Preface

This volume contains the proceedings of the 8th Conference on Interactive Theorem Proving (ITP 2017) held in Brasília, Brazil, on September 26–29, 2017. The conference was organized by the departments of Computer Science and Mathematics of the Universidade de Brasília.

The ITP conference series is concerned with all topics related to interactive theorem proving, ranging from theoretical foundations to applications in program verification, security, and formalization of mathematics. ITP succeeded TPHOLs, which took place every year from 1988 until 2009. Since 2010, ITP has been held in Edinburgh (2010), Nijmegen (2011), Princeton (2012), Rennes (2013), Vienna (2014), Nanjing (2015), and Nancy (2016).

ITP 2017 was part of the Brasília Spring on Automated Reasoning and was co-located with the 26th International Conference on Automated Reasoning with Analytic Tableaux and Related Methods (Tableaux 2017) and the 11th International Symposium on Frontiers of Combining Systems (FroCoS 2017). In addition to the three main conferences, four workshops took place: 12th Logical and Semantic Frameworks with Applications (LSFA 2017), 5th Workshop for Proof eXchange for Theorem Proving (PxTP 2017), EPS - Encyclopedia of Proof Systems, and DaLí - Dynamic Logic: New Trends and Applications. The Brasília Spring on Automated Reasoning also included four tutorials: Proof Compressions and the Conjecture NP = PSPACE, General Methods in Proof Theory for Modal and Substructural Logics, From Proof Systems to Complexity Bounds, and PVS for Computer Scientists.

There were 65 submissions. Each submission was reviewed by at least 3 members of the Program Committee. The reviews were written by the 36 committee members and 69 external reviewers. An electronic PC meeting was held using the EasyChair system. The PC decided to accept 28 regular submissions and 2 rough diamond contributions. The program also included 3 invited talks by Moa Johansson on Automated Theory Exploration for Interactive Theorem Proving: An Introduction to the Hipster System, Cezary Kaliszyk on Automating Formalization by Statistical and Semantic Parsing of Mathematics, and Leonardo de Moura on Whitebox Automation. Cezary Kaliszyk, Katalin Bimbó, and Jasmin Blanchette presented joint TABLEAUX/ FroCoS/ITP invited talks.

We would like to thank the PC members for their work, especially during the paper selection process, all the reviewers for writing high-quality reviews, the invited speakers for accepting our invitation and delivering insightful talks, and the authors who submitted their contributions to ITP 2017. Many people helped to make ITP 2017 a success. In particular, we are very grateful to Cláudia Nalon and Daniele Nantes-Sobrinho, who served as Local Organizers at the Universidade de Brasília. Claudia and Daniele worked hard and were highly instrumental in guaranteeing the success of the Brasília Spring on Automated Reasoning.

September 2017   Mauricio Ayala-Rincón
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