Tuesday 27th April  
(12.30 - 2.00pm) James Martin Seminar Room

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‘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.