in Computer Science. The ICALP 2015 conference chair is Kazuo Iwama (Kyoto University).

ICALP is the main conference and annual meeting of the European Association for Theoretical Computer Science (EATCS). As usual, the main conference will be preceded and/or followed by a series of workshops.

### Important dates

- Submission deadline: Tuesday, 17 February 2015, 23:59 PST (Pacific Standard Time, UTC-8)
- Author notification: 15 April 2015
- Final manuscript due: 30 April 2015

Deadlines are firm; late submissions will not be considered.

### Proceedings

ICALP proceedings are published in the Springer-Verlag ARCoSS (Advanced Research in Computing and Software Science) subseries of LNCS (Lecture Notes in Computer Science).

### Invited Speakers

**Keynote Speakers:** Ken Kawarabayashi (NII, Japan); Valerie King (University of Victoria, Canada); Thomas Moscibroda (MSR Asia, China); Anca Muscholl (Université Bordeaux, France) (Joint with LICS); Peter O'Hearn (Facebook, UK) (Joint with LICS)

**Invited Tutorial Speakers (Joint with LICS):** Piotr Indyk (MIT, USA); Andrew Pitts (University of Cambridge, UK); Geoffrey Smith (Florida International University, USA)

**Masterclass speaker:** Ryuhei Uehara (JAIST, Japan)

### 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**  
Algorithmic Game Theory; Approximation Algorithms; Combinatorial Optimization; Combinatorics in Computer Science; Computational Biology; Computational Complexity; Computational Geometry; Cryptography; Data Structures; Design and Analysis of Algorithms; Machine Learning; Parallel, Distributed and External Memory Computing; Randomness in Computation; Quantum Computing

### Track B: Logic, Semantics, Automata 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; Principles and Semantics of Programming Languages; Logic in Computer Science, Theorem Proving and Model Checking; Models of Concurrent, Distributed, and Mobile Systems; Models of Reactive, Hybrid and Stochastic Systems; Program Analysis and Transformation; Specification, Refinement, Verification and Synthesis; Type Systems and Theory, Typed Calculi

### Track C: Foundations of Networked Computation: Models, Algorithms and Information Management

Algorithmic Aspects of Networks and Networking; Formal Methods for Network Information Management; Foundations of Privacy, Trust and Reputation in Networks; 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

### Submission Guidelines

Authors are invited to submit an extended abstract of no more than 12 pages, including references, in LNCS style presenting original research on the theory of Computer Science. All submissions will be electronic via the EasyChair page for the conference, with three tracks (A, B and C):

<https://easychair.org/conferences/?conf=icalp2015>

Submissions should be made to the appropriate track of the conference. No prior publication or simultaneous submission to other publication outlets (either a conference or a journal) is allowed.

Submissions must adhere to the specified format and length. Submissions that are too long or formatted incorrectly may be rejected immediately. All the technical details that are necessary for a proper scientific evaluation of a submission must be included in a clearly-labelled appendix, to be consulted at the discretion of program committee members. This includes, in particular, the proofs of all the key theorems in a paper.

