

31st International Conference on Concurrency Theory

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■ Preface

This proceedings volume contains peer-reviewed contributions accepted at the 31st International Conference on Concurrency Theory (CONCUR), 2020.

The CONCUR conference series brings together researchers, developers, and students in order to advance the theory of concurrency, and promote its applications. Amid the COVID-19 situation, CONCUR 2020 could not take place at TU Wien (Vienna, Austria), as it was originally planned. Instead it was organized as a virtual conference, as part of the umbrella conference QONFEST 2020. In addition to CONCUR 2020, the QONFEST 2020 comprised also the 25th International Conference on Formal Methods for Industrial Critical Systems (FMICS) 2020, the 18th International Conference on Formal Modeling and Analysis of Timed Systems (FORMATS) 2020 and the 17th International Conference on Quantitative Evaluation of SysTems (QEST) 2020, alongside with several workshops and tutorials.

Despite the COVID-19 crisis, we have received a high number of submissions. Out of 112 submissions, we have accepted 45 papers for presentation at CONCUR 2020. Given great quality of many submissions, the acceptance bar was quite high. The quality criteria for acceptance were very strict and we thank our program committee and external reviewers for their excellent job in reviewing the CONCUR 2020 submissions. We are especially very grateful to all our reviewers for their efforts in providing high-quality and timely reviews and conducting active discussions on each submission at CONCUR 2020.

We thank the authors of our proceeding's papers for repaying the efforts of our reviewers and submitting their revised works to the CONCUR 2020 proceedings. We hope that details of the papers included in the present proceedings will bring lively discussions within the virtual conference platform of CONCUR 2020, initiating new research directions and collaboration within the CONCUR scientific community and beyond.

In addition to the exceptional papers accepted at CONCUR 2020, the proceedings also include four invited papers accompanying the works presented by our invited speakers at CONCUR 2020. The invited talk by Prof. Annabelle McIver (Macquarie University, Australia) served as a plenary keynote talk of QONFEST 2020, whereas the invited talks by Prof. Roderick Bloem (TU Graz, Austria) and Prof. Thomas A. Henzinger (IST Austria) were shared with other QONFEST 2020 conferences, including FMICS 2020, FORMATS 2020, and QEST 2020. We are also delighted to have had Prof. Catuscia Palamidessi (INRIA Saclay and LIX, France) as our invited speaker discussing recent applications of game theory in the fields of machine learning and privacy, topics that are of core interests for the CONCUR community.

Starting with CONCUR 2020, we are also happy to announce the CONCUR Test-of-Time (ToT) Award series, established by the CONCUR conference and the IFIP 1.8 Working Group on Concurrency Theory. The purpose of this award is to recognize important achievements in Concurrency Theory that were published at CONCUR conferences and have stood the test of time. All papers published in CONCUR between 1990 and 1995 were eligible for the CONCUR ToT Award 2020. The award winners for the CONCUR ToT Awards 2020 have been selected by a Jury composed of Prof. Luca Aceto (Chair), Prof. Jos Baeten, Prof. Patricia Bouyer-Decitre, Prof. Holger Hermanns, and Prof. Alexandra Silva. The results and winners of the CONCUR ToT Award 2020 selection process are described in the invited contribution of Prof. Luca Aceto in these proceedings.

31st International Conference on Concurrency Theory (CONCUR 2020).
Editors: Igor Konnov and Laura Kovács



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As usual, the CONCUR 2020 proceedings are open access thanks to the LIPIcs series. We thank the authors of CONCUR 2020 papers, the CONCUR 2020 participants, as well as the organizers and student volunteers of CONCUR 2020 for making CONCUR 2020 a successful virtual event.

Igor Konnov and Laura Kovács
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