

Complexity & Networks Programme

Gabor Seminar Room, 611

The Electrical and Electronic Engineering Dept Building
South Kensington, London

<http://www3.imperial.ac.uk/complexityandnetworks>

How the brain works: Insights from complexity and self-organization

Sponsored by the Beckley Foundation

<http://www.beckleyfoundation.org/>

Wednesday 21st September 2011

The meeting is open to everyone, but please register by email to r.carhart-harris@imperial.ac.uk for catering purposes

- 13:00 Henrik Jeldtoft Jensen (Complexity & Networks and Dept of Math, Imperial College)
Welcome.
- 13:02 – 13:10 Robin Carhart-Harris (Neuropsychopharmacology Unit, Imperial College London)
Thanks to Amanda Feilding – and remarks on the Beckley Foundation.
- 13:10 – 13:35 Henrik Jeldtoft Jensen (Complexity & Networks and Dept of Math, Imperial College)
What does Complexity Science have to offer Neuroscience?
- 13:35 – 14:00 Kim Christensen (Complexity & Networks and Dept of Physics, Imperial College)
Self-similarity in the brain
- 14:00 – 14:10 *Discussion*
- 14:10 – 14:25 Refreshments
- 14:25 – 15:10 Karl Friston (Wellcome Trust Centre for Neuroimaging, UCL, London, UK)
Self-organisation and free energy
- 15:10 – 15:55 Ed Bullmore (Dept of Psychiatry, University of Cambridge, UK)
Brain graphs: what can graph theory tell us about brain complexity?
- 15:55 – 16:10 *Discussion*
- 16:10 – 16:40 Tea
- 16:40 – 17:25 Murray Shanahan (Dept of Computing, Imperial College)
Metastable Neurodynamics from Complex Brain Networks
- 17:25 – 18:10 Roseli S. Wedeman (Instituto de Matem. e Estatstica, Univ. do Estado do Rio de Janeiro)
Associativity in Complex Networks and the Modeling of Mental Processes
- 18:10 – 18:25 *Discussion*
- 18:25 – 18:30 Henrik Jeldtoft Jensen (Complexity & Networks and Dept of Math, Imperial College)
Closing remarks

For more information email Robin Carhart-Harris (r.carhart-harris@imperial.ac.uk) or
Henrik Jeldtoft Jensen (h.jensen@imperial.ac.uk)