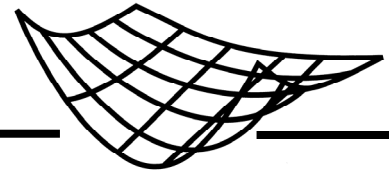


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Wednesday, 13 December

7:30 am – 8:15 am Registration & Coffee

Ballroom

Chair: Eckhard Platen

8:20 - 8:30 am **Welcome**

8:30 - 9:10 am **Mark Davis** (Imperial College, London, UK)
Risk Sensitive Benchmarked Asset Management

9:10 - 9:50 am **Damir Filipovic** (University of Munich, Germany)
Monotone and Cash-Invariant Convex Functions and Hulls

9:50 - 10:30 am **Claudio Albanese** (Imperial College, London, UK)
Stochastic Drift Models: Swaption Volatility Cube Calibration and Callable CMS Spread Range Accruals

Morning Tea

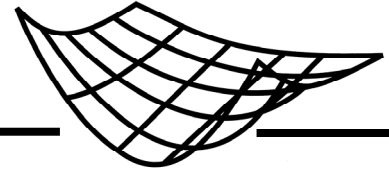
Chair: Carl Chiarella

11:00 - 11:40 am **Mark Joshi** (University of Melbourne, Australia)
Early Exercise and Monte Carlo Obtaining Tight Bounds

11:40 - 12:20 pm **Marek Rutkowski** (University of New South Wales, Sydney, Australia)
Hedging of Defaultable Game Options in a Hazard Process Model

Lunch

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Ballroom – Wednesday

Chair: Erik Schlögl

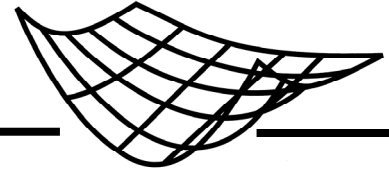
- 2:00 – 2:20 pm **Keiichi Tanaka** (Tokyo Metropolitan University, Japan)
Credit Derivatives with Recovery of Market Value for Multiple Firms
- 2:20 – 2:40 pm **Fabian Vieth** (West LB AG, New York, USA)
STCDO Model Calibration and Hedge Performance
- 2:40 – 3:00 pm **Andrea Macrina** (King's College, London, UK)
Beyond Hazard Rates: A New Framework for Credit-Risk Modelling
- 3:00 – 3:20 pm **Alicia Vidler** (Imperial College and Merrill Lynch, London, UK)
Dynamic Credit Correlation Modelling
-

Afternoon Tea

Chair: Marek Rutkowski

- 3:40 - 4:00 pm **Thomas Breuer** (Fachhochschule Vorarlberg GmbH, Austria)
Negative Diversification Effects between Credit and Market Risk
- 4:00 - 4:20 pm **Alun Pope** (St. George Bank, Sydney, Australia)
Low Probability Defaults: Estimation and Simulation
- 4:20 - 4:40 pm **Michel Vellekoop** (University of Twente, The Netherlands)
Modelling Tradeable Securities with Dividends
- 4:40 - 5:00 pm **Jaesun Noh** (KAIST, Seoul, South Korea)
Long Run Probability of Default and BASEL II Capital Allocation
-

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Balgowlah Room – Wednesday

Chair: Claudio Albanese

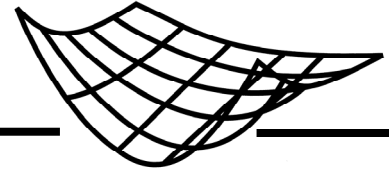
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|----------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 2:20 - 2:40 pm | Peter Buchen (University of Sydney, Australia)
<i>Option Pricing for Asset-Dependent Volatility Models</i> |
| 2:20 - 2:40 pm | Toshikazu Kimura (Hokkaido University, Sapporo, Japan)
<i>Valuing Continuous-Installment Options: A Laplace Transform Approach</i> |
| 2:40 - 3:00 pm | Kenneth James Palmer (National Taiwan University, Taipei)
<i>Smooth Convergence in the Binomial Model</i> |
| 3:00 - 3:20 pm | Aleksandar Mijatovic (Imperial College, London, UK)
<i>Spectral Methods for Volatility Derivatives</i> |
-

