SAID BUSINESS SCHOOL, University of Oxford

SEMINAR SERIES / Hilary 2012

Convenor: Felix Reed-Tsochas, CABDyN Complexity Centre, Saïd Business School

For further information please contact the Cabdyn Administrator:

info.cabdyn@sbs.ox.ac.uk

01865 288785

Seminar webpage: www.cabdyn.ox.ac.uk/complexity_seminars.asp

Sandwiches and drinks will be provided

Please note: although the seminar programme detailed was correct at time of printing, seminar arrangements are subject to change – for the latest information, please check the seminar webpage.

'Agent behaviour and network influence on energy innovation diffusion'

Dr Martino Tran

Institute for Carbon and Energy Reduction in Transport, Oxford Martin School, UK

Tuesday 13th March 2012, 12.30 -14.00
Seminar Room A, Saïd Business School

Martino Tran is an Oxford Martin Research Fellow at the Institute for Carbon and Energy Reduction in Transport (ICERT) a joint initiative between Engineering Sciences and the Transport Studies Unit at the Oxford University Centre for Environment. He was previously a UK Energy Research Centre (UKERC) Fellow working on energy modelling and scenario analysis to inform UK government policy. He has advised on energy and environment for industry, UNDP, UNEP, and the UK Energy Research Council. He is generally interested in how complexity theory can inform environmental policy.

ABSTRACT:

Global environmental policies have increased the need to understand how new energy innovations diffuse into the market. A central uncertainty is whether the market for new technologies such as electric vehicles can be sustained into the future. Policy needs to be better informed about the necessary conditions for successful market introduction and penetration of new innovations. We investigate the coupled role of individual behaviour and social network influence on the adoption of electric vehicles. We find that network influence can have a positive effect on accelerating the diffusion of new energy innovations, but can be counteracted by individual risk adverse behaviour. Interestingly, indirect influence from the larger population can potentially have a greater effect than direct personal contacts on an individual. This implies a feedback between population and sub-population level signals on adoption behaviour which warrants further exploration as a mechanism to induce individual level change.

Cabdyn Complexity Centre

OXFORDMARTIN SCHOOL

Saïd Business School
UNIVERSITY OF OXFORD