

**Donald Mackenzie**  
University of Edinburgh  
**@ *The Financial Cyborg***

**Algorithms, Humans & Finance**



**31 May — 1 June 2016**

**Villa Mirafiori – Department of Philosophy  
Via Carlo Fea, 2 - Rome**

*Phinance* Finance, Mathematics & Philosophy

**Organisation & Info: Emiliano Ippoliti & Diana  
Quarantotto**



**SAPIENZA**  
UNIVERSITÀ DI ROMA

## Programme

Tuesday 31 may 2016 16:30-16:40 room XII	<b>Introduction</b> Emiliano Ippoliti, Sergio Caprara <i>Sapienza</i>
16:40-17:40	Donald MacKenzie, <b><i>Futures Lag: The Material Political Economy of High-Frequency Trading</i></b>
17:40-18:30	<i>debate</i>
Wednesday 1 june 2016 10:30-10:40 room X	<b>Introduction</b> Emiliano Ippoliti, Sergio Caprara <i>Sapienza</i>
10:40-11:40	Donald MacKenzie, <b><i>Automated Trading Desk, Island and the Transformation of Finance</i></b>
11:40-12:30	<i>debate</i>

## Description

- **Futures Lag: The Material Political Economy of High-Frequency Trading**  
*Donald MacKenzie*

It is very tempting to think of today's financial system as abstract and virtual, to imagine that globalisation has led to a 'flat world' and 'the end of geography', and assume that both time and space have shrunk. MacKenzie's presentation will cast doubt on those assumptions by delving into the material underpinnings of the financial system: underground cables, microwave towers, computer data centres, and the like.

His focus will be today's automated, ultrafast 'high-frequency trading' or HFT. He will explain how HFT algorithms predict prices, and show that in crucial cases the ways in which they do that are the result of political-economic struggles over how financial trading should be organised. The main example he will give is the single historically most important technique of prediction, known to those involved as 'futures lag', and his central argument will be that to understand today's financial system we need a 'material political economy' that gives equal weight to all three words.

- **Automated Trading Desk, Island and the Transformation of Finance**  
*Donald MacKenzie*

As late as the 1990s, all of the world's main financial markets were what could be called 'fixed-role' markets, in which some classes of participants had privileges that others did not, along with corresponding responsibilities. Since then, some markets (especially the US stock markets) have changed dramatically in the direction of 'all-to-all' trading, with previously central roles either disappearing or having their privileges greatly reduced.

This talk will discuss the processes of this transition, via the examination of the histories of Automated Trading Desk or ATD (one of the world's first high-frequency trading firms) and Island, one of the most influential early all-to-all markets. Both ATD and Island were involved deeply in the single sharpest internal conflict in the recent history of finance in the US. This conflict was between the official market makers on NASDAQ and stigmatised 'bandit' traders who 'picked off' market makers' stale prices, and it involved threats of violence on both sides. The talk will explain how 'bandits' and ATD's algorithms predicted prices, and describe how Island emerged from 'among the despised', as one of MacKenzie's interviewees put it.