Afternoon Tea

Chair: Peter Buchen

- | | |
|----------------|--------------------------------------------------------------------------------------------------------------------------------|
| 3:40 - 4:00 pm | Gerald Cheang (Nanyang Technological University, Singapore)
<i>On Multi-Asset Options with Price Discontinuities</i> |
| 4:00 - 4:20 pm | Huimin Zhao (The University of Hong Kong)
<i>Asset Pricing under Jump Diffusion</i> |
| 4:20 - 4:40 pm | Ka Yung Lau (The Chinese University of Hong Kong)
<i>Quanto Options under Double Exponential Jump Diffusion</i> |
| 4:40 - 5:00 pm | Hardy Hulley (University of Technology, Sydney, Australia)
<i>Hedging Basis Risk using Quadratic Criteria</i> |
-

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Clontarf Room – Wednesday

Chair: Robert Brooks

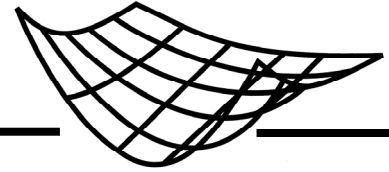
- 2:00 - 2:20 pm **Hiroshi Ishijima** (Osaka University, Toyonaka, Japan)
A Real Estate Valuation Model under Regime Switching
- 2:20 - 2:40 pm **Takashi Shibata** (Kyoto University, Japan)
Investment Timing, Asymmetric Information, and Audit Structure: A Real Options Framework
- 2:40 - 3:00 pm **Motoh Tsujimura** (Ryokoku University, Kyoto, Japan)
Optimal Capacity Expansion and Contraction with Fixed and Quadratic Adjustment Costs
- 3:00 - 3:20 pm **Michi Nishihara** (Kyoto University, Japan)
A Real Options Model for Determining a Firm's Optimal R&D Project
-

Afternoon Tea

Chair: Koichi Matsumoto

- 3:40 - 4:00 pm **Zuo Quan Xu** (The Chinese University of Hong Kong)
Continuous Time Mean-Variance Portfolio Selection with Proportional Transaction Costs
- 4:00 - 4:20 pm **Jieping Zhang** (University of Cambridge, UK)
Management and Performance Fees in the Asset Management Industry
- 4:20 - 4:40 pm **Timur Yusupov** (University of Kiel, Germany)
Efficient Market Hypothesis: Through the Eyes of the Artificial Technical Analyst
- 4:40 - 5:00 pm **Chih-Ying Hsiao** (University of Technology, Sydney, Australia)
Intertemporal Asset Allocation when the Underlying Factors are Unobservable
-

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Thursday, 14 December

8:00 am – 8:25 am Registration & Coffee

Ballroom

Chair: Mark Davis

8:30 - 9:10 am **Alain Bensoussan** (University of Texas at Dallas, USA)
Remarks on the Dynamic Capital Asset Pricing Model

9:10 - 9:50 am **Carole Alexander** (The University of Reading, UK)
Model-Free Hedge Ratios and Scale-Invariant Models

9:50 - 10:30 am **Gerhard Stahl** (German Financial Supervisory Authority, Bonn, Germany)
Overview on Methods of Quantitative Risk Management

Morning Tea

Chair: Damir Filipovic

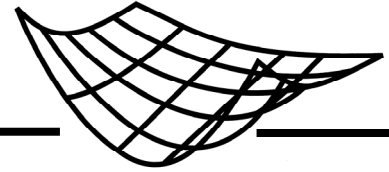
11:00 - 11:40 am **John Van der Hoek** (University of Adelaide, Australia)
Partial Differential Equations and Martingales

11:40 - 12:20 pm **Eckhard Platen** (University of Technology, Sydney, Australia)
Pricing and Hedging Extreme Maturity Contracts under the Benchmark Approach

Lunch

1:00 - 1:45 pm **Paul Taylor** (Senior Applications Engineer, The MathWorks)
MATLAB: A Powerful and Flexible Platform for Financial Modeling, Analysis and Simulation.

