



# University Defence Research Collaboration and the Alan Turing Institute Joint Themed Meeting Programme

# **Data Science, Signal Processing and Defence**

This joint meeting between the University Defence Research Collaboration and the Alan Turing Institute will investigate the challenges that are involved in Data Science and Signal Processing in a defence context. This meeting aims to identify synergies, share experiences and views, and to understand challenges in this important area.

Location: Alan Turing Institute, 1st Floor, Enigma Room, British Library, 96 Euston Road, London NW1 2DB

# Wednesday, November 29, 2017

#### 09:00 to 09:30 Refreshments

- 09:30 to 09:40 Welcome and introduction, Mark Briers, Alan Turing Institute
- 09:40 to 10:05 Privacy preserving data analysis, Adria Gascon, Alan Turing Institute
- 10:05 to 10:30 Building more discriminative feature spaces for deep learning in video, Alessandro Borgia, Queens University Belfast
- 10:30 to 10:55 Contextual information in network anomaly detection, Fran Aparicio-Navarro, Newcastle University
- 10:55 to 11:20 Network-based inference and structure discovery, Simon Godsill, Cambridge University

## 11:20 to 11:45 Refreshments

- 11:45 to 12:10 Annotated data availability in defence deep learning applications, or the lack of it, Mohammad Dabbah
- 12:10 to 12:35 Matrix completion/compressed sensing with expander graphs, Jared Tanner, Alan Turing Institute
- 12:35 to 13:00 Multiway analysis for data science, Danilo Mandic, Imperial College London

# 13:00 to 13:40 Lunch

- 13:40 to 14:05 Reinforcement learning for optimal adaptive waveform design in MIMO active sensing systems, Steven Herbert, University of Edinburgh
- 14:05 to 14:30 Bots versus humans on social media- what are the tells?, Jon Crowcroft, Alan Turing Institute
- 14:30 to 14:55 Global Interaction Networks Predict the Geography of Conflict, Weisi Guo, Alan Turing Institute
- 14:55 to 15:20 Making sense of sounds, Wenwu Wang, University of Surrey
- 15:20 to 15:50 Dstl challenge competitions, Jordi Barr, Dstl

## 15:50 to 16:00 Discussion and Close