

Broad Perspectives and New Directions in Financial Mathematics

Thursday March 19, 2015

- 3:30–4:30 **Dörte Kreher** (Humboldt-Universität)
A weak law of large numbers for a limit order book model with fully state dependent order dynamics

Monday March 30, 2015

- 3:30–4:30 **David Levermore** (University of Maryland)
Measuring Systemic Risk by Quantifying the Efficient Market Hypothesis

Tuesday March 31, 2015

- 3:30–4:30 **Svetlana Borovkova** (Vrije Universiteit)
Systemic Risk and CCPs: network analysis and practical issues

Thursday April 2, 2015

- 3:30–4:30 **Reinhard Fellmann** (London School of Economics and Political Science)
Modelling Stability of Sovereign Credit Markets and Systems

Tuesday April 7, 2015

- 3:30–4:30 **Julius Bonart** (Imperial College)
The price impact of trades: Empirical evidence and recent theoretical developments

Monday April 20, 2015

- 2:00–3:00 **Marek Rutkowski** (University of Sydney)
Arbitrage Pricing with Differential Funding Costs and Collateralization
- 3:30–4:30 **Stephan Sturm** (Worcester Polytechnic Institute)
Delegated Portfolio Optimization with Convex Incentive Schemes



Tuesday April 21, 2015

3:30–4:30 **Thaleia Zariphopoulou** (University of Texas at Austin)
Optimal portfolio construction under forward performance criteria: Part 1

Wednesday April 22, 2015

3:30–4:30 **Thaleia Zariphopoulou** (University of Texas at Austin)
Optimal portfolio construction under forward performance criteria: Part 2

Thursday April 23, 2015

3:30–4:30
TBA

Tuesday April 28, 2015

2:00–3:00 **Jaksa Cvitanic** (California Institute of Technology)
Introduction to contract theory in continuous-time models

3:30–4:30 **Jaksa Cvitanic** (California Institute of Technology)
Moral hazard problems with CARA utilities on finite horizon

Wednesday April 29, 2015

2:00–3:00 **Jianfeng Zhang** (University of Southern California (USC))
Solving Principal-Agent Problems via Forward-Backward SDEs – Good news and bad news

Thursday April 30, 2015

3:30–4:30 **Xuwei Yang** (University of California, Santa Barbara (UCSB))
Mean Field Game Approach to Production and Exploration of Exhaustible Commodities

Monday May 11, 2015

- 11:30–12:30 **Xunyu Zhou** (University of Oxford)
Mathematical Behavioral Finance Part I: Introduction and Background
- 2:00–3:00 **Xunyu Zhou** (University of Oxford)
Mathematical Behavioural Finance Part II: Portfolio Choice and Quantile Formulation
- 3:30–4:30 **Svetlana Borovkova** (Vrije Universiteit)
The role of news in commodity markets

Tuesday May 12, 2015

- 10:30–11:30 **Xunyu Zhou** (University of Oxford)
Mathematical Behavioural Finance Part III: Market Equilibrium and Asset Pricing
- 3:30–4:30 **Pierre Garreau** (Frankfurt Institute for Advanced Studies (FIAS) Goethe University)
Default Risk, Dependence and Levy Processes

Wednesday May 13, 2015

- 3:30–4:30 **Anna Kruglova** (Massachusetts Institute of Technology)
Speculative Oil

Thursday May 14, 2015

- 8:00–5:00 *Inaugural National Meeting of Women in Financial Mathematics*

Friday May 15, 2015

- 9:00–9:45 **Rama Cont** (Imperial College)
Functional Ito Calculus and Applications - Lecture 1: Pathwise calculus for non-anticipative functionals
- 10:00–10:15 *Break*
- 10:15–11:00 **Rama Cont** (Imperial College)
Functional Ito Calculus and Applications - Lecture 2: Weak functional calculus and martingale representation
- 11:15–11:30 *Break*

(Friday schedule continued on next page)

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- 11:30–12:15 **Rama Cont** (Imperial College)
Functional Ito Calculus and Applications - Lecture 3: Functional Kolmogorov equations
- 12:30–2:00 *Lunch (on your own)*
- 2:00–2:45 **Rama Cont** (Imperial College)
Functional Ito Calculus and Applications - Lecture 4: Application to Forward-Backward stochastic differential equations
- 3:00–3:15 *Break*
- 3:15–4:00 **Terry Lyons** (University of Oxford)
New directions in machine learning - Part I
- 4:15–4:30 *Break*
- 4:30–5:15 **Terry Lyons** (University of Oxford)
New directions in machine learning - Part II

Tuesday May 26, 2015

- 2:00–3:00 **Eric Schaanning** (Imperial College)
Fire sales: Price mediated contagion and systemic risk
- 3:30–4:30 **Igor Cialenco** (Illinois Institute of Technology)
Dynamic Acceptability Indices as a market-making tool - Part I

Thursday May 28, 2015

- 3:30–4:30 **Igor Cialenco** (Illinois Institute of Technology)
Dynamic Acceptability Indices as a market-making tool - Part II

Tuesday June 2, 2015

- 3:30–4:30 **Richard Sowers** (University of Illinois at Urbana-Champaign)
Stochastic Latency

Thursday June 4, 2015

- 3:30–4:30 **Andrew Papanicolaou** (University of Sydney)
Extreme-Strike Comparisons and Structural Bounds for SPX and VIX Options

