



SAID BUSINESS SCHOOL, University of Oxford

SEMINAR SERIES / Hilary 2013

For further information please contact the Cabdyn Administrator:

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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.

'Dynamics of temporal social networks'

Ginestra Bianconi
Department of Physics, Northeastern University

Thursday 24th January 2013, 12.30 -14.00
Seminar Room 14, Saïd Business School

ABSTRACT:

The recent availability of data describing social networks is changing our understanding of the "microscopic structure" of a social tie. A social tie indeed is an aggregated outcome of many social interactions such as face-to-face conversations or phone calls. Analysis of data on face-to-face interactions and phone-calls shows that such events, as many other human activities, are bursty, with very heterogeneous durations. In this talk we present a model for social interactions at short time scales, based on a reinforcement dynamics. In this model the longer two individuals interact the smaller is the probability that they end their conversation. We present the analytic solution of the model and numerical study of the model's dynamical properties, and show that it reproduces important features of empirical data.