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Ballroom - Thursday

Chair: David Hobson

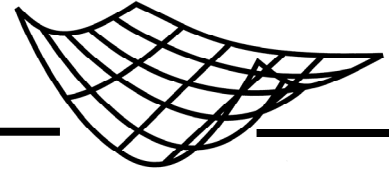
- 2:00 - 2:20 pm **Raoul Davie** (Macquarie Bank, Sydney, Australia)
Derivative Portfolio Optimisation
- 2:20 - 2:40 pm **Kasper Larsen** (Carnegie Mellon University, Pittsburgh, USA)
Are Option-Pricing and Utility-Maximization Problems Well-posed?
- 2:40 - 3:00 pm **Koichi Matsumoto** (Kyushu University, Fukuoka, Japan)
Portfolio Insurance in a Random Trade Time Model
- 3:00 - 3:20 pm **Winfried G. Hallerbach** (Erasmus University, Rotterdam, The Netherlands)
Active Portfolio Management with Conditional Tracking Error
-

Afternoon Tea

Chair: Hiroshi Ishijima

- 3:40 - 4:00 pm **Juri Hinz** (ETH Zentrum, Zurich, Switzerland)
A Quantitative Approach to Carbon Price Risk Modeling
- 4:00 - 4:20 pm **Martin Smid** (Institute of Information Technology and Automation, Praha, Czech Republic)
Dynamic Behavior of a Rational Agent at a Limit Order Market
- 4:20 - 4:40 pm **Remco Zwinkels** (Radboud University, Nijmegen, The Netherlands)
Behavioural Heterogeneity and Shift-Contagion: Evidence from the Asian Crisis
- 4:40 - 5:00 pm **Patrick Hewlett** (University of Oxford, UK)
Optimal Liquidation against a Markovian Limit Order Book
-

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Balgowlah Room - Thursday

Chair: Keichi Tanaka

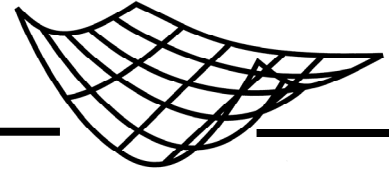
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|----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 2:00 – 2:20 pm | Truc Le (University of Technology, Sydney, Australia)
<i>Interest Rate Term Structure Modelling under the Benchmark Approach</i> |
| 2:20 – 2:40 pm | Mia Hinnerich (Stockholm School of Economics, Sweden)
<i>Inflation Indexed Swaps and Swaptions</i> |
| 2:40 – 3:00 pm | Simona Svoboda (University of Oxford, UK)
<i>LIBOR Market Model with Markov Chain Stochastic Volatility</i> |
| 3:00 – 3:20 pm | Mikael Elhouar (Stockholm School of Economics, Sweden)
<i>Finite Dimensional Realizations of Regime-Switching HJM models</i> |
-

Afternoon Tea

Chair: Alan Tobin

- | | |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:40 – 4:00 pm | Paul Schneider (WU Wien, Vienna, Austria)
<i>The Risk Microstructure of Corporate Bonds: A Bayesian Analysis</i> |
| 4:00 – 4:20 pm | Tanja de la Rey (North-West University, Potchefstroom, South Africa)
<i>Detecting Outliers in Credit Scoring using L:Logistic Regression</i> |
| 4:20 – 4:40 pm | François Quittard-Pinon (Université Lyon 1, France)
<i>Risk-Neutral and Actual Default Probabilities with an Endogenous Bankruptcy Jump-Diffusion Model</i> |
| 4:40 – 5:00 pm | Agatha Valentina Murgoci (Stockholm School of Economics, Sweden)
<i>Pricing Vulnerable Options Using Good Deal Bounds</i> |
-

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Clontarf Room - Thursday

Chair: Stefan Jaschke

- 2:00 - 2:20 pm **Katsumasa Nishide** (Kyoto University, Japan)
Insider Trading with Imperfectly Competitive Market Makers
- 2:20 - 2:40 pm **Leung-Ho Philip Yu** (The University of Hong Kong)
Trading Strategies Based on a Dynamic Mixture Gaussian Model
- 2:40 - 3:00 pm **Robert Brooks** (Monash University, Melbourne, Australia)
Modelling the Volatility of Emerging Markets
- 3:00 - 3:20 pm **Wen Cheong Chin** (Multimedia University, Cyberjaya, Malaysia)
An Empirical Study of Realized Volatility and Long Memory GARCH Standardized Stock-Return
-

