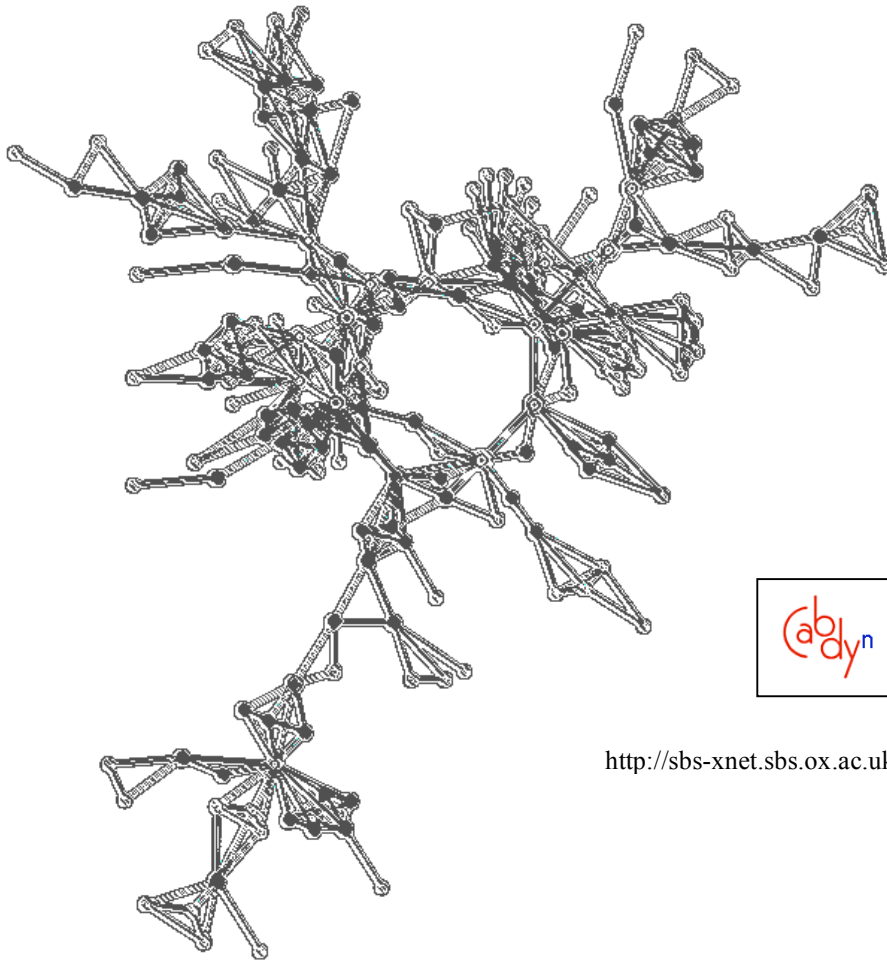




1st MMCOMNET WORKSHOP



MEASURING AND MODELLING COMPLEX NETWORKS ACROSS DOMAINS



<http://sbs-xnet.sbs.ox.ac.uk/complexity/>

20th-21st October 2005
Saïd Business School, University of Oxford.



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20 October 2005
Thursday

OPEN SESSION

INTRODUCTION AND WELCOME

9:30 – 10:00

Coffee and Registration
SEMINAR ROOM A

10:00 – 10:15

Official Welcome and Introduction of Participants
Roy Westbrook, Deputy Dean, Saïd Business School, Oxford.
SEMINAR ROOM A

10:15 – 11:00

The MMCOMNET Research Project: Overview and Roadmap
Felix Reed-Tsochas, Saïd Business School, Oxford.
SEMINAR ROOM A

WORKING PAPER SESSIONS

This session has been organised so that at least one paper is presented by each project partner reflecting ongoing MMCOMNET research. The aim is to allow all MMCOMNET participants to become more familiar with each others work, as a starting point for new direct collaborations and joint publications. Papers should be 30 minutes in length, and speakers are encouraged to address issues that are not fully understood or unresolved. There will be 10 minutes for discussion following each paper.

