

Wednesday, September 13

08:30 – 09:00 **Registration**

09:00 – 09:05 Workshop Opening - Radim Jiroušek

09:05 – 10:50 **Inference I (General)**

Chair: Linda C. van der Gaag

09:05 Dynamic Weighting A* Search-based MAP Algorithm for Bayesian Networks.

Xiaoxun Sun, Marek J. Druzdzel, and Changhe Yuan

09:40 Dynamic importance sampling in Bayesian networks using factorisation of probability trees.

Irene Martínez, Carmelo Rodríguez, and Antonio Salmerón

10:15 Optimal Design with Design Networks.

Yang Xiang

10:50 – 11:20 **Coffee Break**

11:20 – 12:30 Inference II (Propagation)

Chair: José A. Gámez

11:20 Loopy Propagation: the Convergence Error in Markov Networks.

Janneke H. Bolt

11:55 Hybrid Loopy Belief Propagation.

Changhe Yuan and Marek J. Druzdzel

12:30 – 14:00 **Lunch**

14:00 – 16:00 Poster Session I:

Decision-Making, Applications

Chair: Kristian G. Olesen

Complexity Results for Enhanced Qualitative Probabilistic Networks.

Johan Kwisthout and Gerard Tel

Preprocessing the MAP Problem.

Janneke H. Bolt and Linda C. van der Gaag

• An Empirical Study of Efficiency and Accuracy of Probabilistic Graphical Models.

Jens D. Nielsen and Manfred Jaeger

• Sensitivity analysis of extreme inaccuracies in Gaussian Bayesian Networks.

Miguel A. Gómez-Villegas, Paloma Maín, and Rosario Susi

• A Bayesian Network Framework for the Construction of Virtual Agents with Human-like Behaviour. Olav Bangsø, Nicolaj Søndberg-Madsen, and Finn V. Jensen

Predictive Maintenance using Dynamic Probabilistic Networks.

Demet Özgür-Ünlüakin and Taner Bilgiç

• Literature Mining using Bayesian Networks.

Péter Antal and András Millinghoffer

• Decision analysis with influence diagrams using Elvira's explanation facilities.

Manuel Luque and Francisco J. Díez

Continuous Decision MTE Influence Diagrams.

Barry R. Cobb

• Evaluating Causal effects using Chain Event Graphs.

Peter Thwaites and Jim Smith

16:00 – 16:30 **Coffee Break**

16:30 – 18:15 **Applications to Decision-Making**

Chair: Antonio Salmerón

16:30 Selecting Strategies for Infinite-Horizon Dynamic LIMIDS.

Marcel A. J. van Gerven and Francisco J. Díez

17:05 Diagnosing Lyme disease - Tailoring patient specific Bayesian networks for temporal reasoning. Kristian G. Olesen, Ole K. Hejlesen, Ram Dessau, Ivan Beltoft, and Michael Trangeled

17:40 Abstraction and Refinement for Solving Continuous Markov Decision Processes. Alberto Reyes, Pablo Ibargüengoytia, L. Enrique Sucar, and Eduardo Morales

19:30 – 22:00 **Welcome Party**

19:00 Meeting at the registration desk.

The Welcome Party takes part in Michnův Palác - a part of Tyršův dům - situated in the heart of the city's Lesser Town (Malá Strana). The address of Michnův Palác is Újezd 40/450, Praha 1.