



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.

'Generative models of networks'

Richard Wilson

Department of Computer Science, University of York

Tuesday 19th February 2013, 12.30 -14.00
Andrew Cormack Seminar Room, Saïd Business School

ABSTRACT:

Graphs and networks are becoming increasingly important representations of data in a wide range of fields including engineering, neuroscience, social sciences, chemoinformatics and bioinformatics. This is because they give a natural representation to connections, relationships and interactions. One of the key questions that arises is how to model such networks. In this talk I will give an overview of some well known and some more recent attempts to model the structure of graphs and networks. In particular I will focus on recent attempts to construct a generative model for graphs which can be learnt from data. I will explain how simple models can be learnt and discuss the difficult issue of controlling model complexity. Finally I will mention some possible future directions for this approach.