



SAID BUSINESS SCHOOL, University of Oxford

## SEMINAR SERIES / TRINITY 2010

Convenors: Felix Reed-Tsochas, Institute for Science, Innovation and Society,  
Saïd Business School  
Eduardo López, Saïd Business School

For further information please contact the Cabdyn Administrator:

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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 27<sup>th</sup> April

(12.30 - 2.00pm) James Martin Seminar Room

Dr Michael Gastner

Institute for Mathematical Sciences, Imperial College of London

*'The Complex Network of Global Cargo Ship Movements'*

### ABSTRACT

*Transportation networks play a crucial role in human mobility, the exchange of goods, and the spread of invasive species.*

*With an estimated 90% of world trade carried by sea, the global network of merchant ships provides one of the most important modes of transportation. I will present how the world-wide network of ports can be inferred from itineraries of 16,363 cargo ships during the year 2007. The network's properties will be compared to other transportation networks and previous models of network flows. I will discuss implications, especially for forecasts of ship-mediated marine bio-invasion which is threatening many coastal ecosystems.*