

Contents

Invited Talks

Foundational (Co)datatypes and (Co)recursion for Higher-Order Logic.	3
<i>Julian Biendarra, Jasmin Christian Blanchette, Aymeric Bouzy, Martin Desharnais, Mathias Fleury, Johannes Hölzl, Ondřej Kunčar, Andreas Lochbihler, Fabian Meier, Lorenz Panny, Andrei Popescu, Christian Sternagel, René Thiemann, and Dmitriy Traytel</i>	
Designing Theory Solvers with Extensions.	22
<i>Andrew Reynolds, Cesare Tinelli, Dejan Jovanović, and Clark Barrett</i>	

Description and Temporal Logics

A New Description Logic with Set Constraints and Cardinality Constraints on Role Successors.	43
<i>Franz Baader</i>	
Metric Temporal Description Logics with Interval-Rigid Names	60
<i>Franz Baader, Stefan Borgwardt, Patrick Koopmann, Ana Ozaki, and Veronika Thost</i>	
Using Ontologies to Query Probabilistic Numerical Data	77
<i>Franz Baader, Patrick Koopmann, and Anni-Yasmin Turhan</i>	
Pushing the Boundaries of Reasoning About Qualified Cardinality Restrictions	95
<i>Jelena Vlasenko, Volker Haarslev, and Brigitte Jaumard</i>	

Rewriting

Parallel Closure Theorem for Left-Linear Nominal Rewriting Systems.	115
<i>Kentaro Kikuchi, Takahito Aoto, and Yoshihito Toyama</i>	
Complexity Analysis for Term Rewriting by Integer Transition Systems	132
<i>Matthias Naaf, Florian Frohn, Marc Brockschmidt, Carsten Fuhs, and Jürgen Giesl</i>	

SAT, SMT and Automated Theorem Proving

Solving SAT and MaxSAT with a Quantum Annealer: Foundations and a Preliminary Report	153
<i>Zhengbing Bian, Fabian Chudak, William Macready, Aidan Roy, Roberto Sebastiani, and Stefano Varotti</i>	
Superposition with Structural Induction	172
<i>Simon Cruanes</i>	
Subtropical Satisfiability	189
<i>Pascal Fontaine, Mizuhito Ogawa, Thomas Sturm, and Xuan Tung Vu</i>	

Decision Procedures, Decidability and Verification

On Solving Nominal Fixpoint Equations	209
<i>Mauricio Ayala-Rincón, Washington de Carvalho-Segundo, Maribel Fernández, and Daniele Nantes-Sobrinho</i>	
Decidable Verification of Decision-Theoretic GOLOG	227
<i>Jens Claßen and Benjamin Zarriß</i>	
The Bernays–Schönfinkel–Ramsey Fragment with Bounded Difference Constraints over the Reals Is Decidable	244
<i>Marco Voigt</i>	

Properties and Combinations of Logic

First-Order Interpolation of Non-classical Logics Derived from Propositional Interpolation	265
<i>Matthias Baaz and Anela Lolic</i>	
Finitariness of Elementary Unification in Boolean Region Connection Calculus	281
<i>Philippe Balbiani and Çiğdem Gencer</i>	
Merging Fragments of Classical Logic	298
<i>Carlos Caleiro, Sérgio Marcelino, and João Marcos</i>	
Interpolation, Amalgamation and Combination (The Non-disjoint Signatures Case)	316
<i>Silvio Ghilardi and Alessandro Gianola</i>	
The Boolean Solution Problem from the Perspective of Predicate Logic	333
<i>Christoph Wernhard</i>	
Author Index	351

Frontiers of Combining Systems

11th International Symposium, FroCoS 2017, Brasília,
Brazil, September 27-29, 2017, Proceedings

Dixon, C.; Finger, M. (Eds.)

2017, X, 351 p. 38 illus., Softcover

ISBN: 978-3-319-66166-7