10th International Conference on Interactive Theorem Proving

ITP 2019, September 9–12, 2019, Portland, OR, USA

Edited by

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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, in Portland OR, USA, is the tenth to be held under the ITP name, following Edinburgh 2010, Nijmegen 2011, Princeton 2012, Rennes 2013, Vienna 2014, Nanjing 2015, Nancy 2016, Brasilia 2017 and Oxford 2018; 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 72 submissions (61 long papers and 11 short papers); with the exception of the very first ITP in 2010 (which received 74 submissions) this is the largest number of submissions received by ITP or its predecessor conferences. 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: 33 papers (29 long papers and 4 short). As a consequence of limited time for presentation at the conference, many interesting papers had to be rejected. 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 June Andronick (Data 61, CSIRO), Kevin Buzzard (Imperial College) and Martin Dixon (Intel).

The present volume collects all the accepted papers contributed to the conference as well as abstracts of the three invited presentations. This year, for the first time, we are publishing the proceedings in the LIPIcs series, motivated by its commitment to open access. We thank all those at Dagstuhl for their responsive feedback on all matters associated with the production of the finished proceedings.

Finally, we are grateful to Portland State University for logistical support, to several corporate donors who helped to support the conference, and to the ITP Steering Committee for their guidance throughout.

July 2019

John Harrison
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