# KR 2008 Programme

## **Monday September 15**

13:30-15:00 Tutorial 1 Michael Thielscher: KR-Techniques for General Game Playing (Doric)		
	Coffee Break	
15:30-17:00	Tutorial 2 Tony Hunter: Argumentation Systems (Doric)	
17:00-18:00 KR Opening Norman Foo: Great Moments in KR Talk (Doric)		
18:00	Welcome Reception (Banquet Hall)	

### **Tuesday September 16**

09:00- 10:00	KR-CP Invited talk: Adnan Darwiche Satisfiability, Knowledge Compilation and the Journey Towards Universal				
10.00	Reasoning Engines (Grand Lodge)  Coffee Break				
10:30-	S1: LOGIC PROGRAMMING (Doric)	S2: PREFERENCES (Corinth.)			
12:00	` ′	ll '			
	Computing Loops with at Most One External Support Rule, Xiaoping Chen, Jianmin Ji, Fangzhen Lin  Conflict-Driven Disjunctive Answer Set Solving, Christian Drescher, Martin Gebser, Torsten Grote, Benjamin Kaufmann, Arne König, Max Ostrowski, Torsten Schaub	Relational Preference Rules for Control, Ronen I. Brafman Reasoning with Qualitative Preferences and Cardinalities			
		using Generalized Circumscription, Patrick Doherty, Andrzej Szalas			
		Dealing with Incomplete Agents' Preferences and an Uncertain Agenda in Group Decision Making via			
	On Loop Formulas with Variables, Joohyung Lee, Yunsong Meng	Rossi, Kristen Brent Venable, Toby Walsh			
	Answer Set Programming with Functions, Fangzhen Lin, Yisong Wang	Preference Modeling by Weighted Goals with Max Aggregation, Joel Uckelman, Ulle Endriss			
	Lunch Break				
13:30-	S3: NONMONOTONIC REASONING (Doric)	S4: TEMPORAL AND SPATIAL REASONING (Corinth.)			
15:00	Default Theory of Defeasible Entailment, Alexander Bochman	Formalising Temporal Constraints on Part-Whole Relations, Alessandro Artale, Nicola Guarino, C. Maria			
	Semantic Preferential Subsumption, Katarina Britz, Johannes Heidema, Thomas Meyer	Keet Time Representation and Temporal Reasoning from the			
	Computing Default Extensions by Reductions on OR, Espen H. Lian, Arild Waaler	Perspective of Non-Standard Analysis, Philippe Balbiani  A Complete First-Order Logic of Knowledge and Time,			
	An Abstract Argumentation Framework with Varied- Strength Attacks, Diego C. Martínez, Alejandro J. García, Guillermo R. Simari	Francesco Belardinelli, Alessio Lomuscio			
		Automated Complexity Proofs for Qualitative Spatial and Temporal Calculi, Jochen Renz, Jason Jingshi Li			
	Coffee Break				
15:30- 17:00	S5: NONM. REAS. AND LOGIC PROGR. (Doric)	S6: CAUSALITY AND MACHINE LEARNING (Corinth.)			
	Embedding Approaches to Combining Rules and Ontologies into Autoepistemic Logic, Jos de Bruijn, Thomas Eiter, Hans Tompits	Scenario Update Applied to Causal Reasoning, Florence Dupin de Saint-Cyr			
	A Principled Framework for Modular Web Rule Bases and Its Semantics, Anastasia Analyti, Grigoris	Defaults and Normality in Causal Structures, Joseph Y. Halpern			
	Antoniou, Carlos Viegas Damásio	On Notions of Causality and Distributed Knowledge, Ron van der Meyden			
	Notions of Strong Equivalence for Logic Programs with Ordered Disjunction, Wolfgang Faber, Hans Tompits, Stefan Woltran	A First Experimental Demonstration of Massive Knowledge Infusion, Loizos Michael, Leslie G. Valiant			
	Belief Revision of Logic Programs under Answer Set Semantics, James Delgrande, Torsten Schaub, Hans Tompits, Stefan Woltran				
17:15- 18:45	Doctoral Consortium (Banquet Hall, Snacks provided)				

