Thursday, 11th January – morning

9:30–10:30 Logic and automata I

9:30 - 9:45 Nathanaël Fijalkow or David Pym
Introduction

9:45 - 10:30 Martin Grohe (Aachen)
Learning Logically Defined Hypotheses

10:30–11:00 Coffee break

11:00–12:30 Logic and automata II

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

14:00–15:30 Programming languages

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 Probabilistic programming I

16:00 - 16:45 Jane Hilston (Edinburgh)
Integrating Inference with Stochastic Process Algebra Models

Friday, 12th January – morning

9:00–10:30 Verification

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 Probabilistic programming II

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

14:00–15:30 Neural networks

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