

Thursday, 11th January – morning (Chair: David Pym)

9:30–10:30

9:30 - 9:45 Nathanaël Fijalkow

Introduction

9:45 - 10:30 Martin Grohe (Aachen)

Learning Logically Defined Hypotheses

10:30–11:00 Coffee break

11:00–12:30

11:00 - 11:45 Borja Balle (Amazon Cambridge)

Learning Automata with Hankel Matrices

11:45 - 12:30 Edward Grefenstette (DeepMind)

Recurrent Neural Networks and Models of Computation

12:30–14:00 Lunch

Thursday, 11th January – afternoon (Chair: Andrew Blake)

14:00–15:30

14:00 - 14:45 Luc De Raedt (Leuven)

Probabilistic logic learning

14:45 - 15:30 Aditya Nori (Microsoft Cambridge)

Fairness and robustness in machine learning – a formal methods perspective

15:30–16:00 Coffee break

16:00–16:45

16:00 - 16:45 Jane Hilston (Edinburgh)

Integrating Inference with Stochastic Process Algebra Models

Friday, 12th January – morning (Chair: Anuj Dawar)

9:00–10:30

9:00 - 9:45 Jan Křetínský (Technical University of Munich)

Fast learning of small strategies

9:45 - 10:30 Alessandro Abate (Oxford and Turing)

Formal verification and learning of complex systems

10:30–11:00 Coffee break

11:00–12:30

11:00 - 11:45 Joost-Pieter Katoen (Aachen)

Bayesian Inference by Program Verification

11:45 - 12:30 Sam Staton (Oxford)

Denotational validation of higher-order Bayesian inference

12:30–14:00 Lunch

Friday, 12th January – afternoon (Chair: Stephen H. Muggleton)

14:00–15:30

14:00 - 14:45 Richard Evans (DeepMind)

Learning Explanatory Rules from Noisy Data

14:45 - 15:30 Tim Rocktäschel (Oxford)

End-to-End Differentiable Proving

15:30–16:00 Coffee break

16:00–17:00 FINAL REMARKS AND PERSPECTIVES

16:00 - 16:30 Prakash Panangaden (McGill)

16:30 - 17:00 Marta Kwiatkowska (Oxford)