

# 32nd International Symposium on Theoretical Aspects of Computer Science

STACS'15, March 4–7, 2015, Garching, Germany

Edited by

Ernst W. Mayr

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### *ACM Classification 1998*

F.1.1 Models of Computation, F.2.2 Nonnumerical Algorithms and Problems, F.4.1 Mathematical Logic, F.4.3 Formal Languages, G.2.1 Combinatorics, G.2.2 Graph Theory

## **ISBN 978-3-939897-78-1**

### *Published online and open access by*

Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, Saarbrücken/Wadern, Germany. Online available at <http://www.dagstuhl.de/dagpub/978-3-939897-78-1>.

### *Publication date*

February, 2015

### *Bibliographic information published by the Deutsche Nationalbibliothek*

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at <http://dnb.d-nb.de>.

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Digital Object Identifier: 10.4230/LIPIcs.STACS.2015.i

**ISBN 978-3-939897-78-1**

**ISSN 1868-8969**

**<http://www.dagstuhl.de/lipics>**

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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, algorithmic game theory, analysis of algorithms; automata and formal languages; 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 4–7 in Garching near Munich) is the 32nd 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), and Lyon (2014).

The interest in STACS has remained at a high level over the past years. The STACS 2015 call for papers led to 235 submissions with authors from 39 countries. Each paper was assigned to three program committee members who, at their discretion, asked external reviewers for reports. The committee selected 55 papers during a three-week electronic meeting held in November/December. For the first 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. 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 includes two tutorials. We would like to express our thanks to the speakers Felix Brandt (TUM) and Paul Goldberg (Oxford) for these tutorials, as well as to the invited speakers, Sanjeev Arora (Princeton), Manuel Bodirsky (Dresden), and Peter Sanders (Karlsruhe). Special thanks also go to Andrei Voronkov for his EasyChair software (<http://www.easychair.org>). Moreover, we would like to warmly thank Christine Lissner and Ernst Bayer for continuous help throughout the conference organization.

We would also like to thank Marc Herbstritt and 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.

STACS 2015 has received funds and help from the Deutsche Forschungsgemeinschaft (DFG), for which we are very grateful.

Munich and Orléans, February 2015

Ernst W. Mayr and Nicolas Ollinger





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