

Trinity Term 2008

CABDyN SEMINAR SERIES
Saïd Business School, University of Oxford



Convenors:

Felix Reed-Tsochas, *James Martin Institute, Saïd Business School*
Jukka-Pekka Onnela, *Physics Department & 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 (<http://sbs-xnet.sbs.ox.ac.uk/complexity/>).

Tuesday 22nd April, 12.30 – 2.00 pm

Seminar Room B, Saïd Business School

Professor Tamás Vicsek
Department of Biological Physics
Eötvös Loránd University (ELTE), Budapest

Collective motion: models and experiments

ABSTRACT

We address the question of finding unifying principles describing the essential aspects of collective motion, being one of the most relevant, widespread and spectacular manifestation of collective behaviour. After an introduction to the topic, several models as well as a few new experiments will be discussed. The models have been designed to capture both the general features of group motion as well as the behaviour of specific systems including tissue cell cultures and panicking people. The experimental observations involve groups of migrating keratocytes in a Petri dish and a study of soaring bird trajectories.

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