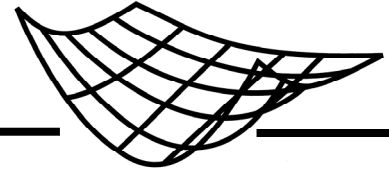
Afternoon Tea

Chair: Alex Novikov

- 3:40 - 4:00 pm **Giacomo Scandolo** (Università Di Firenze, Italy)
On Pareto Optimal Allocations for Multi-Period Risks
- 4:00 - 4:20 pm **Arne Buch** (WU Wien, Vienna, Austria)
Coherent Risk Measures, Coherent Capital Allocations, and the Gradient Allocation Principle
- 4:20 - 4:40 pm **Stefan Jaschke** (German Financial Supervisory Authority, Bonn, Germany)
How to Achieve Comparability of Internal Risk Capital Models without Prescribing the Methodology
- 4:40 - 5:00 pm **Taposhri Ganguly** (Brunel University, Uxbridge, UK)
Alternative Approaches to Compute Value-at-Risk
-

6:30 pm Conference Dinner at the Manly Pier Restaurant for delegates who have registered for the dinner. The Manly Pier Restaurant is behind Oceanworld, on Manly Cove Beach, approximately 200 metres from the Manly Wharf.

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Friday, 15 December

8:00 am – 8:25 am Registration & Coffee

Ballroom

Chair: Alain Benssoussan

- 8:30 - 9:10 am **Jim Gatheral** (New York University, USA)
Real-time Volatility Estimation Under Zero Intelligence
- 9:10 - 9:50 am **Erik Schlögl** (University of Technology, Sydney, Australia)
*Fitting the Market: Tractable Approximations and Calibrating
Models to Multiple Volatility Smiles*
- 9:50 - 10:30 am **Vicky Henderson** (Princeton University, USA)
Risk Aversion, Effort and Block Exercise of Executive Stock Options
-

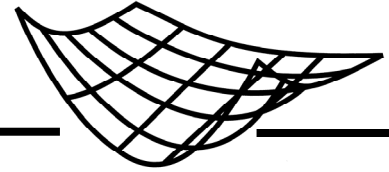
Morning Tea

Chair: Gerhard Stahl

- 11:00 - 11:40 am **David Hobson** (University of Bath, UK)
Skorokhod Embeddings and Finance
- 11:40 - 12:20 pm **Rama Cont** (Ecole Polytechnique, France & Columbia University, USA)
*Inverse Problems in Option Pricing: A Solution via Random
Mixtures of Martingales*
-

Lunch

Quantitative Methods in Finance 2006 Conference Draft Programme



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Ballroom - Friday

Chair: Daniel Dufresne

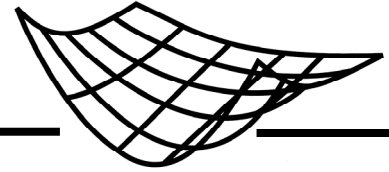
- 2:00 - 2:20 pm **Songping Zhu** (University of Wollongong, Australia)
A Simple Analytical Formula for the Critical Stock Price of American Put Options
- 2:20 - 2:40 pm **Alexey Medvedev** (University of Geneva, Switzerland)
Pricing American Options under Stochastic Volatility and Stochastic Interest Rate
- 2:40 - 3:00 pm **Lars Stentoft** (HEC Montreal, Canada)
Value Function Approximation or Stopping Time Approximation: A Comparison of Two Recent Numerical Methods for American Option Pricing using Regression
- 3:00 - 3:20 pm **Sergey Levendorskiy** (University of Texas, Austin, USA)
General Option Exercise Rules for Regime-Switching Models
-

Afternoon Tea

Chair: Truc Le

- 3:40 - 4:00 pm **William Shaw** (King's College, London, UK)
Generating Quantile Functions for Copula and Quasi-Monte-Carlo Simulations using Computer Algebra
- 4:00 - 4:20 pm **Chuan-Hsiang Han** (National Tsing-Hua University, Hsin Chu, Taiwan)
Analysis of Monte Carlo Methods for Option Pricing under Stochastic Volatility Models
- 4:20 - 4:40 pm **Nicola Bruti Liberati** (University of Technology, Sydney, Australia)
Weak Predictor-Corrector Schemes for Jump Diffusions in Finance
- 4:40 - 5:00 pm **Laura Ballotta** (City University, London, UK)
A Dirichlet Bridge Sampling of the Variance Gamma Process: Pricing Path-Dependent Options and Participating Life Insurance Contracts
-

