

# Preface

This volume contains the papers presented at SBMF 2017: the 20th Brazilian Symposium on Formal Methods. The conference was held in Recife, Brazil, from November 29 to December 1, 2017.

The Brazilian Symposium on Formal Methods (SBMF) is an event devoted to the dissemination of the development and use of formal methods for the construction of high-quality computational systems, aiming to promote opportunities for researchers with an interest in formal methods to discuss the recent advances in this area. SBMF is a consolidated scientific–technical event in the software area. Its first edition took place in 1998, reaching the 20th edition in 2017. The proceedings of the last editions have been published in Springer’s *Lecture Notes in Computer Science* series as volumes 5902 (2009), 6527 (2010), 7021 (2011), 7498 (2012), 8195 (2013), 8941 (2014), 9526 (2015), and 10090 (2016).

The conference included three invited talks, given by Ana Cavalcanti (University of York, UK), Christoph Benzmmüller (University of Luxembourg, Luxembourg; Freie Universität Berlin, Germany; and Saarland University, Germany) and Patrícia Machado (UFCG, Brazil). A total of 16 papers were presented at the conference and are included in this volume. They were selected from 37 submissions that came from 16 different countries: Australia, Belgium, Brazil, Canada, China, Colombia, France, Germany, India, Ireland, Norway, Portugal, Spain, Sweden, the UK, and the USA. The Program Committee comprised 46 members from the national and international community of formal methods. Each submission was reviewed by three Program Committee members. Submissions, reviews, deliberations, decisions, as well as the compilation of these proceedings were all handled via EasyChair, which provided excellent support throughout the whole process.

We are grateful to the Program Committee and to the additional reviewers for their hard work in evaluating submissions and suggesting improvements. We are very thankful to the general chair of SBMF 2017, Gustavo Carvalho (UFPE), and the local organization team, who made everything possible for the conference to run smoothly, and to CIn-UFPE for kindly hosting the event. SBMF 2017 was organized by the Federal University of Pernambuco (UFPE), promoted by the Brazilian Computer Society (SBC), and sponsored by the following organizations, which we thank for their generous support: CAPES, CNPq, CIn/UFPE, FACEPE and UFPE. Finally, we would like to thank Springer for agreeing to publish the proceedings as a volume of *Lecture Notes in Computer Science*.

November 2017

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Formal Methods: Foundations and Applications  
20th Brazilian Symposium, SBMF 2017, Recife, Brazil,  
November 29 — December 1, 2017, Proceedings  
Cavalheiro, S.; Fiadeiro, J. (Eds.)  
2017, X, 305 p. 101 illus., Softcover  
ISBN: 978-3-319-70847-8