



SEMINAR SERIES / TRINITY 2009

Convenors: Felix Reed-Tsochas, *Institute for Science, Innovation and Society, Saïd Business School*
Eduardo López, *Saïd Business School*

Tuesday 19th May

12.30 – 2.00pm

James Martin Seminar Room, Saïd Business School

Prof. Alan Baker

Department of Philosophy, *Swarthmore College*
CABDyN Complexity Centre, *Saïd Business School*

“Are Networks Real?”

Much of current research in complexity science is in fact research on complex networks. Representing complex phenomena as patterns of interconnected nodes and links, and analysing the topological properties of these networks, has undoubtedly led to many fruitful developments over the past decade. But what is the status of these networks themselves? Are networks ‘out there’ in the world, awaiting discovery by complexity scientists? Or are networks just a certain type of theoretical model?

While these questions are certainly philosophical in tone, my aim in this talk is to show that they also have implications for scientific practice. For example, when scientists talk of “the structure of the brain”, or “the structure of the Internet”, this suggests that there is a unique, privileged structure waiting to be uncovered. Using case studies from biology, social science and mathematics, I shall argue that our view of the ontological status of networks ought to affect how we delineate the goals of complexity science.

Our meetings intend to provide a forum for rigorous research (in a broad range of disciplines) focusing on complex adaptive systems, using methods and techniques such as agent-based modelling and complex network analysis. Since potential areas of application for such approaches can be located across the social, natural and engineering sciences, our aim is to involve participants from a wide range of departments in Oxford. We welcome talks which focus on particular areas of application and associated technical issues, but also encourage contributions which address more fundamental conceptual or mathematical problems. The CABDyN Seminar Series is one of the activities of the CABDyN Research Cluster (<http://sbs-xnet.sbs.ox.ac.uk/complexity/>).

Sandwiches and
drinks will be
provided

For further information
please contact the
Cabdyn Administrator:

info.cabdyn@sbs.ox.ac.uk
01865 (2)88785



INSTITUTE FOR
SCIENCE, INNOVATION
AND SOCIETY