

Table of Contents

Invited Talks

Representing and Reasoning with Preferences	1
<i>F. Rossi</i>	
Engineering of Logics for the Content-Based Representation of Information	2
<i>F. Baader</i>	
Formal Methods in Robotics	4
<i>B. Nebel</i>	

Multi-agent Systems

Games for Cognitive Agents	5
<i>M. Dastani, L. van der Torre</i>	
Knowledge-Theoretic Properties of Strategic Voting	18
<i>S. Chopra, E. Pacuit, R. Parikh</i>	
The CIFF Proof Procedure for Abductive Logic Programming with Constraints	31
<i>U. Endriss, P. Mancarella, F. Sadri, G. Terreni, F. Toni</i>	
Hierarchical Decision Making by Autonomous Agents	44
<i>S. Heymans, D. Van Nieuwenborgh, D. Vermeir</i>	
Verifying Communicating Agents by Model Checking in a Temporal Action Logic	57
<i>L. Giordano, A. Martelli, C. Schwind</i>	
Qualitative Action Theory (A Comparison of the Semantics of Alternating-Time Temporal Logic and the Kutschera-Belnap Approach to Agency)	70
<i>S. Wölfl</i>	
Practical Reasoning for Uncertain Agents	82
<i>N. de C. Ferreira, M. Fisher, W. van der Hoek</i>	
Modelling Communicating Agents in Timed Reasoning Logics	95
<i>N. Alechina, B. Logan, M. Whitsey</i>	

Logic Programming and Nonmonotonic Reasoning

On the Relation Between ID-Logic and Answer Set Programming	108
<i>M. Mari��n, D. Gilis, M. Denecker</i>	
An Implementation of Statistical Default Logic	121
<i>G.R. Wheeler, C.V. Dam��sio</i>	
Capturing Parallel Circumscription with Disjunctive Logic Programs	134
<i>T. Janhunen, E. Oikarinen</i>	
Towards a First Order Equilibrium	
Logic for Nonmonotonic Reasoning	147
<i>D. Pearce, A. Valverde</i>	
Characterizations for Relativized Notions	
of Equivalence in Answer Set Programming	161
<i>S. Woltran</i>	
Equivalence of Logic Programs Under Updates	174
<i>K. Inoue, C. Sakama</i>	
Cardinality Constraint Programs	187
<i>T. Syrj��nen</i>	
Recursive Aggregates in Disjunctive Logic Programs:	
Semantics and Complexity	200
<i>W. Faber, N. Leone, G. Pfeifer</i>	

Reasoning Under Uncertainty

A Logic for Reasoning About Coherent Conditional Probability:	
A Modal Fuzzy Logic Approach	213
<i>E. Marchioni, L. Godo</i>	
A Logic with Conditional Probabilities	226
<i>M. Ra��kovi��, Z. Ognjanovi��, Z. Markovi��</i>	
Reasoning About Quantum Systems	239
<i>P. Mateus, A. Sernadas</i>	
Sorted Multi-adjoint Logic Programs:	
Termination Results and Applications	252
<i>C.V. Dam��sio, J. Medina, M. Ojeda-Aciego</i>	

Logic Programming

The Modal Logic Programming System MProlog	266
<i>L.A. Nguyen</i>	

Soundness and Completeness of an “Efficient” Negation for Prolog	279
<i>J.J. Moreno-Navarro, S. Muñoz-Hernández</i>	

Logic Programs with Functions and Default Values	294
<i>P. Cabalar, D. Lorenzo</i>	

Actions and Causation

Parallel Encodings of Classical Planning as Satisfiability	307
<i>J. Rintanen, K. Heljanko, I. Niemelä</i>	

Relational Markov Games	320
<i>A. Finzi, T. Lukasiewicz</i>	

On the Logic of ‘Being Motivated to Achieve ρ , Before δ ’	334
<i>J. Broersen</i>	

Complexity Issues

Representation and Complexity in Boolean Games	347
<i>P.E. Dunne, W. van der Hoek</i>	

Complexity in Value-Based Argument Systems	360
<i>P.E. Dunne, T. Bench-Capon</i>	

A Polynomial Translation from the Two-Variable Guarded Fragment with Number Restrictions to the Guarded Fragment	372
<i>Y. Kazakov</i>	

Description Logics

Transforming Fuzzy Description Logics into Classical Description Logics	385
<i>U. Straccia</i>	