#### Wednesday September 17

08:45-10:00: KRAMAS (Doric) 08:30-10:00 KROW (Corinth.) (Dynamic) Epistemic Logic KROW Invited talk: Enrico Franconi What Do We Accept After an Announcement?, Towards Distributed Tableaux Reasoning Procedure for DDL with Herzig, Lima, Lorini Increased Subsumption Propagation between Remote Ontologies, Martin Homola and Luciano Serafini Reasoning about other agents' beliefs under bounded resources, Alechina, Logan, Nguyen, Rakib Simulation and information: quantifying over epistemic events Van Ditmarsch, French Coffee Break 10:30-12:00 KROW (Corinth.) 10:30-12:35: KRAMAS (Doric) Communication, Coalitions & Games Supporting coral reef ecosystems research through modelling re-Dynamic logic on Normal form Games, usable ontologies, Trina Myers, Ian Atkinson and Ron Johnstone Ramanujam, Simon Enhancing Subjective Ontologies with Social Tagging Systems, Modal Logics for Preferences and Cooperation: Dennis Hooijmaijers and Markus Stumptner Expressivity and Complexity, Degremont, Creating and Querying Linguistically Motivated Ontologies, Rolf Kurzen Information-Based Argumentation, Sierra, Debenham From trust in information sources to trust in communication systems: an analysis in modal logic, Lorini, Demolombe Pre-processing Techniques For Anytime Coalition Structure, Michalak, Dowell, McBurney, Wooldridge Lunch Break 14:00- KR-KRAMAS-KROW Invited talk: Joe Halpern Beyond Nash Equilibrium: Solution Concepts for the 21st 15:00 | Century (Doric) Coffee Break 15:20-17:00: KRAMAS (Doric) 15:30-17:00 KROW (Corinth.) Coordination Heterogeneously Structured Ontologies - Integration, Connection, and Refinement, Oliver Kutz, Dominik Luecke and Till Normative Multi-Agent Programs and Their Logics, Dastani, Grossi, Meyer, Tinnemeier Mossakowski Cognitive Artifacts for Intelligent Agents in Ontology Evolution for Customer Services, Tho Quan and Thai MAS: Exploiting Relevant Information residing Nguyen in Environments, Piunti, Ricci An Argumentative Approach to Reasoning with Inconsistent An Argumentation-based Protocol for Conflict Ontologies, Sergio Alejandro Gomez, Carlos Chesnevar and Resolution, Bentahar, Alam, Maamar Guillermo R. Simari Utilising Ontological Structure for Reasoning with Preferences, Requirements towards automated mediation Gil Chamiel and Maurice Pagnucco agents, Simoff, Sierra, Lopez de Mantaras 17:45- Conference dinner on MV Sydney 2000 with boarding at Jetty 1 of King Street Wharf. See map.

## **Thursday September 18**

9:00- 10:00	KR-ICAPS Invited Talk: Ronen Brafman Preferences, Planning and Control (Grand Lodge)				
	Coffee Break				
10:30-	S7: JOINT KR-ICAPS SESSION I (Grand Lodge)	S8: DESCRIPTION LOGICS/ONTOLOGIES I (Doric)			
12:00	On the Complexity of Planning Operator Subsumption, Patrick Eyerich, Michael Brenner, Bernhard Nebel	LTL over Description Logic Axioms Franz Baader, Silvio Ghilardi, Carsten Lutz  View-Based Query Answering over Description Logic			
	Deductive Planning with Inductive Loops, Martin Magnusson, Patrick Doherty	Ontologies Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Riccardo Rosati			
	Planning Graphs and Propositional Clause- Learning, Jussi Rintanen	Unions of Conjunctive Queries in SHOQ, Birte Glimm, Ian Horrocks, Ulrike Sattler			
	Proving Goal Achievability, Fangzhen Lin	Representing Structured Objects using Description Graphs, Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, Ulrike Sattler			
	Lunch Break				
13:30-	S9: JOINT KR-ICAPS SESSION II (Grand Lodge)	S10: DESCRIPTION LOGICS/ONTOLOGIES II (Doric)			
15:00	A Temporal Logic-Based Planning and Execution Monitoring System, Jonas Kvarnström, Fredrik Heister Potrick Deborts	Identifying Objects Over Time with Description Logics, David Toman, Grant Weddell			
	Heintz, Patrick Doherty  The Complexity of Optimal Planning and a More Efficient Method for Finding Solutions, Katrina Ray, Matthew L. Ginsberg	Path-Based Identification Constraints in Description Logics, Diego Calvanese, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Riccardo Rosati			
	A Compact and Efficient SAT Encoding for Planning, Nathan Robinson, Charles Gretton, Duc- Nghia Pham, Abdul Sattar	RIQ and SROIQ Are Harder than SHOIQ, Yevgeny Kazakov How Many Toes Do I Have? Parthood and Number Restrictions in Description Logics, Lutz Schröder, Dirk Pattinson			
	Stochastic Planning with First Order Decision Diagrams, Saket Joshi, Roni Khardon	a dunison			
	Coffee Break				
15:30- 17:00	S11: JOINT KR-ICAPS SESSION III (Grand Lodge)	S12: DESCRIPTION LOGICS/ONTOLOGIES III (Doric)  Can You Tell the Difference Between DL-Lite Ontologies?,  Roman Kontchakov, Frank Wolter, Michael Zakharyaschev			
	Classen, Gerhard Lakemeyer	Complexity of Abduction in the EL Family of Lightweight			
		Model-Theoretic Characterization of Asher and Vieu's Ontology of Mereotopology, Torsten Hahmann, Michael			
	On the Relative Expressiveness of ADL and Golog: The Last Piece in the Puzzle, Gabriele Röger, Malte Helmert, Bernhard Nebel	Gruninger  Ontology Generation through the Fusion of Partial Reuse and Relation Extraction, Nwe Ni Tun, Jin Song Dong			
	Behavior Composition in the Presence of Failure, Sebastian Sardina, Fabio Patrizi, Giuseppe De Giacomo				

