# Monday, October 11

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.50 – 9.00</td>
<td>OPENING</td>
</tr>
<tr>
<td></td>
<td>Chair: Andrei Voronkov</td>
</tr>
<tr>
<td>9.00 – 9.50</td>
<td>INVITED TALK</td>
</tr>
<tr>
<td></td>
<td>Krishnendu Chatterjee:</td>
</tr>
<tr>
<td></td>
<td><em>The Complexity of Partial-Observation Parity Games</em></td>
</tr>
<tr>
<td>9.50 – 10.15</td>
<td>Thomas A. Henzinger, Thibaud Hottelier, Laura Kovács, Andrey Rybalchenko:</td>
</tr>
<tr>
<td></td>
<td><em>Aligators for Arrays</em></td>
</tr>
<tr>
<td>10.15 – 10.40</td>
<td>Michael Codish, Carsten Fuhs, Jürgen Giesl, Peter Schneider-Kamp:</td>
</tr>
<tr>
<td></td>
<td><em>Lazy Abstraction for Size-Change Termination</em></td>
</tr>
<tr>
<td>10.40 – 11.10</td>
<td>COFFEE BREAK</td>
</tr>
<tr>
<td></td>
<td>Chair: Gert Smolka</td>
</tr>
<tr>
<td>11.10 – 11.35</td>
<td>Tino Teige, Martin Fränzle:</td>
</tr>
<tr>
<td></td>
<td><em>Resolution for Stochastic Boolean Satisfiability</em></td>
</tr>
<tr>
<td>11.35 – 12.00</td>
<td>Franz Baader, Barbara Morawska:</td>
</tr>
<tr>
<td></td>
<td><em>SAT Encoding of Unification in $\mathcal{EL}$</em></td>
</tr>
<tr>
<td>12.00 – 12.25</td>
<td>Norbert Manthey, Steffen Höldobler, Ari Saptawijaya:</td>
</tr>
<tr>
<td></td>
<td><em>Improving Resource-Unaware SAT Solvers</em></td>
</tr>
<tr>
<td>12.30 – 14.00</td>
<td>LUNCH</td>
</tr>
<tr>
<td></td>
<td>Chair: Steffen Höldobler</td>
</tr>
<tr>
<td>14.00 – 14.25</td>
<td>Mutsunori Banbara, Haruki Matsunaka, Naoyuki Tamura, Katsumi Inoue:</td>
</tr>
<tr>
<td></td>
<td><em>Generating Combinatorial Test Cases by Efficient SAT Encodings Suitable for CDCL SAT Solvers</em></td>
</tr>
<tr>
<td>14.25 – 14.50</td>
<td>Antti Hyvärinen, Tommi Junttila, Ilkka Niemelä:</td>
</tr>
<tr>
<td></td>
<td><em>Partitioning SAT Instances for Distributed Solving</em></td>
</tr>
<tr>
<td>14.50 – 15.20</td>
<td>3 SHORT PAPERS</td>
</tr>
<tr>
<td></td>
<td>Uwe Pfeiffer, Tomas Karnagel, Guido Scheffler:</td>
</tr>
<tr>
<td></td>
<td><em>A Sudoku-Solver for Large Puzzles using SAT</em></td>
</tr>
<tr>
<td></td>
<td>Matthias Baaz, Oliver Fasching:</td>
</tr>
<tr>
<td></td>
<td><em>Gödel logics with an operator shifting truth value</em></td>
</tr>
<tr>
<td></td>
<td>Hannes Strass, Michael Thielischer:</td>
</tr>
<tr>
<td></td>
<td><em>Default Reasoning in Action Domains with Conditional, Non-Local Effect Actions</em></td>
</tr>
<tr>
<td>15.20 – 16.00</td>
<td>COFFEE BREAK</td>
</tr>
<tr>
<td></td>
<td>Chair: Eugenia Ternovska</td>
</tr>
<tr>
<td>16.00 – 16.25</td>
<td>Claire David, Leonid Libkin, Tony Tan:</td>
</tr>
<tr>
<td></td>
<td><em>On the Satisfiability of Two-Variable Logic over Data Words</em></td>
</tr>
<tr>
<td>16.25 – 16.50</td>
<td>Kaustuv Chaudhuri:</td>
</tr>
<tr>
<td></td>
<td><em>Magically Constraining the Inverse Method with Dynamic Polarity Assignment</em></td>
</tr>
<tr>
<td>16.50 – 17.15</td>
<td>Marijn Heule, Matti Järvisalo, Armin Biere:</td>
</tr>
<tr>
<td></td>
<td><em>Clause Elimination Procedures for CNF Formulas</em></td>
</tr>
<tr>
<td>17.15 – 17.25</td>
<td>Marijn Heule, Matti Järvisalo, Armin Biere:</td>
</tr>
<tr>
<td></td>
<td><em>Covered Clause Elimination (SHORT PAPER)</em></td>
</tr>
</tbody>
</table>
### Tuesday, October 12