Computing the Least Common Subsumer w.r.t. a Background Terminology	400
<i>F. Baader, B. Sertkaya, A.-Y. Turhan</i>	

Explaining Subsumption by Optimal Interpolation	413
<i>S. Schlobach</i>	

Belief Revision

Two Approaches to Merging Knowledge Bases	426
<i>J.P. Delgrande, T. Schaub</i>	

An Algebraic Approach to Belief Contraction and Nonmonotonic Entailment	439
<i>L. Flax</i>	

XII Table of Contents

Logical Connectives for Nonmonotonicity: A Choice Function-Based Approach	452
<i>J. Mengin</i>	

On Sceptical Versus Credulous Acceptance for Abstract Argument Systems	462
<i>S. Doutre, J. Mengin</i>	

Modal, Spacial, and Temporal Logics

Line-Based Affine Reasoning in Euclidean Plane	474
<i>P. Balbiani, T. Tinchev</i>	

Measure Logics for Spatial Reasoning	487
<i>M. Giritli</i>	

Only Knowing with Confidence Levels: Reductions and Complexity	500
<i>E.H. Lian, T. Langholm, A. Waaler</i>	

Time Granularities and Ultimately Periodic Automata	513
<i>D. Bresolin, A. Montanari, G. Puppis</i>	

Theorem Proving

Polynomial Approximations of Full Propositional Logic via Limited Bivalence	526
<i>M. Finger</i>	

Some Techniques for Branch-Saturation in Free-Variable Tableaux	539
<i>N. Peltier</i>	

Semantic Knowledge Partitioning	552
<i>C. Wernhard</i>	

Negative Hyper-resolution as Procedural Semantics of Disjunctive Logic Programs	565
<i>L.A. Nguyen</i>	

Applications

Discovering Anomalies in Evidential Knowledge by Logic Programming	578
<i>F. Angiulli, G. Greco, L. Palopoli</i>	

Logic Programming Infrastructure for Inferences on FrameNet	591
<i>P. Baumgartner, A. Burchardt</i>	

An Answer Set Programming Encoding of Prioritized Removed Sets Revision: Application to GIS	604
<i>J. Ben-Naim, S. Benferhat, O. Papini, E. Würbel</i>	

Automatic Compilation of Protocol Insecurity Problems into Logic Programming	617
<i>A. Armando, L. Compagna, Y. Lierler</i>	
Exploiting Functional Dependencies in Declarative Problem Specifications	628
<i>M. Cadoli, T. Mancini</i>	
Combining Decision Procedures for Sorted Theories	641
<i>C. Tinelli, C.G. Zarba</i>	
Meta-level Verification of the Quality of Medical Guidelines Using Interactive Theorem Proving	654
<i>A. Hommersom, P. Lucas, M. Balser</i>	
Towards a Logical Analysis of Biochemical Pathways	667
<i>P. Doherty, S. Kertes, M. Magnusson, A. Szalas</i>	
Systems Session	
Abductive Logic Programming with ClIFF: System Description	680
<i>U. Endriss, P. Mancarella, F. Sadri, G. Terreni, F. Toni</i>	
The DALI Logic Programming Agent-Oriented Language	685
<i>S. Costantini, A. Tocchio</i>	
Qsmodels: ASP Planning in Interactive Gaming Environment	689
<i>L. Padovani, A. Provetti</i>	
A System with Template Answer Set Programs	693
<i>F. Calimeri, G. Ianni, G. Ielpa, A. Pietramala, M.C. Santoro</i>	
New DLV Features for Data Integration	698
<i>F. Calimeri, M. Citrigno, C. Cumbo, W. Faber, N. Leone, S. Perri, G. Pfeifer</i>	
Profiling Answer Set Programming: The Visualization Component of the noMoRe System	702
<i>A. Bösel, T. Linke, T. Schaub</i>	
The PLP System	706
<i>T. Wakaki, K. Inoue, C. Sakama, K. Nitta</i>	
The MyYapDB Deductive Database System	710
<i>M. Ferreira, R. Rocha</i>	
InterProlog: Towards a Declarative Embedding of Logic Programming in Java	714
<i>M. Calejo</i>	

Logics in Artificial Intelligence

9th European Conference, JELIA 2004, Lisbon, Portugal,

September 27-30, 2004, Proceedings

Alferes, J.J.; Leite, J. (Eds.)

2004, XIV, 746 p., Softcover

ISBN: 978-3-540-23242-1