12th International Conference on Interactive Theorem Proving

ITP 2021, June 29–July 1, 2021, Rome, Italy (Virtual Conference)

Edited by

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LIPIcs – Vol. 193 – ITP 2021 www.dagstuhl.de/lipics

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ACM Classification 2012
Theory of computation → Logic

ISBN 978-3-95977-188-7

Published online and open access by
Schloss Dagstuhl – Leibniz-Zentrum für Informatik GmbH, Dagstuhl Publishing, Saarbrücken/Wadern, Germany. Online available at https://www.dagstuhl.de/dagpub/978-3-95977-188-7.

Publication date
June, 2021

Bibliographic information published by the Deutsche Nationalbibliothek
The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available in the Internet at https://portal.dnb.de.

Digital Object Identifier: 10.4230/LIPIcs.ITP.2021.0

LIPIcs – Leibniz International Proceedings in Informatics

LIPIcs is a series of high-quality conference proceedings across all fields in informatics. LIPIcs volumes are published according to the principle of Open Access, i.e., they are available online and free of charge.

ISSN 1868-8969

https://www.dagstuhl.de/lipics

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Leibniz International Proceedings in Informatics
LIPICS Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl Publishing, Germany

Preface

The International Conference on Interactive Theorem Proving (ITP) is the main venue for the presentation of research into interactive theorem proving frameworks and their applications. It has evolved organically starting with a HOL workshop back in 1988, gradually widening to include other higher-order systems and interactive theorem provers generally, as well as their applications. This year's conference, the twelfth to be held under the ITP name, is co-located with the 36th Annual Symposium on Logic in Computer Science (LICS 2021), and was to be held in Rome, Italy. However, due to the COVID-19 global pandemic, the conference will be held in an online format for the first time. Previous ITP conferences took place in Edinburgh 2010, Nijmegen 2011, Princeton 2012, Rennes 2013, Vienna 2014, Nanjing 2015, Nancy 2016, Brasilia 2017, Oxford 2018 and Portland 2019; those in 2010, 2014 and 2018 were under the umbrella organization of the Federated Logic Conference (FLoC).

This year's conference attracted a total of 57 submissions (51 long papers and 6 short papers). Each paper was systematically reviewed by at least three program committee members or appointed external reviewers, as a result of which the PC winnowed down the selection to be presented at the conference: 29 papers (28 long papers and 1 short). We thank the authors of both accepted and rejected papers for their submissions, as well as the PC members and external reviewers for their invaluable work.

As well as all the regular papers, we are very pleased to have invited keynote talks by Nadia Polikarpova (University of California, San Diego, joint talk with LICS), Andrei Popescu (University of Sheffield), and Magnus Myreen (Chalmers). The present volume collects all the accepted papers contributed to the conference as well as the latter two invited papers. This is the second time that the ITP proceedings are published in the LIPIcs series. We thank all those at Dagstuhl for their responsive feedback on all matters associated with the production of the finished proceedings, as well as the EasyConferences staff for their support in the logistics.

We are grateful to Daniele Gorla for offering to organize ITP in Rome and his flexibility in changing the format in face of the pandemic. We would like to also extend this thanks to all authors and speakers, as we are certain that adjusting to the new format of the conference required some additional effort. Finally we are thankful to the ITP Steering Committee for their guidance throughout.

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