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00 – 9.50</td>
<td><strong>INVITED TALK</strong></td>
</tr>
<tr>
<td></td>
<td>Joseph Y. Halpern:</td>
</tr>
<tr>
<td></td>
<td><em>Awareness in Logic, Awareness in Games</em></td>
</tr>
<tr>
<td>9.50 – 10.15</td>
<td>Franz Baader, Marcel Lippmann, Hongkai Liu:</td>
</tr>
<tr>
<td></td>
<td><em>Using Causal Relationships to Deal with the Ramification Problem in Action Formalisms Based on Description Logics</em></td>
</tr>
<tr>
<td>10.15 – 10.40</td>
<td>Jean Marie Lagniez, Gilles Audemard, Bertrand Mazeure, Lakhdar Saïs:</td>
</tr>
<tr>
<td></td>
<td><em>Boosting Local Search Thanks to CDCL</em></td>
</tr>
<tr>
<td>10.40 – 11.10</td>
<td><strong>COFFEE BREAK</strong></td>
</tr>
<tr>
<td>11.10 – 11.35</td>
<td>Roland Axelsson, Matthew Hague, Stephan Kreutzer, Martin Lange, Markus Latte:</td>
</tr>
<tr>
<td></td>
<td><em>Extended Computation Tree Logic</em></td>
</tr>
<tr>
<td>11.35 – 12.00</td>
<td>Yuxin Deng, Rob van Glabbeek:</td>
</tr>
<tr>
<td></td>
<td><em>Characterising Probabilistic Processes Logically</em></td>
</tr>
<tr>
<td>12.00 – 12.25</td>
<td>Antonina Kolokolova, Yongmei Liu, David Mitchell, Eugenia Ternovska:</td>
</tr>
<tr>
<td></td>
<td><em>On the Complexity of Model Expansion</em></td>
</tr>
<tr>
<td>12.30 – 14.00</td>
<td><strong>LUNCH</strong></td>
</tr>
<tr>
<td>14.00 – 14.25</td>
<td>Andreas Reuß, Helmut Seidl:</td>
</tr>
<tr>
<td></td>
<td><em>Bottom-Up Tree Automata with Term Constraints</em></td>
</tr>
<tr>
<td>14.25 – 14.50</td>
<td>Jasmin Christian Blanchette, Koen Claessen:</td>
</tr>
<tr>
<td></td>
<td><em>Generating Counterexamples for Structural Inductions by Exploiting Nonstandard Models</em></td>
</tr>
<tr>
<td>14.50 – 15.30</td>
<td><strong>4 SHORT PAPERS</strong></td>
</tr>
<tr>
<td></td>
<td>Jasmin Christian Blanchette:</td>
</tr>
<tr>
<td></td>
<td><em>Nitpick: A Counterexample Generator for Isabelle/HOL Based on the Relational Model Finder Kodkod</em></td>
</tr>
<tr>
<td></td>
<td>Sara L. Uckelman, Jesse Alama:</td>
</tr>
<tr>
<td></td>
<td><em>Playing Lorenzen Dialogue Games on the Web</em></td>
</tr>
<tr>
<td></td>
<td>Sara L. Uckelman, Jesse Alama:</td>
</tr>
<tr>
<td></td>
<td><em>Proof rules for the dialogical logic N</em></td>
</tr>
<tr>
<td></td>
<td>Beishui Liao, Li Jin, Robert Koons:</td>
</tr>
<tr>
<td></td>
<td><em>Dynamics of Argumentation Systems: A Basic Theory</em></td>
</tr>
<tr>
<td>15.30 – 16.00</td>
<td><strong>COFFEE BREAK</strong></td>
</tr>
<tr>
<td>16.00 – 16.25</td>
<td>Jean-Pierre Jouannaud, Benjamin Monate:</td>
</tr>
<tr>
<td></td>
<td><em>Infinite Families of Finite String Rewriting Systems and Their Confluence</em></td>
</tr>
<tr>
<td>16.25 – 16.50</td>
<td>Camilo Rocha, José Meseguer:</td>
</tr>
<tr>
<td></td>
<td><em>Constructors, Sufficient Completeness, and Deadlock Freedom of Rewrite Theories</em></td>
</tr>
<tr>
<td>16.50 – 17.15</td>
<td>Dejan Jovanović, Clark Barrett:</td>
</tr>
<tr>
<td></td>
<td><em>Polite Theories Revisited</em></td>
</tr>
</tbody>
</table>
Wednesday, October 13

On Wednesday there will be the excursion to Borobodur, Prambanan, and more, followed by dinner at the Joyokusomo Prince House. See [http://www.computational-logic.org/lpar-17/Social_Events.html](http://www.computational-logic.org/lpar-17/Social_Events.html).