11:00 – 11:40

‘Multiscale modelling of vascular tumours’
Philip Maini, Centre for Mathematical Biology, Oxford.
SEMINAR ROOM A

11:40 – 12:20

‘Dynamics of resource allocation through a developing transport network’
Mark Fricker, Department of Plant Sciences, Oxford.
SEMINAR ROOM A

12:35 – 13:45

Lunch
SEMINAR ROOM A

- 13:45 – 14:25 *‘Venture Capital Deals in the United States’*
Bruce Kogut, INSEAD.
RHODES TRUST LECTURE THEATRE
- 14:25 – 15:05 *‘Statistical Analysis of 22 public transport networks in Poland’*
Janusz Holyst, Faculty of Physics, Warsaw University of Technology.
RHODES TRUST LECTURE THEATRE
- 15:05 – 15:45 *‘Statistics for Networks’*
Gesine Reinert, Department of Statistics, Oxford.
RHODES TRUST LECTURE THEATRE
- 15:45 – 16:25 *‘To centralise, or not to centralise? Effects of congestion in hub-and-spoke networks’*
Sean Gourley, Department of Physics and Saïd Business School, Oxford.
RHODES TRUST LECTURE THEATRE
- 16:25 – 16:45 **Coffee break**
- 16:45 – 17:25 *‘Continuous modelling of material and information flows in production and supply networks’*
Karsten Peters, Institut für Wirtschaft und Verkehr, Technical University of Dresden.
RHODES TRUST LECTURE THEATRE
- 17:25 – 18:10 *‘Identifying the underlying structure and dynamic modifications in a network’*
Serguei Saavedra, Department of Engineering Science, Oxford.
RHODES TRUST LECTURE THEATRE
- 18:10 – 18:50 *‘The network of inter-regional direct investment stocks across Europe: Statistical distributions and scaling laws’*
Stefano Battiston, Chair for Systems Design, ETH Zürich.
RHODES TRUST LECTURE THEATRE
- 19:00 – 19:30 **PERSPECTIVES FROM INDUSTRY**
This is an opportunity for industrial participants to comment on the research questions that they believe are of vital importance to business. The setting will be informal, and drinks will be available, to encourage the discussions to continue over dinner.
SEMINAR ROOM A
- 19:30 **Workshop Dinner**
RECEPTION ROOM, SAID BUSINESS SCHOOL.



MMCOMNET is a Specific Targeted Research Project (STREP) funded by the European Commission under the 6th Framework Programme (Contract No. 12999), with a total contribution of €1.5m over 3 years. The project is supported via the NEST Pathfinder Initiative on *Tackling Complexity in Science*. NEST (New and Emerging Science and Technology) activities aim to support unconventional and visionary research, with a view to helping European scientists to take a lead in pioneering new fields.

21 October 2005
Friday

CLOSED SESSION FOR MMCOMNET PARTNERS

ALL MEETINGS WILL BE HELD IN SEMINAR ROOM A

[MODERATED ROUNDTABLE DISCUSSION OF KEY ISSUES](#)

We plan to make these moderated discussions a regular feature of our workshops. This first session will focus on the various datasets that are being analysed as part of MMCOMNET. All participants should come prepared to discuss the type of data they are working with, possible problems with incomplete or ambiguous data, and techniques and approaches which might help resolve such problems. In the next workshop we plan to run a similar roundtable discussion on modelling techniques.

9:30 – 11:00

[From Empirical Datasets to Agents, Nodes, and Links](#)

Moderator: Felix Reed-Tsochas, Saïd Business School, Oxford.

11:00 – 11:15

Coffee break

[WORK PACKAGE MEETINGS](#)

Work package meetings function primarily as organisational meetings, in order to discuss progress on individual work packages, and to consider how immediate and future milestones will be met, and whether any problems have been encountered to date. Each meeting should be led by the respective work package leader (or their designated representative), and all work package members should participate. Members of other work packages are strongly encouraged to attend as well.

11:15 – 12:00

Work Package 1

[BIOLOGICAL NETWORKS](#)

Leaders: Mark Fricker and Philip Maini, Oxford.

12:00 – 12:45

Work package 4

[HIGH-TECH INNOVATION NETWORKS](#)

Leader: Felix Reed-Tsochas, Oxford.

12:45 – 14:00

Lunch

14:00 – 14:45

Work Package 2

[SUPPLY CHAIN AND NETWORK CHARACTERISTICS](#)

Leader: Janet Efstathiou, Oxford (represented by Ani Calinescu, Oxford).

14:45 – 15:30

Work Package 3

[DYNAMIC FLOWS IN SUPPLY CHAINS AND NETWORKS](#)

Leader: Dirk Helbing, Dresden (represented by Karsten Peters, Dresden).

15:30 – 16:15

Work Package 5

[FUNCTIONAL AND DYNAMIC NETWORK CHARACTERISTICS](#)

Leader: Janusz Holyst, Warsaw.

16:15 – 16:30

Coffee break

16:30 – 17:15

Work Package 6

[STATISTICAL NETWORK METRICS](#)

Leader: Gesine Reinert, Oxford.

17:15 – 17:45

[CONCLUSION AND ARRANGEMENTS FOR NEXT WORKSHOP](#)