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Automata, Languages, and Programming

40th International Colloquium, ICALP 2013
Riga, Latvia, July 8-12, 2013
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Preface

ICALP, the International Colloquium on Automata, Languages and Programming, is arguably the most well-known series of scientific conferences on Theoretical Computer Science in Europe. The first ICALP was held in Paris, France, during July 3–7, 1972, with 51 talks. The same year EATCS, the European Association for Theoretical Computer Science, was established. Since then ICALP has been the flagship conference of EATCS.

ICALP 2013 was the 40th conference in this series (there was no ICALP in 1973). For the first time, ICALP entered the territory of the former Soviet Union. It was held in Riga, Latvia, during on July 8–12, 2013, in the University of Latvia. This year the program of ICALP was organized in three tracks: Track A (Algorithms, Complexity and Games), Track B (Logic, Semantics, Automata and Theory of Programming), and Track C (Foundations of Networked Computation: Models, Algorithms and Information Management).

In response to the Call for Papers, 436 papers were submitted; 14 papers were later withdrawn. The three Program Committees worked hard to select 71 papers for Track A (out of 249 papers submitted), 33 papers for Track B (out of 113 papers), and 20 papers for Track C (out of 60 papers). The average acceptance rate was 29%. The selection was based on originality, quality, and relevance to theoretical computer science. The quality of the submitted papers was very high indeed. The Program Committees acknowledge that many rejected papers deserved publication but regrettably it was impossible to extend the conference beyond 5 days.

The best paper awards were given to Mark Bun and Justin Thaler for their paper “Dual Lower Bounds for Approximate Degree and Markov-Bernstein Inequalities” (in Track A), to John Fearnley and Marcin Jurdziński for the paper “Reachability in Two-Clock Timed Automata is PSPACE-complete” (in Track B), and to Dariusz Dereniowski, Yann Disser, Adrian Kosowski, Dominik Pająk, and Przemysław Uznański for the paper “Fast Collaborative Graph Exploration” (in Track C). The best student paper awards were given to Radu Curticapean for the paper “Counting matchings of size k is $\#W[1]$ -hard” (in Track A) and to Nicolas Basset for the paper “A maximal entropy stochastic process for a timed automaton” (in Track B).

ICALP 2013 contained a special EATCS lecture on the occasion of the 40th ICALP given by:

- Jon Kleinberg, Cornell University

Invited talks were delivered by:

- Susanne Albers, Humboldt University
- Orna Kupferman, Hebrew University
- Dániel Marx, Hungarian Academy of Sciences

- Paul Spirakis, University of Patras
- Peter Widmayer, ETH Zürich

The main conference was preceded by a series of workshops on Sunday July 7, 2013 (i.e., one day before ICALP 2013). The list of workshops consisted of:

- Workshop on Automata, Logic, Formal languages, and Algebra (ALFA 2013)
- International Workshop on Approximation, Parameterized and Exact Algorithms (APEX 2013)
- Quantitative Models: Expressiveness and Analysis
- Foundations of Network Science (FONES)
- Learning Theory and Complexity
- 7th Workshop on Membrane Computing and Biologically Inspired Process Calculi (MeCBIC 2013)
- Workshop on Quantum and Classical Complexity

We sincerely thank our sponsors, members of the committees, referees, and the many colleagues who anonymously spent much time and effort to make ICALP 2013 happen.

May 2013

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