MICHAELMAS TERM 2009

Saïd Business School, University of Oxford

SEMINAR SERIES

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

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.

Tuesday 27th October, 12:30-14:00

James Martin Seminar Room

Prof Alan McKane

School of Physics and Astronomy, University of Manchester

'Evolving complex food webs'

ABSTRACT

Prof McKane will describe a model in which the network structure of interactions between the constituents of the model is emergent, and not postulated a priori. This is carried out in the context of food webs networks of who eats whom in an ecological community. Three distinct time scales are present: an evolutionary time scale, a time-scale on which conventional population dynamics operates and one on which species may alter their feeding habits to take advantage of recent changes in population sizes. Various properties of the model webs are measured over a large number of realisations, and compared with data on real food webs. Many other aspects of the model have been investigated, and some of these will be briefly discussed.

Sandwiches and drinks will be provided

For further information contact info.cabdyn@sbs.ox.ac.uk
Seminar webpage: http://sbs-xnet.sbs.ox.ac.uk/complexity/complexity_seminars.asp
Please note: Although the seminar programme detailed above was correct at the time of printing, seminar arrangements are subject to change so , for the latest information please check seminar webpage.