Jasmin Blanchette Laura Kovács Dirk Pattinson (Eds.)

# **Automated Reasoning**

11th International Joint Conference, IJCAR 2022 Haifa, Israel, August 8–10, 2022 Proceedings





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# **Automated Reasoning**

11th International Joint Conference, IJCAR 2022 Haifa, Israel, August 8–10, 2022 Proceedings



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#### **Preface**

This volume contains the papers presented at the 11th International Joint Conference on Automated Reasoning (IJCAR 2022) held during August 8–10, 2022, in Haifa, Israel. IJCAR was part of the Federated Logic Conference (FLoC 2022), which took place from July 31 to August 12, 2022, in Haifa.

IJCAR is the premier international joint conference on all aspects of automated reasoning, including foundations, implementations, and applications, comprising several leading conferences and workshops. IJCAR 2022 united the Conference on Automated Deduction (CADE), the International Symposium on Frontiers of Combining Systems (FroCoS), and the International Conference on Automated Reasoning with Analytic Tableaux and Related Methods (TABLEAUX). Previous IJCAR conferences were held in Siena, Italy, in 2001, Cork, Ireland, in 2004, Seattle, USA, in 2006, Sydney, Australia, in 2008, Edinburgh, UK, in 2010, Manchester, UK, in 2012, Vienna, Austria, in 2014, Coimbra, Portugal, in 2016, Oxford, UK, in 2018, and Paris, France, in 2020 (virtual).

There were 85 submissions. Each submission was assigned to at least three Program Committee members and was reviewed in single-blind mode. The committee decided to accept 41 papers: 32 regular papers and nine system descriptions.

The program also included two invited talks, by Elvira Albert and Gilles Dowek, as well as a plenary FLoC talk by Aarti Gupta.

We acknowledge the FLoC sponsors:

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We also acknowledge the generous sponsorship of Springer and the Trakhtenbrot family, as well as the invaluable support provided by the EasyChair developers. We finally thank the FLoC 2022 organization team for assisting us with local organization and general conference management.

May 2022

Jasmin Blanchette Laura Kovács Dirk Pattinson

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