

Complexity Science in Business, Industry & Government 2012 Wednesday December 12 2012

Room D1.07, Centre for Complexity Science, Zeeman Building, University of Warwick

Organiser: Thomas Nichols (Department of Statistics, Warwick Manufacturing Group, & Centre for Complexity Science)

Aims and Objectives

This one-day meeting between Warwick Centre for Complexity staff and students and representatives of non-academic "end-users" of complex systems research aims to facilitate further transfer of Warwick's expertise in Complex Systems beyond the academic sphere. It will take place on December 12 at the Warwick Centre for Complexity Science. The aims of the workshop are as follows.

- to explore further opportunities for future collaborations between Warwick Centre for Complexity Science and external agencies.
- to give Warwick graduate students in Complexity Science a better insight into how their skills are relevant to business and industry.
- to identify appropriate Complexity MSc projects to be done in collaboration with external agencies.

Participants:

- Ian Hall & Roger Morbey (Health Protection Authority)
- Sarah Lee (Mango Solutions)
- Eman Martin-Vignerte (Bosch Healthcare)
- Philip Felton, Ian Wright and Ric Cooke (Mercedes-Benz Grand Prix Limited, "Mercedes F1")
- Phil Murphy (GlaxoSmithKline)



Programme-

(To take place in D1.07 unless otherwise stated)

- 11:30-12:00 Complexity Science at Warwick Prof. Robert MacKay (Director Warwick Centre for Complexity Science)
- 12:00-12:30 Data challenges in Health Protection Authority Ian Hall (HPA)
- **12:30-12:50** Talks from invited guests
- 12:30-14:00 Lunch and poster showcase of complexity research at Warwick
- 14:00-15:00 Complexity science challenges: how are complex systems relevant to industry and business? Discussion groups with PhD and MSc students. These discussion groups will be led by industry representatives and will focus on identifying possible ways in which the students' skills and knowledge of modeling and control of complex systems could possibly be applied to industrial problems of interest. A student representative of each group will report the outcome of the discussion group back to the entire group in the afternoon session.
 - Group 1: Challenges in health protection, led by Roger Morbey (HPA)(Postgraduate Study Area, First Floor, Complexity)
 - Group 2 cancelled at short notice
 - Group 3: Analysis challenges medical imaging, led by Sarah Lee (Mango Solutions)
 (Common Room, Complexity Science)
 - Group 4: Digital healthcare, led by Eman Martin-Vignerte (Bosch Healthcare) (D1.07 Complexity Science)
 - o Group 5: Formula 1, Philip Felton (Mercedes F1) (Common Room, Complexity Science)
 - o Group 6: Pharmaceuticals, by Phil Murphy (GSK) (**D1.07, Complexity Science**)
- 15:00-15:15 Coffee break
- 15:15-16:30 Summary of outcomes of discussion groups and open discussion
- **16:30-17:00** Round table discussion with Centre for Complexity Science staff: *future challenges* and opportunities in academic-industry collaborations in complexity science.