

Workshop on Stochastic and Quantitative Finance

Friday 28 November (Electrical Engineering Building, Room 407B)

8am: Registration opens

8.50: Opening speech (Josef Teichmann)

MORNING SESSION (Chair: Jan Obłój)

9am-9.45: Claude Martini

Investigating the extremal martingale measures with pre-specified marginals

9.45-10am. COFFEE BREAK

10-10.45: Mathias Beiglböck

Brenier-type martingale transport plans

10.45-11.30: Pierre Henry-Labordère

Forward Monte-Carlo schemes for nonlinear PDEs

11.30: 1pm: LUNCH BREAK

AFTERNOON SESSION (Chair: Nick Bingham)

1pm-1.45: David Hobson

Option pricing, fake Brownian motion and minimising the 1-variation

1.45-2.30: Contributed talks:

Géraldine Bouveret

A backward dual representation for the quantile hedging of Bermudan options

Zhaoxu Hou

Robust Framework in Finance: Martingale Optimal Transport and Robust Hedging for Multiple Marginals in Continuous Time

2.30-3pm: COFFEE BREAK

3pm-3.45: Beatrice Acciaio

Arbitrage of the first kind and filtration enlargements in semimartingale financial models

3.45-4.30: Jon Danielsson

Model Risk of Risk Models

4.30-5.15: Mark Davis

Pathwise stochastic calculus and applications to model-free finance

Workshop dinner: 6.30pm, The Devonshire Arms

Saturday 29 November (Huxley Building, Room 139)

MORNING SESSION (Chair: Mikko Pakkanen)

9am-9.45: Ronnie Sircar

Multiscale Perturbation Methods for Portfolio Choice Problems

9.45-10.30: Almut Veraart

Stochastic volatility in electricity markets

10.30-11am: COFFEE BREAK

11am-11.45: Lorian Mancini

Quadratic Variance Swap Models

11.45-12.30: Robert Stelzer

Geometric Ergodicity of the Multivariate Continuous-time GARCH(1,1) Process

12.30-2pm: LUNCH BREAK

AFTERNOON SESSION (Chair: Alex Mijatović)

2pm-2.45: Christian Bayer

Asymptotics Beats Monte Carlo: The Case of Correlated Local Volatility Baskets

2.45-4pm: Contributed talks:

Patrick Roome

A dynamic view of the Heston model

Julio Backhoff

A new functional analytic approach to robust utility maximization in the dominated case

Philipp Harms

Consistent Yield Curve Modelling

4pm-4.30: COFFEE BREAK

4.30-5.15: Mathieu Rosenbaum

Volatility is rough, Part 1: Empirical facts and microstructural foundations

5.15-6pm: Jim Gatheral

Volatility is rough, Part 2: Pricing