## 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.

## Program Committees

**Track A:** Peyman Afshani (Aarhus University, Denmark); Hee-Kap Ahn (POSTECH, South Korea); Hans Bodlaender (Utrecht University, The Netherlands); Karl Bringmann (Max-Planck Institut für Informatik, Germany); Sergio Cabello (University of Ljubljana, Slovenia); Ken Clarkson (IBM Almaden Research Center, USA); Éric Colin de Verdière (École Normale Supérieure Paris, France); Stefan Dziembowski (University of Warsaw, Poland); David Eppstein (University of California at Irvine, USA); Dimitris Fotakis (National Technical University of Athens, Greece); Paul Goldberg (University of Oxford, UK); Mohammad-Taghi Hajiaghayi (University of Maryland at College Park, USA); Jesper Jansson (Kyoto University, Japan); Andrei Krokhnin (Durham University, UK); Asaf Levin (Technion, Israel); Inge Li Gørtz (Technical University of Denmark, Denmark); Pinyan Lu (Microsoft Research Asia, China); Frédéric Magniez (Université Paris Diderot, France); Kazuhisa Makino (Kyoto University, Japan); Elvira Mayordomo (Universidad de Zaragoza, Spain); Ulrich Meyer (Goethe University Frankfurt am Main, Germany); Wolfgang Mulzer (Free University Berlin, Germany); Viswanath Nagarajan (University of Michigan, USA); Vicky Papadopoulou (European University Cyprus, Cyprus); Michał Pilipczuk (University of Bergen, Norway); Liam Roditty (Bar-Ilan University, Israel); Ignaz Rutter (Karlsruhe Institute of Technology, Germany); Rocco Servedio (Columbia University, USA); Jens Schmidt (TU Ilmenau, Germany); Bettina

Speckmann (**chair**) (TU Eindhoven, The Netherlands); Csaba D. Tóth (California State University Northridge, USA); Takeaki Uno (National Institute of Informatics, Japan); Erik Jan van Leeuwen (Max-Planck Institut für Informatik, Germany); Rob van Stee (University of Leicester, UK); Ivan Visconti (University of Salerno, Italy)

**Track B:** Andreas Abel (Chalmers and Gothenburg University, Sweden); Albert Atserias (Universitat Politècnica de Catalunya, Spain); Christel Baier (TU Dresden, Germany); Lars Birkedal (Aarhus University, Denmark); Luís Caires (Universidade Nova de Lisboa, Portugal); James Cheney (University of Edinburgh, UK); Wei Ngan Chin (National University of Singapore, Singapore); Ugo Dal Lago (University of Bologna, Italy); Thomas Ehrhard (CNRS, Université Paris Diderot, France); Zoltán Ésik (University of Szeged, Hungary); Xinyu Feng (University of Science and Technology of China, China); Wan Fokkink (VU University Amsterdam, The Netherlands); Shin-ya Katsumata (Kyoto University, Japan); Naoki Kobayashi (**chair**) (The University of Tokyo, Japan); Eric Koskinen (New York University, USA); Antonín Kučera (Masaryk University, Czech Republic); Orna Kupferman (Hebrew University, Israel); Annabelle McIver (Macquarie University, Australia); Dale Miller (INRIA Saclay, France); Markus Müller-Olm (University of Münster, Germany); Andrzej Murawski (University of Warwick, UK); Joel Ouaknine (University of Oxford, UK); Prakash Panangaden (McGill University, Canada); Pawel Parys (University of Warsaw, Poland); Reinhard Pichler (TU Vienna, Austria); Simona Ronchi Della Rocca (University of Torino, Italy); Jeremy Siek (Indiana University, USA)

**Track C:** Ioannis Caragiannis (Univ. Patras, Greece); Katarina Cechlarova (Pavol Jozef Safarik Univ., Slovakia); Shiri Chechik (Tel Aviv Univ., Israel); Yuval Emek (Technion, Israel); Sndor Fekete (TU Braunschweig, Germany); Pierre Fraigniaud (CNRS and Paris Diderot, France); Leszek Gsieniec (Univ. Liverpool, UK); Aristides Gionis (Aalto Univ., Finland); Magnús M. Halldórsson (**chair**) (Reykjavik Univ, Iceland); Monika Henzinger (Univ. Wien, Austria); Bhaskar Krishnamachari (USC, USA); Fabian Kuhn (Freiburg, Germany); Michael Mitzenmacher (Harvard Univ, USA); Massimo Merro (Univ. Verona, Italy); Gopal Pandurangan (Univ. Houston, USA); Pino Persiano (Salerno, Italy); R. Ravi (CMU, USA); Ymir Vigfusson (Emory Univ., USA); Roger Wattenhofer (ETH Zurich, Switzerland); Masafumi Yamashita (Kyushu Univ., Japan)