

39th IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science

FSTTCS 2019, December 11–13, 2019, Bombay, India

Edited by

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■ Preface

The 39th IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS 2019) was held at the Indian Institute of Technology Bombay, India from December 11 to December 13, 2019. In this version, a new format was introduced as the conference was formally separated into two tracks, Track-A focussing on algorithms, complexity and related issues and Track-B focussing on logic, automata and other formal methods aspects of computer science. Each track had its own Program Committee (PC) with a chair. 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 comprised of 6 invited talks, 22 contributed talks in Track-A and 23 in Track-B. This volume contains all contributed papers from both tracks and the abstracts of all invited talks presented at the conference. There were overall 93 submissions (after weeding out the obvious bogus ones), 51 in Track-A and 42 in Track-B. We thank all those who submitted to FSTTCS. We also thank all PC members for their tireless work and all external reviewers for their expert opinion in the form of timely reviews.

We are grateful to all the invited speakers: Karthikeyan Bhargavan (INRIA-Paris, France), Robert Krauthgamer (Weizmann, Israel), Ranko Lazić (Warwick, U.K.), Toniann Pitassi (Toronto, Canada), Tim Roughgarden (Columbia, U.S.) and Alexandra Silva (University College London, U.K.). They kindly accepted our invitations and gave talks that inspired the entire FSTTCS audience at large.

The main conference was preceded by two workshops on the 10th December: *Complexity in Algorithmic Game Theory*, organized by Siddharth Barman (IISc.) and Umang Bhaskar (TIFR), and *Trends in Transformations*, organized by S. Krishna (IIT Bombay). This was followed by two post-conference workshops on 14th December: *Extension Complexity and Lifting Theorems*, organized by Ankit Garg (MSR Bangalore), Raghu Meka (UCLA), Toniann Pitassi (Toronto) and Makrand Sinha (CWI, Amsterdam), and *GALA: Gems of Automata, Logic and Algebra*, organized by C. Aiswarya (CMI, Chennai), S. Akshay (IIT Bombay) and Benedikt Bollig (LSV, CNRS & ENS Paris-Saclay). Besides, there was a colocated SAT/SMT winter school from December 8th to 10th.

We are indebted to the organizing committee members from the Department of Computer Science and Engineering, IIT Bombay for ensuring a smooth running of the conference and workshops and making all necessary arrangements. We also thank S.P. Suresh of CMI for maintaining and working on the conference web page. We also thank the friendly staff at Dagstuhl LIPIcs, particularly Michael Wagner, for being prompt and helpful in answering our queries. Finally, we would also like to thank the members of the Steering Committee for having faith in us for running the conference.

Arkadev Chattopadhyay and Paul Gastin
December 2019



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