London Graduate School in Mathematical Finance

Mathematics of Financial Risk Management
Thursday 28 March 2013
Isaac Newton Institute for Mathematical Sciences, Cambridge
http://www.newton.ac.uk/programmes/TGM/

Organised by the London Graduate School of Mathematical Finance in association with the Turing Gateway to Mathematics
Coordinator: Rama Cont (Department of Mathematics, Imperial College London)

The mathematical sciences play an increasingly important role in the measurement, monitoring and management of risk in today’s increasingly complex financial markets and institutions. The realm of quantitative risk management has come to encompass a range of topics, market volatility, interest rate risk, credit risk, default risk, counterparty risk, high frequency trading, systemic risk, liquidity risk, which are challenging to model. The recent turmoil in financial markets has highlighted the need for a better and more sophisticated approach to quantitative risk management and has stimulated the interest of industry for exploring new research approaches for facing current challenges.

This event will bring together academic researchers and industry experts in quantitative risk management and mathematical modelling in finance to discuss and explore new challenges in quantitative risk management and emerging research directions and stimulate the interest of early career researchers.

The meeting will be open to graduate students and academics in mathematical sciences interested in the topics of the workshop. Participation of early career researchers, especially PhD students, is encouraged.

Aims and Objectives
a) Present a panorama of current modelling challenges and recent research advances in quantitative risk management
b) Raise awareness in the research community of the exciting and challenging research problems found in this field
c) To expose PhD students and participants to current challenges in risk management and provide examples of interactions between mathematical research and industry practice.

Speakers and panellists

Damiano BRIGO (Imperial College London)
Rama CONT (Imperial College London)
Alvaro CARTEA (University College London)
Ewan KIRK (Cantab Capital Partners LLP)
Andrea MACRINA (University College London)
Richard MARTIN (Longwood Credit Partners LLP)
Teemu PENNANEN (Kings College London)
Ilya SHEYNZON (London School of Economics)
Dirk TASCHE (Bank of England)

Registration

To book a place to attend this workshop, please complete an online booking form:

https://www.newton.ac.uk/cgi/tgm-register

Assistance with travel expenses is available for young researchers and graduate students

Date: March 28, 2013.

Programme

09:00 – 09:30 Registration and coffee

09:30 – 10:15 Dirk Tasche (Bank of England)
Risk measurement and quantitative risk management

10:15 – 11:00 Damiano Brigo (Imperial College London)
Counterparty credit risk, collateral and funding: next generation valuation models under interconnected risks

11:00 – 11:30 Coffee break

11:30 – 12:15 Teemu Pennanen (King’s College London)
Risk management and contingent claim valuation in life insurance

12:15 – 13:00 Alvaro Cartea and Andrea Macrina (University College London)
Aspects of algorithmic and high frequency trading

13:00 – 14:00 Lunch

14:00 – 14:45 Richard Martin (Longwood Credit Partners)
Risk and reward in momentum trading strategies

14:45 – 15:30 Ilya Sheynzon (London School of Economics)
Quantitative modelling of market booms and crashes

15:30 – 16:00 Coffee break

16:00 – 16:45 Rama Cont (Imperial College London)
Systemic risk: a challenge for mathematical modelling

16:45 – 17:30 Panel discussion:
Quantitative risk management: challenges and perspectives