41st IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science

FSTTCS 2021, December 15–17, 2021, Virtual Conference

Edited by
Mikołaj Bojańczyk
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LIPIcs – Vol. 213 – FSTTCS 2021 www.dagstuhl.de/lipics

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ACM Classification 2012
Theory of computation; Computing methodologies; Software and its engineering

ISBN 978-3-95977-215-0

Published online and open access by
Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, Saarbrücken/Wadern, Germany. Online available at https://www.dagstuhl.de/dagpub/978-3-95977-215-0.

Publication date
December, 2021

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 https://portal.dnb.de.

Digital Object Identifier: 10.4230/LIPIcs.FSTTCS.2021.0

ISBN 978-3-95977-215-0 **ISSN 1868-8969** **https://www.dagstuhl.de/lipics**

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ISSN 1868-8969

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Preface

This volume contains the proceedings of the 41st IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS 2021). The conference was originally planned to be held on December 15–17, 2021 in BITS Pilani, K K Birla Goa Campus, Goa, India. Due to the COVID-19 pandemic, the conference was moved to a virtual format, with the same dates.

The conference has two tracks. Track A focusing on algorithms, complexity and related issues, and Track B focusing on logic, automata and other formal method aspects of computer science. Each track had its own Program Committee (PC) and chair (Chandra Chekuri for Track A and Mikołaj Bojańczyk for Track B). This volume constitutes the joint proceedings of the two tracks, published in the LIPIcs series under a Creative Common license, with free online access to all.

The conference comprises of 5 invited talks, 27 contributed talks in Track A, and 20 in Track B. This volume contains all the contributed papers from the two tracks, and the abstracts of all the invited talks. The conference received a total of 122 submissions with 73 in Track A and 49 in Track B. This edition of FSTTCS implemented, for the first time, an author rebuttal phase during the paper review and selection process. We thank all the authors who submitted their papers to FSTTCS 2021. We are especially grateful to the PC members for their tireless work, and all the external reviewers for their expert opinion in the form of timely reviews.

We thank all the invited speakers for accepting our invitation: Scott Aaronson (University of Texas at Austin), Javier Esparza (Technische Universität München), Leslie Ann Goldberg (University of Oxford), Huijia (Rachel) Lin (University of Washington), and Rahul Savani (University of Liverpool).

The main conference is to be accompanied by four workshops: *iVerif: Artificial Intelligence and Verification* (organized by Shibashis Guha and Guillermo A. Perez), *QISE: Quantum Information Science and Engineering* (organized by Jaikumar Radhakrishnan and Manoj Nambiar), *Trends in Transformations* (organized by Emmanuel Filiot and S. Krishna), and *VeriCrypt* (organized by Karthikeyan Bhargavan and Aseem Rastogi).

We are indebted to the organising committee members: A. Baskar (BITS Pilani), Pritam Bhattacharya (BITS Pilani), Amaldev Manuel (IIT Goa), and A.V. Sreejith (IIT Goa) for managing the logistics of the conference and affiliated workshops. They made all the necessary arrangements for the virtual conference, and they are doing this for a second year in row due to the Covid pandemic. We thank S.P. Suresh (CMI, Chennai) for maintaining the conference web page and promptly addressing our update requests. We thank the friendly staff at Dagstuhl LIPIcs, Michael Didas and Michael Wagner, for helping us put together the proceedings. Finally, we thank the members of the Steering Committee, especially Jaikumar Radhakrishnan, and the PC Chairs from FSTTCS 2020 (Nitin Saxena and Sunil Simon), for providing pertinent information and advice about various aspects of the conference.

Mikołaj Bojańczyk and Chandra Chekuri
November 2021

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