<table>
<thead>
<tr>
<th>Time</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.30</td>
<td>Departure for the excursion from the lobby of the Hyatt Regency Hotel</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>9.00 – 9.50</td>
<td><strong>INVITED TALK</strong></td>
</tr>
<tr>
<td></td>
<td>Michael J. Maher:</td>
</tr>
<tr>
<td></td>
<td><em>Human and Unhuman Commonsense Reasoning</em></td>
</tr>
<tr>
<td>9.50 – 10.15</td>
<td><strong>Tableau Calculus for the Logic of Comparative Similarity over Arbitrary Distance spaces</strong></td>
</tr>
<tr>
<td>10.15 – 10.40</td>
<td><strong>PBINT, a Logic for Modelling Search Problems Involving Arithmetic</strong></td>
</tr>
<tr>
<td>10.40 – 11.10</td>
<td><strong>COFFEE BREAK</strong></td>
</tr>
<tr>
<td>11.10 – 11.35</td>
<td><strong>Revisiting Matrix Interpretations for Polynomial Derivational Complexity of Term Rewriting</strong></td>
</tr>
<tr>
<td>11.35 – 12.00</td>
<td><strong>Characterising Space Complexity Classes via Knuth-Bendix Orders</strong></td>
</tr>
<tr>
<td>12.00 – 12.25</td>
<td><strong>Labelled Unit Superposition Calculi for Instantiation-based Reasoning</strong></td>
</tr>
<tr>
<td>12.30 – 14.00</td>
<td><strong>LUNCH</strong></td>
</tr>
<tr>
<td>14.00 – 14.25</td>
<td><strong>Interpolating Quantifier-Free Presburger Arithmetic</strong></td>
</tr>
<tr>
<td>14.25 – 14.50</td>
<td><strong>An Isabelle-Like Procedural Mode for HOL Light</strong></td>
</tr>
<tr>
<td>14.50 – 15.15</td>
<td><strong>Superposition-Based Analysis of First-Order Probabilistic Timed Automata</strong></td>
</tr>
<tr>
<td>15.15 – 15.40</td>
<td><strong>Symbolic Automata Constraint Solving</strong></td>
</tr>
<tr>
<td>15.40 – 16.00</td>
<td><strong>COFFEE BREAK</strong></td>
</tr>
<tr>
<td>16.00 – 16.25</td>
<td><strong>Expansion Nets: Proof Nets for for Propositional Classical Logic</strong></td>
</tr>
<tr>
<td>16.25 – 16.50</td>
<td><strong>On Strong Normalization of the Calculus of Constructions with Type-Based Termination</strong></td>
</tr>
<tr>
<td>16.50 – 17.15</td>
<td><strong>How to Universally Close the Existential Rule</strong></td>
</tr>
</tbody>
</table>
LPAR-17 Program
Revision of Oct. 8 2010

Friday, October 15

9.00 – 9.50 INVITED TUTORIAL
Norbert Preining:
Gödel Logics – A Survey

9.50 – 10.15 Pavel Klínov, Bijan Parsia, David Picado-Muiño:
The Consistency of the CADIAG-2 Knowledge Base: A Probabilistic Approach

10.15 – 10.40 Jean-François Condotta, Souhila Kaci, Pierre Marquis, Nicolas Schwind:
A Syntactical Approach to Qualitative Constraint Networks Merging

10.40 – 11.10 COFFEE BREAK

Chair: Laura Kovacs

11.10 – 11.35 Mark Kaminski, Gert Smolka:
Clausal Graph Tableaux for Hybrid Logic with Eventualities and Difference

11.35 – 12.00 Jeremy E. Dawson, Rajeev Góre:
Generic Methods for Formalising Sequent Calculi Applied to Provability Logic

12.00 – 12.25 Taus Brock-Nannestad, Carsten Schürmann:
Focused Natural Deduction

12.30 – 14.00 LUNCH

Chair: Konstantin Korovin

14.00 – 14.25 Laura Girodano, Valentina Gliozzi, Nicola Olivetti, Gian Luca Pozzato:
A nonmonotonic extension of KLM Preferential Logic P

14.25 – 14.50 Mauro Ferrari, Camillo Fiorentini, Guido Fiorino:
FCube: An Efficient Prover for Intuitionistic Propositional Logic

14.50 – 15.30 4 SHORT PAPERS
Libor Behounek:
Feasibility as a gradual notion
Petr Cintula, George Metcalfe:
Complexity of Admissible Rules in the Implication-Negation Fragment of Intuitionistic Logic
Karel Chvalovský, Petr Cintula:
Note on Deduction Theorems in Contraction-Free Logics
Sylvain Conchon, Evelyne Contejean, Iguernelala Mohamed:
Ground Associative and Commutative Completion Modulo Shostak Theories

15.30 – 16.00 COFFEE BREAK

Chair: Chris Fermüller

16.00 – 16.25 Theofrastos Mantadelis, Gerda Janssens:
Variable Compression in ProbLog

16.25 – 16.50 Witold Charatonik, Piotr Witkowski:
On the Complexity of the Bernays-Schönfinkel Class with Datalog

Page 5