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Balgowlah Room - Friday

Chair: Giacomo Scandolo

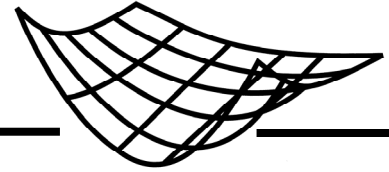
- 2:00 - 2:20 pm **Wojciech Szatzschneider** (Anahuac University, Mexico)
Principal-Agent and Nash Applied to Environment
- 2:20 - 2:40 pm **Teruyoshi Suzuki** (Hokkaido University, Sapporo, Japan)
Optimal Consumption and Investment Strategies of Homeowners Facing the Risk of Earthquakes
- 2:40 - 3:00 pm **Vladimir Kaishev** (City University, London, UK)
On B-spline Related Stochastic Processes and Some Applications in Finance and Insurance
- 3:00 - 3:20 pm **Boda Kang** (University of South Australia, Adelaide)
Pricing Financial Derivatives on Weather-Sensitive Assets
-

Afternoon Tea

Chair: Gerald Cheang

- 3:40 - 4:00 pm **Simona Sanfelici** (University of Parma, Italy)
Properties of the Fourier Integrated Volatility Estimator under Microstructure Noise
- 4:00 - 4:20 pm **Artem Prokhorov** (Concordia University, Montreal, Canada)
Robustness, Redundancy, and Validity of Copulas in Likelihood Models
- 4:20 - 4:40 pm **Wantanee Surapaitookorn** (Chulalongkorn University, Thailand)
Bayesian Stochastic Volatility Model for FX Asian Crisis Market
- 4:40 - 5:00 pm **Detlet Seese** (University of Karlsruhe, Germany)
Investigating FX Market Efficiency with Support Vector Machines
-

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Clontarf Room - Friday

Chair:

- | | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2:00 - 2:20 pm | Mark Craddock (University of Technology, Sydney, Australia)
<i>Lie Group Symmetries of Fundamental Solutions of Financial Models</i> |
| 2:20 - 2:40 pm | Malgorzata Korolkiewicz (University of South Australia, Adelaide)
<i>Modelling Default Risk: An Intensity-Based Credit Migration Approach</i> |
| 2:40 - 3:00 pm | Christina Nikitopoulos Sklibosios (University of Technology, Sydney, Australia)
<i>Real-World Pricing for the HJM framework with Jumps</i> |
| 3:00 - 3:20 pm | Ivan Ivanov (Ramapo College, New Jersey, USA)
<i>International Bond Immunization: Assets and Liabilities Selection</i> |
-

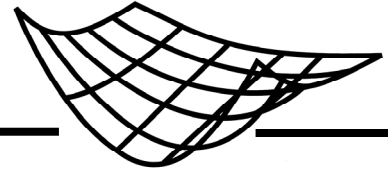
Afternoon Tea

Chair:

- | | |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3:40 - 4:00 pm | Tony Ware (University of Calgary, Canada)
<i>Options with Partial Exercise</i> |
| 4:00 - 4:20 pm | Min Zheng (University of Technology, Sydney, Australia)
<i>The Stochastic Dynamics of Speculative Behaviour</i> |
| 4:20 - 4:40 pm | Stefan Kassberger (University of Ulm, Germany)
<i>A Lévy-driven Structural Model for the Valuation of Collateralized Debt Obligations and other Credit Derivatives</i> |
| 4:40 - 5:00 pm | Ali Endi (University of Cape Town, South Africa)
<i>New Approaches to Risk Management in Financial Optimization</i> |

Ballet Evening at the Sydney Opera House for delegates who have registered for this event. Performance starts at 7:30 pm. Ferries depart at 6:00 and 6:30pm and Jetcats depart at 6:15, 6:35 and 7:00pm.

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Saturday, 16 December

8:00 – 8:25 am Registration & Coffee

Ballroom

Chair: Vicky Henderson

8:30 - 9:10 am **Lane Hughston** (King's College, London, UK)
Information-Based Asset Pricing

9:10 - 9:50 am **Carl Chiarella** (University of Technology, Sydney, Australia)
Pricing American Options Under Stochastic Volatility and Jump-Diffusion Dynamics

9:50 - 10:30 am **Daniel Dufresne** (University of Melbourne, Australia)
New Results on Exponential Integral Functionals of Brownian Motion

Morning Tea

Chair: John van der Hoek

11:00 - 11:40 am **Alex Novikov** (University of Technology, Sydney, Australia)
Pricing of Corporate Debts with Stochastic Thresholds

11:40 - 12:20 pm **Robert Elliott** (University of Calgary, Canada)
Asset Prices with Regime Switching Variance Gamma Dynamics

Lunch
