## KR 2008, Preliminary Program (as of August 20)

### Monday, Sept. 15

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>15:30</td>
<td>Tutorial Tony Hunter: Argumentation Systems</td>
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<tr>
<td>17:00</td>
<td>KR-Opening: Norman Foo: Great Moments in KR Talk</td>
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<tr>
<td>18:00</td>
<td>Welcome Reception</td>
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### Tuesday, Sept. 16

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00</td>
<td>KR-CP Invited Talk Adnan Darwiche: Satisfiability, Knowledge Compilation and the Journey Towards Universal Reasoning Engines</td>
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<tr>
<td>10:30</td>
<td>S1: Logic Programming</td>
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<td></td>
<td>S2: Preferences</td>
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<tr>
<td>13:30</td>
<td>S3: Nonmonotonic Reasoning</td>
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<td></td>
<td>S4: Temporal and Spatial Reasoning</td>
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<tr>
<td>15:30</td>
<td>S5: Nonmonotonic Reasoning and Logic Programming</td>
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<td></td>
<td>S6: Causality &amp; Machine Learning</td>
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<tr>
<td>17:15</td>
<td>Doctoral Consortium (Snacks provided)</td>
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### Wednesday, Sept. 17

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:30</td>
<td>KRAMAS &amp; KROW</td>
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<tr>
<td>14:00</td>
<td>Invited Talk Joe Halpern: Beyond Nash Equilibrium: Solution Concepts for the 21st Century</td>
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<tr>
<td>15:30</td>
<td>KRAMAS &amp; KROW</td>
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### Thursday, Sept. 18

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<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>9:00</td>
<td>KR-ICAPS Invited Talk Ronen Brafman: Preferences, Planning and Control</td>
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<tr>
<td>10:30</td>
<td>S7: joint KR-ICAPS session I</td>
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<td></td>
<td>S8: Description Logics/Ontologies I</td>
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<tr>
<td>13:30</td>
<td>S9: joint KR-ICAPS session II</td>
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<tr>
<td></td>
<td>S10: Description Logics/Ontologies II</td>
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<tr>
<td>15:30</td>
<td>S11: Joint KR-ICAPS session III</td>
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<tr>
<td></td>
<td>S12: Description Logics/Ontologies III</td>
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### Friday, Sept. 19

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>8:45</td>
<td>S13: Agents</td>
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<td></td>
<td>S14: Inconsistency</td>
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<tr>
<td>11:10</td>
<td>KR Challenges Session: Erik Sandewall &amp; Frank van Harmelen</td>
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<tr>
<td>13:30</td>
<td>S15: Reasoning about Action</td>
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<td>S16: Argumentation</td>
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<tr>
<td>15:30</td>
<td>S17: Approximate Reasoning &amp; Query Answering</td>
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<td>S18: Belief Change</td>
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Paper sessions Tuesday, Sept. 16

S1: Logic Programming (Tuesday, Sept. 16, 10:30)

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

On Loop Formulas with Variables
Joohyung Lee, Yunsong Meng

Answer Set Programming with Functions
Fangzhen Lin, Yisong Wang

S2: Preferences (Tuesday, Sept. 16, 10:30)

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 Sequential Majority Voting
Maria Silvia Pini, Francesca Rossi, Kristen Brent Venable, Toby Walsh

Preference Modeling by Weighted Goals with Max Aggregation
Joel Uckelman, Ulle Endriss

S3: Nonmonotonic Reasoning (Tuesday, Sept. 16, 13:30)

Default Theory of Defeasible Entailment
Alexander Bochman

Semantic Preferential Subsumption
Katarina Britz, Johannes Heidema, Thomas Meyer

Computing Default Extensions by Reductions on OR
Espen H. Lian, Arild Waaler

An Abstract Argumentation Framework with Varied-Strength Attacks
Diego C. Martínez, Alejandro J. García, Guillermo R. Simari
S4: Temporal and Spatial Reasoning (Tuesday, Sept. 16, 13:30)

- Formalising Temporal Constraints on Part-Whole Relations
  Alessandro Artale, Nicola Guarino, C. Maria Keet

- Time Representation and Temporal Reasoning from the Perspective of Non-Standard Analysis
  Philippe Balbiani

- A Complete First-Order Logic of Knowledge and Time
  Francesco Belardinelli, Alessio Lomuscio

- Automated Complexity Proofs for Qualitative Spatial and Temporal Calculi
  Jochen Renz, Jason Jingshi Li

S5: Nonmonotonic Reasoning and Logic Programming (Tuesday, Sept. 16, 15:30)

- Embedding Approaches to Combining Rules and Ontologies into Autoepistemic Logic
  Jos de Bruijn, Thomas Eiter, Hans Tompits

- A Principled Framework for Modular Web Rule Bases and Its Semantics
  Anastasia Analyti, Grigoris Antoniou, Carlos Viegas Damásio

- Notions of Strong Equivalence for Logic Programs with Ordered Disjunction
  Wolfgang Faber, Hans Tompits, Stefan Woltran

- Belief Revision of Logic Programs under Answer Set Semantics
  James Delgrande, Torsten Schaub, Hans Tompits, Stefan Woltran

S6: Causality & Learning (Tuesday, Sept. 16, 15:30)

- Scenario Update Applied to Causal Reasoning
  Florence Dupin de Saint-Cyr

- Defaults and Normality in Causal Structures
  Joseph Y. Halpern

- On Notions of Causality and Distributed Knowledge
  Ron van der Meyden

- A First Experimental Demonstration of Massive Knowledge Infusion
  Loizos Michael, Leslie G. Valiant
Paper sessions Thursday, Sept. 18

