

# **40th International Symposium on Theoretical Aspects of Computer Science**

**STACS 2023, March 7–9, 2023, Hamburg, Germany**

Edited by

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40th International Symposium on Theoretical Aspects of Computer Science (STACS 2023).  
Editors: Petra Berenbrink, Patricia Bouyer, Anuj Dawar, and Mamadou Moustapha Kanté



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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.

For the first time, STACS 2023 consists of two tracks, A and B. Track A is dedicated to algorithms and data structures, complexity and games. Track B covers automata, logic, semantics and theory of programming.

STACS is held alternately in France and in Germany. This year's conference, taking place in Hamburg (University of Hamburg) from March 7 to March 9, is the 40th 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), Montpellier (2020), Saarbrücken (2021, taking place virtually), and Marseille (2022, taking place virtually).

The interest in STACS has remained at a very high level over the past years. The STACS 2023 call for papers led to 183 submissions (148 for Track A and 35 for Track B) with authors from 34 countries. Each paper was assigned to three program committee members who, at their discretion, asked external reviewers for reports. For the ninth 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. In addition, and for the third time, STACS 2023 employed a lightweight double-blind reviewing process: submissions should not reveal the identity of the authors in any way. However, it was still possible for authors to disseminate their ideas or draft versions of their paper as they normally would, for instance by posting drafts on the web or giving talks on their results. The committee selected 52 papers during for publication (41 for Track A and 11 for Track B). This means an acceptance rate around 28%. As co-chairs of the program committee, we would like to sincerely thank all its members and the 285 external reviewers for their valuable work. In particular, there were intense and interesting discussions inside the PC committee. The 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: Karoliina Lethinen (CNRS, Aix-Marseille Université, France), Eva Rotenberg (Technical University of Denmark, Denmark), and Moshe Y. Vardi (Rice University, USA).

We thank Michael Wagner from the 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. 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. We would also like to thank the local organising team at University of Hamburg for all their help with the web pages, registration and preparing the program. Our special thank to Felix Biermeier, Christohper Hahn, Lukas Hinze and Hamed Hosseinpour.

Petra Berenbrink, Patricia Bouyer, Anuj Dawar, and Mamadou Moustapha Kanté



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