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# Logic for Programming, Artificial Intelligence, and Reasoning

19th International Conference, LPAR-19  
Stellenbosch, South Africa, December 14-19, 2013  
Proceedings

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# Preface

This volume contains the papers presented at the 19th International Conference on Logic for Programming, Artificial Intelligence and Reasoning (LPAR-19), held during December 14–19, 2013, in Stellenbosch, South Africa.

Following the call for papers, LPAR-19 received a record number of 152 submissions, materializing in 136 submissions with authors representing 31 different countries. Each submission was reviewed by at least three of the 37 Program Committee (PC) members. The PC was assisted by 174 additional reviewers and decided to accept 44 regular papers and eight tool descriptions and experimental papers. Once again the EasyChair system provided an indispensable platform for all matters related to the reviewing process, production of these proceedings, program and Web page generation, and registration of participants.

A record number of workshops were collocated with LPAR-19. The International Workshop on Algebraic Logic in Computer Science was organized by Clint van Alten of the University of the Witwatersrand and Petr Cintula and Carles Noguera of the Academy of Sciences of the Czech Republic. The 2nd Workshop on Automata, Logic, Formal languages, and Algebra (ALFA 2013) was organized by Volker Diekert, Manfred Kufleitner, and Michael Matthiesen of the University of Stuttgart. The 7th International Workshop on Analytic Proof Systems (APS-7) was organized by Matthias Baaz and Christian Fermüller of the Vienna University of Technology. The 10th International Workshop on the Implementation of Logics (IWIL-10) was organized by Stephan Schulz of the TU München, Geoff Sutcliffe of the University of Miami, and Boris Konev of the University of Liverpool. The First Workshop on Logics and Reasoning for Conceptual Models was organized by Maria Keet of the University of KwaZulu-Natal, Diego Calvanese of the Free University of Bolzano, and Szymon Klarman and Arina Britz of the CSIR-Meraka Institute in Pretoria. We were fortunate in having Laura Kovacs (Chalmers University of Technology) again as the LPAR-19 workshop chair.

Another key person in the LPAR community is Geoff Sutcliffe. This year, in his 5th LPAR organization, he teamed up with Bernd Fischer of the University of Stellenbosch. We thank them for the excellent organization.

LPAR-19 is greatful for the generous support by Microsoft Research, IBM South Africa, and VAS Tech.

October 2013

Ken Mcmillan  
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X         Organization

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# Table of Contents

An Algorithm for Enumerating Maximal Models of Horn Theories with an Application to Modal Logics .....	1
<i>Luca Aceto, Dario Della Monica, Anna Ingólfssdóttir, Angelo Montanari, and Guido Sciavicco</i>	
May-Happen-in-Parallel Analysis for Priority-Based Scheduling .....	18
<i>Elvira Albert, Samir Genaim, and Enrique Martin-Martin</i>	
The Complexity of Clausal Fragments of LTL .....	35
<i>Alessandro Artale, Roman Kontchakov, Vladislav Ryzhikov, and Michael Zakharyaschev</i>	
A Semantic Basis for Proof Queries and Transformations.....	53
<i>David Aspinall, Ewen Denney, and Christoph Lüth</i>	
Expressive Path Queries on Graphs with Data .....	71
<i>Pablo Barceló, Gaelle Fontaine, and Anthony Widjaja Lin</i>	
Proving Infinite Satisfiability .....	86
<i>Peter Baumgartner and Joshua Bax</i>	
SAT-Based Preprocessing for MaxSAT.....	96
<i>Anton Belov, António Morgado, and Joao Marques-Silva</i>	
Dynamic and Static Symmetry Breaking in Answer Set Programming.....	112
<i>Belaïd Benhamou</i>	
HOL Based First-Order Modal Logic Provers .....	127
<i>Christoph Benzmüller and Thomas Raths</i>	
Resourceful Reachability as HORN-LA .....	137
<i>Josh Berdine, Nikolaj Bjørner, Samin Ishtiaq, Jael E. Kriener, and Christoph M. Wintersteiger</i>	
A Seligman-Style Tableau System .....	147
<i>Patrick Blackburn, Thomas Bolander, Torben Braüner, and Klaus Frovin Jørgensen</i>	
Comparison of LTL to Deterministic Rabin Automata Translators .....	164
<i>František Blahoudek, Mojmír Křetínský, and Jan Strejček</i>	