## Friday September 19

08:45- 10:40	S13: AGENTS (Doric)	S14: INCONSISTENCY (Corinth.)			
	Mehdi Dastani, Brian S. Logan, John-Jules Ch. Meyer  A Logical Framework to Represent and Reason about Graded  Preferences and Intentions, Ana Casali, Lluís Godo, Carles  Sierra	How to Choose Weightings to Avoid Collisions in a Restricted Penalty Logic, Nathalie Chetcuti- Sperandio, Sylvain Lagrue			
		Conflict-Based Merging Operators, Patricia Everaere, Sébastien Konieczny, Pierre Marquis			
		Measuring Inconsistency through Minimal Inconsistent Sets, Anthony Hunter, Sébastien Konieczny			
		Inconsistency Management Policies, Maria Vanina Martinez, Francesco Parisi, Andrea Pugliese, Gerardo I. Simari, V. S. Subrahmanian			
		A Lexicographic Inference for Partially Preordered Belief Bases, Safa Yahi, Salem Benferhat, Sylvain Lagrue, Mariette Sérayet, Odile Papini			
	Coffee Break				
11:10-	KR Challenges Session: (Doric)				
12:10	Erik Sandewall: Obtaining Well-Represented Knowledge from the WWW: the Need for Information Analysis Frank van Harmelen: Knowledge Representation in the age of the Web: Why KR will never be the same again				
	Lunch Break				
13:30-	S15: REASONING ABOUT ACTION (Doric)	S16: ARGUMENTATION (Corinth.)			
15:00	Complex Epistemic Modalities in the Situation Calculus, Ryan F. Kelly, Adrian R. Pearce	Peer-to-Peer Query Answering with Inconsistent Knowledge, Arnold Binas, Sheila A. McIlraith			
	Cartesian Situations and Knowledge Decomposition in the Situation Calculus, Ronald P. A. Petrick	Making Decisions through Preference-Based Argumentation, Leila Amgoud, Yannis Dimopoulos, Pavlos Moraitis			
	Action Theory Contraction and Minimal Change, Ivan José Varzinczak	Revision of an Argumentation System, Claudette			
	First-Order Strong Progression for Local-Effect Basic Action Theories, Stavros Vassos, Gerhard Lakemeyer, Hector J. Levesque	Cayrol, Florence Dupin de Saint-Cyr, Marie- Christine Lagasquie-Schiex			
	Coffee Break				
15:30-	S17: APPROXIMATE REASONING AND QUERY ANSWERING (Doric)  Injecting the How into the What: Investigating a Finite Classical Logic, Timothy L. Hinrichs, Michael R. Genesereth Taming the Infinite Chase: Query Answering under Expressive Relational Constraints, Andrea Cali, Georg Gottlob, Michael Kifer	S18: BELIEF CHANGE (Corinth.)			
17:00		Equilibria in Social Belief Removal, Richard Booth, Thomas Meyer			
		Horn Clause Belief Change: Contraction Functions, James P. Delgrande			
		Linking Iterated Belief Change Operations to Nonmonotonic Reasoning, Gabriele Kern-Isberner			
	Accuracy and Efficiency of Fixpoint Methods for Approximate, Query Answering in Locally Complete Databases Álvaro Cortés-Calabuig, Marc Denecker, Ofer Arieli, Maurice Bruynooghe	Improvement Operators, Sébastien Konieczny, Ramón Pino Pérez			
	Approximate Reasoning in First-Order Logic Theories, Johan Wittocx, Maarten Marién, Marc Denecker				