Introduction to Selected Papers from NFM 2022

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The NASA Formal Methods (NFM) Symposium is a forum to foster collaboration between theoreticians and practitioners from NASA, academia, and industry, to identify challenges and provide solutions for assurance in mission- and safety-critical systems. The symposium focuses specifically on techniques based on formal methods.

The 14th NASA Formal Methods Symposium (NFM 2022) took place at the California Institute of Technology (Pasadena, CA, USA) on May 24–27, 2022, and was organized by JPL, the University of Southern California, the Formal Methods group at NASA Langley Research Center, and the California Institute of Technology. Its proceedings appeared as volume 13260 of the series Lecture Notes in Computer Science (LNCS), published by Springer.

In this special issue, we bring to you extended versions of selected papers from the symposium. To assemble the issue, we invited the twelve most favorably reviewed papers from NFM 2022. The authors of five of these papers accepted the invitation. Each submission subsequently went through the regular review process of the journal, requiring three reviews per submission. We selected one reviewer of the NFM 2022 symposium version of each paper when available, and supplemented this set with additional reviewers who had not reviewed the same work before. Each paper went through two rounds of revisions. The five papers published in this special issue represent the diversity of NFM 2022, combining theoretical and practical contributions.

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