Tree Interpolation in Vampire . . . . .	173
<i>Régis Blanc, Ashutosh Gupta, Laura Kovács, and Bernhard Kragl</i>	
Polarizing Double-Negation Translations . . . . .	182
<i>Mélanie Boudard and Olivier Hermant</i>	
Revisiting the Equivalence of Shininess and Politeness . . . . .	198
<i>Filipe Casal and João Rasga</i>	
Towards Rational Closure for Fuzzy Logic: The Case of Propositional Gödel Logic . . . . .	213
<i>Giovanni Casini and Umberto Straccia</i>	
Multi-objective Discounted Reward Verification in Graphs and MDPs . . . . .	228
<i>Krishnendu Chatterjee, Vojtěch Forejt, and Dominik Wojtczak</i>	
Description Logics, Rules and Multi-context Systems . . . . .	243
<i>Luís Cruz-Filipe, Rita Henriques, and Isabel Nunes</i>	
Complexity Analysis in Presence of Control Operators and Higher-Order Functions . . . . .	258
<i>Ugo Dal Lago and Giulio Perrittà</i>	
Zenon Modulo: When Achilles Outruns the Tortoise Using Deduction Modulo . . . . .	274
<i>David Delahaye, Damien Doligez, Frédéric Gilbert, Pierre Halmagrand, and Olivier Hermant</i>	
Long-Distance Resolution: Proof Generation and Strategy Extraction in Search-Based QBF Solving . . . . .	291
<i>Uwe Egly, Florian Lonsing, and Magdalena Widl</i>	
Verifying Temporal Properties in Real Models . . . . .	309
<i>Tim French, John McCabe-Dansted, and Mark Reynolds</i>	
A Graphical Language for Proof Strategies . . . . .	324
<i>Gudmund Grov, Aleks Kissinger, and Yuhui Lin</i>	
A Proof of Strong Normalisation of the Typed Atomic Lambda-Calculus . . . . .	340
<i>Tom Gundersen, Willem Heijltjes, and Michel Parigot</i>	
Relaxing Synchronization Constraints in Behavioral Programs . . . . .	355
<i>David Harel, Amir Kantor, and Guy Katz</i>	
Characterizing Subset Spaces as Bi-topological Structures . . . . .	373
<i>Bernhard Heinemann</i>	

Proof-Pattern Recognition and Lemma Discovery in ACL2 . . . . .	389
<i>Jónathan Heras, Ekaterina Komendantskaya, Moa Johansson, and Ewen Maclean</i>	
Semantic A-translations and Super-Consistency Entail Classical Cut Elimination . . . . .	407
<i>Lisa Allali and Olivier Hermant</i>	
Blocked Clause Decomposition . . . . .	423
<i>Marijn J.H. Heule and Armin Biere</i>	
Maximal Falsifiability: Definitions, Algorithms, and Applications . . . . .	439
<i>Alexey Ignatiev, Antonio Morgado, Jordi Planes, and Joao Marques-Silva</i>	
Solving Geometry Problems Using a Combination of Symbolic and Numerical Reasoning . . . . .	457
<i>Shachar Itzhaky, Sumit Gulwani, Neil Immerman, and Mooly Sagiv</i>	
On QBF Proofs and Preprocessing . . . . .	473
<i>Mikoláš Janota, Radu Grigore, and Joao Marques-Silva</i>	
Partial Backtracking in CDCL Solvers . . . . .	490
<i>Chuan Jiang and Ting Zhang</i>	
Lemma Mining over HOL Light . . . . .	503
<i>Cezary Kaliszyk and Josef Urban</i>	
On Module-Based Abstraction and Repair of Behavioral Programs . . . . .	518
<i>Guy Katz</i>	
Prediction and Explanation over DL-Lite Data Streams . . . . .	536
<i>Szymon Klarman and Thomas Meyer</i>	
Forgetting Concept and Role Symbols in $\mathcal{ALCH}$ -Ontologies . . . . .	552
<i>Patrick Koopmann and Renate A. Schmidt</i>	
Simulating Parity Reasoning . . . . .	568
<i>Tero Laitinen, Tommi Junttila, and Ilkka Niemelä</i>	
Herbrand Theorems for Substructural Logics . . . . .	584
<i>Petr Cintula and George Metcalfe</i>	
On Promptness in Parity Games . . . . .	601
<i>Fabio Mogavero, Aniello Murano, and Loredana Sorrentino</i>	
Defining Privacy Is Supposed to Be Easy . . . . .	619
<i>Sebastian A. Mödersheim, Thomas Groß, and Luca Viganò</i>	
Reachability Modules for the Description Logic $\mathcal{SRIQ}$ . . . . .	636
<i>Riku Nortje, Katarina Britz, and Thomas Meyer</i>	

An Event Structure Model for Probabilistic Concurrent Kleene Algebra . . . . .	653
<i>Annabelle McIver, Tahiry Rabehaja, and Georg Struth</i>	
Three SCC-Based Emptiness Checks for Generalized Bchi Automata . . . . .	668
<i>Etienne Renault, Alexandre Duret-Lutz, Fabrice Kordon, and Denis Poitrenaud</i>	
PeRIPLO: A Framework for Producing Effective Interpolants in SAT-Based Software Verification . . . . .	683
<i>Simone Fulvio Rollini, Leonardo Alt, Grigory Fedyukovich, Antti E.J. Hyvärinen, and Natasha Sharygina</i>	
Incremental Tabling for Query-Driven Propagation of Logic Program Updates . . . . .	694
<i>Ari Saptawijaya and Luís Moniz Pereira</i>	
Tracking Data-Flow with Open Closure Types . . . . .	710
<i>Gabriel Scherer and Jan Hoffmann</i>	
Putting Newton into Practice: A Solver for Polynomial Equations over Semirings . . . . .	727
<i>Maximilian Schlund, Michał Terepeta, and Michael Luttenberger</i>	
System Description: E 1.8 . . . . .	735
<i>Stephan Schulz</i>	
Formalization of Laplace Transform Using the Multivariable Calculus Theory of HOL-Light . . . . .	744
<i>Syeda Hira Taqdees and Osman Hasan</i>	
On Minimality and Integrity Constraints in Probabilistic Abduction . . . . .	759
<i>Calin-Rares Turliuc, Nataly Maimari, Alessandra Russo, and Krysia Broda</i>	
POLAR: A Framework for Proof Refactoring . . . . .	776
<i>Dominik Dietrich, Iain Whiteside, and David Aspinall</i>	
<b>Author Index . . . . .</b>	<b>793</b>