

## **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 24<sup>th</sup> November, 12:30-14:00

James Martin Seminar Room

Prof David Strang

Department of Sociology, Cornell University

'Innovation diffusion as a coevolutionary process: adaptive emulation among firms and consultants'

## **ABSTRACT**

Models of innovation diffusion generally pay little attention to the carriers of new practices. We develop simple agent-based models that include consultants (as advertisers and implementers of innovations) as well as firms (as innovation adopters). Working within the "adaptive emulation" formulation of Strang and Macy (2001), we assume that both firms and consultants imitate the behaviour of their most successful peers. Interdependencies between the two populations (firms rely on experienced, high quality consultants to implement innovations while consultant revenue is based on providing innovations that firms want) generate distinctive adoption and abandonment trajectories. We explore the conditions under which consultants influence the faddishness versus stability of popular innovations over time.

Sandwiches and drinks will be provided