S7: Joint KR-ICAPS session I (Thursday, Sept. 18, 10:30)

On the Complexity of Planning Operator Subsumption
Patrick Eyerich, Michael Brenner, Bernhard Nebel

Deductive Planning with Inductive Loops
Martin Magnusson, Patrick Doherty

Planning Graphs and Propositional Clause-Learning
Jussi Rintanen

Proving Goal Achievability
Fangzhen Lin

S8: Description Logics/Ontologies I (Thursday, Sept. 18, 10:30)

LTL over Description Logic Axioms
Franz Baader, Silvio Ghilardi, Carsten Lutz

View-Based Query Answering over Description Logic Ontologies
Diego Calvanese, Giuseppe De Giacomo, Maurizio Lenzerini, Riccardo Rosati

Unions of Conjunctive Queries in SHOQ
Birte Glimm, Ian Horrocks, Ulrike Sattler

Representing Structured Objects using Description Graphs
Boris Motik, Bernardo Cuenca Grau, Ian Horrocks, Ulrike Sattler

S9: Joint KR-ICAPS session II (Thursday, Sept. 18, 13:30) ICAPS papers

A Temporal Logic-Based Planning and Execution Monitoring System
Jonas Kvarnström, Fredrik Heintz, Patrick Doherty

The Complexity of Optimal Planning and a More Efficient Method for Finding Solutions
Katrina Ray, Matthew L. Ginsberg

A Compact and Efficient SAT Encoding for Planning
Nathan Robinson, Charles Gretton, Duc-Nghia Pham, Abdul Sattar

Stochastic Planning with First Order Decision Diagrams
Saket Joshi, Roni Khardon
S10: Description Logics/Ontologies II (Thursday, Sept. 18, 13:30)

Identifying Objects Over Time with Description Logics
David Toman, Grant Weddell

Path-Based Identification Constraints in Description Logics
Diego Calvanese, Giuseppe De Giacomo, Domenico Lembo, Maurizio Lenzerini, Riccardo Rosati

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

S11: Joint KR-ICAPS session III (Thursday, Sept. 18, 15:30)

A Logic for Non-Terminating Golog Programs
Jens Classen, Gerhard Lakemeyer

ConGolog, Sin Trans: Compiling ConGolog into Basic Action Theories for Planning and Beyond
Christian Fritz, Jorge A. Baier, Sheila A. McIlraith

On the Relative Expressiveness of ADL and Golog: The Last Piece in the Puzzle
Gabriele Röger, Malte Helmert, Bernhard Nebel

Behavior Composition in the Presence of Failure
Sebastian Sardina, Fabio Patrizi, Giuseppe De Giacomo

S12: Description Logics/Ontologies III (Thursday, Sept. 18, 15:30)

Can You Tell the Difference Between DL-Lite Ontologies?
Roman Kontchakov, Frank Wolter, Michael Zakharyaschev

Complexity of Abduction in the EL Family of Lightweight Description Logics
Meghyn Bienvenu

Model-Theoretic Characterization of Asher and Vieu’s Ontology of Mereotopology
Torsten Hahmann, Michael Gruninger

Ontology Generation through the Fusion of Partial Reuse and Relation Extraction
Nwe Ni Tun, Jin Song Dong
Paper sessions Friday, Sept. 19

S13: Agents (Friday, Sept. 19, 8:45)

Reasoning about Agent Deliberation
*Natasha Alechina, 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*

A Logical Account of Institutions: From Acceptances to Norms via Legislators
*Emiliano Lorini, Dominique Longin*

Promises Kept, Promises Broken: An Axiomatic and Quantitative Treatment of Fulfillment
*Gerardo I. Simari, Matthias Broecheler, V.S. Subrahmanian, Sarit Kraus*

Dynamic Logic on Games with Structured Strategies
*R. Ramanujam, Sunil Easaw Simon*

S14: Inconsistency (Friday, Sept. 19, 8:45)

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 Sèrayet, Odile Papini*

S15: Reasoning about Action (Friday, Sept. 19, 13:30)

Complex Epistemic Modalities in the Situation Calculus
*Ryan F. Kelly, Adrian R. Pearce*

Cartesian Situations and Knowledge Decomposition in the Situation Calculus
*Ronald P. A. Petrick*

Action Theory Contraction and Minimal Change
*Ivan José Varzinczak*

First-Order Strong Progression for Local-Effect Basic Action Theories
*Stavros Vassos, Gerhard Lakemeyer, Hector J. Levesque*
S16: Argumentation (Friday, Sept. 19, 13:30)

Peer-to-Peer Query Answering with Inconsistent Knowledge
Arnold Binas, Sheila A. McIlraith

Making Decisions through Preference-Based Argumentation
Leila Amgoud, Yannis Dimopoulos, Pavlos Moraitis

Revision of an Argumentation System
Claudette Cayrol, Florence Dupin de Saint-Cyr, Marie-Christine Lagasque-Schiex

S17: Approximate Reasoning & Query Answering (Friday, Sept. 19, 15:30)

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

Accuracy and Efficiency of Fixpoint Methods for Approximate Query Answering in Locally Complete Databases
Álvaro Cortés-Calabuig, Marc Denecker, Ofer Arieli, Maurice Bruynooghe

Approximate Reasoning in First-Order Logic Theories
Johan Wittocx, Maarten Mariën, Marc Denecker

S18: Belief Change (Friday, Sept. 19, 15:30)

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

Improvement Operators
Sébastien Konieczny, Ramón Pino Pérez

Note: Regular talks will have 22.5 minutes each, including discussion!