31st International Symposium on Theoretical Aspects of Computer Science

STACS'14, March 5th to March 8th, 2014, Lyon, France

Edited by

Ernst W. Mayr

Natacha Portier

Editors

Ernst W. Mayr
Fakultät für Informatik
Technische Universität München
mayr@in.tum.de

Natacha Portier
LIP
École Normale Supérieure de Lyon
natacha.portier@ens-lyon.fr

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Foreword

The Symposium on Theoretical Aspects of Computer Science (STACS) conference series is an international forum for original research on theoretical aspects of computer science. Typical areas are (cited from the call for papers for this year's conference): algorithms and data structures, including: parallel, distributed, approximation, and randomized algorithms, computational geometry, cryptography, algorithmic learning theory, analysis of algorithms; automata and formal languages, games; computational complexity, parameterized complexity, randomness in computation; logic in computer science, including: semantics, specification and verification, rewriting and deduction; current challenges, for example: natural computing, quantum computing, mobile and net computing.

STACS is held alternately in France and in Germany. This year's conference (taking place March 5–8 in Lyon) is the 31st 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), and Kiel (2013).

The interest in STACS has remained at a high level over the past years. The STACS 2014 call for papers led to 210 submissions with authors from 35 countries. Each paper was assigned to three program committee members who, at their discretion, asked external reviewers for reports. The committee selected 54 papers during a three-week electronic meeting held in November/December. As co-chairs of the program committee, we would like to sincerely thank all its members and the many external referees for their valuable work. In particular, there were intense and interesting discussions. The overall very high quality of the submissions made the selection a difficult task.

This year, the conference included a tutorial. We would like to express our thanks to the speaker Neeraj Kayal for this tutorial, as well as to the invited speakers, Javier Esparza, Peter Bro Miltersen, and Luc Segoufin. Special thanks go to Andrei Voronkov for his EasyChair software (`http://www.easychair.org`). Moreover, we would like to warmly thank Marie Bozo and Chiraz Benamor for continuous help throughout the conference organization.

We would also like to warmly thank Nathalie Aubrun for preparing these conference proceedings, and Marc Herbstritt 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 tutorial. 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.

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Munich and Lyon, February 2014 — Ernst W. Mayr and Natacha Portier

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