



SAID BUSINESS SCHOOL, University of Oxford

## SEMINAR SERIES / Hilary 2012

Convenor: Felix Reed-Tsochas, Institute for Science, Innovation and Society,  
Saïd Business School

For further  
information please  
contact the Cabdyn  
Administrator:

[info.cabdyn@sbs.ox.ac.uk](mailto:info.cabdyn@sbs.ox.ac.uk)

01865 288785

Seminar webpage:  
[www.cabdyn.ox.ac.uk/complexity\\_seminars.asp](http://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.

**Tuesday 7<sup>th</sup> February**  
(12.30pm - 2.00pm) Seminar Room A

**Dr Co-Pierre Georg**

Interdisciplinary Group of Complex Systems, Department of  
Mathematics, Universidad Carlos III de Madrid

### "Interbank networks, contagion, and common shocks"

#### ABSTRACT

This paper proposes a dynamic multi-agent model of a banking system with central bank. Banks optimize a portfolio of risky investments and riskless excess reserves according to their risk, return, and liquidity preferences. They are linked via interbank loans and face stochastic deposit supply. Evidence is provided that the central bank stabilizes interbank markets in the short-run only. Comparing different interbank network structures, it is shown that money-center networks are more stable than random networks. Systemic risk via contagion is compared to common shocks and it is shown that both forms of systemic risk require different optimal policy responses.



**Saïd Business School**  
UNIVERSITY OF OXFORD