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37th International Symposium on Theoretical Aspects of Computer Science (STACS 2020)

Christophe Paul, Markus Bläser

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37th International Symposium on Theoretical Aspects of Computer Science

STACS 2020, March 10–13, 2020, Montpellier, France

Edited by

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■ Preface

The International Symposium on Theoretical Aspects of Computer Science (STACS) conference series is an internationally leading forum for original research on theoretical aspects of computer science. Typical areas are:

- algorithms and data structures, including: design of parallel, distributed, approximation, parameterized and randomized algorithms; analysis of algorithms and combinatorics of data structures; computational geometry, cryptography, algorithmic learning theory, algorithmic game theory;
- automata and formal languages, including: algebraic and categorical methods, coding theory; complexity and computability, including: computational and structural complexity theory, parameterized complexity, randomness in computation;
- logic in computer science, including: finite model theory, database theory, semantics, specification verification, rewriting and deduction;
- current challenges, for example: natural computing, quantum computing, mobile and net computing, computational social choice.

STACS is held alternately in France and in Germany. This year's conference (taking place March 10-13 in Montpellier) is the 37th in the series. Previous meetings took place in Paris (1984), Saarbrücken (1985), Orsay (1986), Passau (1987), Bordeaux (1988), Paderborn (1989), Rouen (1990), Hamburg (1991), Cachan (1992), Würzburg (1993), Caen (1994), München (1995), Grenoble (1996), Lübeck (1997), Paris (1998), Trier (1999), Lille (2000), Dresden (2001), Antibes (2002), Berlin (2003), Montpellier (2004), Stuttgart (2005), Marseille (2006), Aachen (2007), Bordeaux (2008), Freiburg (2009), Nancy (2010), Dortmund (2011), Paris (2012), Kiel (2013), Lyon (2014), München (2015), Orléans (2016), Hannover (2017), Caen (2018), Berlin (2019).

The interest in STACS has remained at a very high level over the past years. The STACS 2020 call for papers led to 242 submissions with authors from 43 countries. Each paper was assigned to three program committee members who, at their discretion, asked external reviewers for reports. For the sixth time within the STACS conference series, there was also a rebuttal period during which authors could submit remarks to the PC concerning the reviews of their papers. The committee selected 56 papers during a three-week electronic meeting held in November/December 2019. This means an acceptance rate of only 23%. As co-chairs of the program committee, we would like to sincerely thank all its members and the 448 external reviewers for their valuable work. In particular, there were intense and interesting discussions inside the PC committee. The overall very high quality of the submissions made the selection an extremely difficult task.

We would like to express our thanks to the three invited speakers: Dana Randal (Georgia Technical Institute, Atlanta, USA), Olivier Bournez (LIX, École Polytechnique, Palaiseau, France), and Martin Grohe (RWTH Aachen University, Germany). Since 2011, the conference program includes tutorials. This year, we are pleased to invite Thomas Schiex (INRAE, Toulouse, France) and Stéphan Thomassé (LIP, ENS Lyon, France) to the tutorial session.

Special thanks go to the local organizing committee for continuous help throughout the conference organization. In particular, we wish to thank the colleagues and student from the ALGCO, ECO and ESCAPE research groups for their help as well as Mégane Miquel and Virginie Fèche from LIRMM laboratory staff for her permanent organisation support.

Moreover, we thank Michael Wagner from the Dagstuhl/LIPIcs team for assisting us in the publication process and the final production of the proceedings. These proceedings



contain extended abstracts of the accepted contributions and abstracts of the invited talks and the tutorials. The authors retain their rights and make their work available under a Creative Commons license. The proceedings are published electronically by Schloss Dagstuhl – Leibniz-Center for Informatics within their LIPIcs series. Finally we would like to thank our sponsors for their financial supports: Occitanie Region District, Institut des Sciences de l'Information et leurs Interaction (INS2I) of CNRS; the University of Montpellier and the I-Site MUSE project; the LabEx NUMEV and the LIRMM Laboratory.

Montpellier and Saarbrücken, March 2020

Christophe Paul and Markus Bläser

■ Conference organization

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