

IJCAI 2009

**Workshop on
Spatial and Temporal Reasoning**

Pasadena Conference Center
California, USA

Sunday July 12, 2009

Organizing and Editorial Committee

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Supporting Institutions

Massey University (NEW ZEALAND)
SFB/TR 8 Spatial Cognition, University of Bremen and University of Freiburg (GERMANY)

W32: Sunday, July 12 2009.

SESSION 1 (9.00 – 10.00): Opening

Welcome

Hans Guesgen (Massey University)

Introductions and Research Statements

All Participants

Extending Fuzzy Qualitative-Metric Constraint Networks for Spatial Reasoning

Marco Falda (University of Padova)

***** Coffee Break**

SESSION 2 (10.30 – 12.00): Foundational Aspects

A Study of Heuristic based Evolutionary Algorithms for
Temporal Constraint Problems

Bahareh Jafari Jashmi and Malek Mouhoub (University of Regina)

Interval Algebra Networks with Infinite Intervals

André Trudel (Acadia University)

Logical Complexity of Qualitative Spatial and
Temporal Reasoning Applications

Carl Schultz, Robert Amor, and Hans W. Guesgen (Massey University)

***** Lunch Break**

SESSION 3 (14.00 – 15.00): Application-Driven Approaches

9-Intersection Calculi for Spatial Reasoning on the
Topological Relations between Multi-Domain Objects

Yohei Kurata (University of Bremen)

Extending Temporal Causal Graphs For Diagnosis Problems
Lamia Belouaer, Maroua Bouzid, and Malek Mouhoub
(*Université de Caen Basse-Normandie*)

***** Coffee Break**

SESSION 4 (15.30 – 18.00): Applications and Demos

Reasoning about a Temporal Scenario in Natural Language
Benjamin Han (IBM Watson Research Center)

Spatio-Temporal Aspects of the Monitoring of Complex Events
Gerard Ligozat, Zygmunt Vetulani, and Jędrzej Osinski
(*LIMSI, Paris-Sud University*)

***** Short break**

Pragmatic Scenario Inference on Static Spatial Configurations
Dan Tappan (Idaho State University)

Discussion

Spatial & Temporal calculi, What Next?
Emerging paradigms and roadmap for potential applications

Workshop Closure

Potential collaborations
Result follow-ups – Open call for extended/revised journal contributions
Participant feedback and future events