

Table of Contents

Presenting Constraints (Invited Talk)	1
<i>Peter Jeavons</i>	
On the Use of Automata for Deciding Linear Arithmetic (Invited Talk, Abstract)	16
<i>Pierre Wolper</i>	
Comparative Concept Similarity over Minspaces: Axiomatisation and Tableaux Calculus	17
<i>Régis Alenda, Nicola Olivetti, and Camilla Schwind</i>	
A Schemata Calculus for Propositional Logic	32
<i>Vincent Aravantinos, Ricardo Caferra, and Nicolas Peltier</i>	
Tableaux and Model Checking for Memory Logics	47
<i>Carlos Areces, Diego Figueira, Daniel Gorín, and Sergio Mera</i>	
Canonical Constructive Systems	62
<i>Arnon Avron and Ori Lahav</i>	
A Novel Architecture for Situation Awareness Systems	77
<i>Franz Baader, Andreas Bauer, Peter Baumgartner, Anne Cregan, Alfredo Gabaldon, Krystian Ji, Kevin Lee, David Rajaratnam, and Rolf Schwitter</i>	
On the Proof Theory of Regular Fixed Points	93
<i>David Baelde</i>	
Decidability for Priorean Linear Time Using a Fixed-Point Labelled Calculus	108
<i>Bianca Boretti and Sara Negri</i>	
A Tableau-Based System for Spatial Reasoning about Directional Relations	123
<i>Davide Bresolin, Angelo Montanari, Pietro Sala, and Guido Sciavicco</i>	
Terminating Tableaux for the Basic Fragment of Simple Type Theory	138
<i>Chad E. Brown and Gert Smolka</i>	
Modular Sequent Systems for Modal Logic	152
<i>Kai Brännler and Lutz Straßburger</i>	
Abduction and Consequence Generation in a Support System for the Design of Logical Multiple-Choice Questions	167
<i>Marta Cialdea Mayer</i>	

Goal-Directed Invariant Synthesis for Model Checking Modulo Theories	173
<i>Silvio Ghilardi and Silvio Ranise</i>	
Taming Displayed Tense Logics Using Nested Sequents with Deep Inference	189
<i>Rajeev Goré, Linda Postniece, and Alwen Tiu</i>	
Sound Global State Caching for <i>ALC</i> with Inverse Roles	205
<i>Rajeev Goré and Florian Widmann</i>	
A Tableau System for the Modal μ -Calculus	220
<i>Natthapong Jungteerapanich</i>	
Terminating Tableaux for Graded Hybrid Logic with Global Modalities and Role Hierarchies	235
<i>Mark Kaminski, Sigurd Schneider, and Gert Smolka</i>	
Prime Implicate Tries	250
<i>Andrew Matusiewicz, Neil V. Murray, and Erik Rosenthal</i>	
Proof Systems for a Gödel Modal Logic	265
<i>George Metcalfe and Nicola Olivetti</i>	
Generic Modal Cut Elimination Applied to Conditional Logics	280
<i>Dirk Pattinson and Lutz Schröder</i>	
Proof Search and Counter-Model Construction for Bi-intuitionistic Propositional Logic with Labelled Sequents	295
<i>Luís Pinto and Tarmo Uustalu</i>	
Automated Synthesis of Tableau Calculi	310
<i>Renate A. Schmidt and Dmitry Tishkovsky</i>	
Tableaux for Projection Computation and Knowledge Compilation	325
<i>Christoph Wernhard</i>	
Author Index	341