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Marieke Huisman · Corina Păsăreanu ·  
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# Formal Methods

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Proceedings

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# Preface

This volume contains the papers presented at the 24th Symposium on Formal Methods (FM 2021), organized by the Institute of Software of the Chinese Academy of Sciences, China, and held online during November 20–26, 2021. In addition, these proceedings also contain nine papers selected by the Program Committee of the Industry Day (I-Day@FM21).

FM 2021 was organized under the auspices of Formal Methods Europe (FME), an independent association whose aim is to stimulate the use of, and research on, formal methods for software development. It has been almost 35 years since the first VDM symposium in 1987 brought together researchers with the common goal of creating methods to produce high-quality software based on rigor and reason. Since then the diversity and complexity of computer technology has changed enormously and the formal methods community has stepped up to the challenges those changes brought by adapting, generalizing, and improving the models and analysis techniques that were the focus of that first symposium. The papers in this proceedings reflect this progress, and demonstrate how formal methods have been successfully applied in many different application areas.

To establish the program of FM 2021, we assembled a Program Committee (PC) of 46 renowned scientists from all over the world. We received a total of 161 abstract submissions, which resulted in 131 full paper submissions from authors in 28 different countries. Each submission went through a rigorous review process in which the papers were reviewed by at least three PC members. Following a discussion phase lasting two weeks, we selected 33 full papers and two short tool papers, an acceptance rate of 26 %, for presentation during the symposium and inclusion in these proceedings. The symposium featured keynotes by Paula Herber (University of Münster, Germany), Assia Mahboubi (Inria, France), Clark Barrett (Stanford University, USA), and Mingsheng Ying (University of Technology Sydney, Australia). Paula Herber and Mingsheng Ying also contributed a paper to the proceedings. We hereby thank these invited speakers for having accepted our invitation. The program also featured an FME Fellowship Award Ceremony.

We are grateful to all involved in FM 2021. In particular, the PC members and sub-reviewers for their accurate and timely reviewing, all authors for their submissions, and all attendees of the symposium for their participation. We also thank all the other committees (I-Day, Doctoral Symposium, Journal First Track, Workshops, and Tutorials), listed on the following pages, and particularly the excellent local organization and publicity teams.

We are very grateful to our sponsors: the Chinese Academy of Sciences, and in particular its Institute of Software, and the National Natural Science Foundation of China. Finally, we thank Springer for publishing these proceedings in their FM subline

and we acknowledge the support from EasyChair in assisting us in managing the complete process from submissions to these proceedings to the program.

August 2021

Marieke Huisman  
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