

# Stochastic Analysis for and from Finance (SAFFF)

From August 3, 2009, 9:00 through August 7, 2009, 17:50

At **Science Hall** on the fourth floor of East No.1 Building  
in **Kyoto Research Park** (KRP)

## Program

Monday, August 3

9:00 – 9:10 —*Opening*—

9:10 – 10:10 Freddy Delbaen  
Monetary Utility Functions and non-linear PDE

10:20 – 11:20 Takuji Arai  
Shortfall risk measure for general semimartingales

11:30 – 12:30 David Hobson  
Recovering a time-homogeneous stock price process from perpetual  
option prices

14:30 – 15:30 Yasufumi Osajima  
TBA

16:00 – 17:00 Akihiko Takahashi  
An Asymptotic Expansion Approach in Finance

Tuesday, August 4

9:00 – 10:00 Marc Yor  
Various classes of processes with 1-dimensional martingale  
marginals

10:10 – 11:10 Takahiko Fujita  
TBA

11:20 – 12:20 Yoshio Miyahara  
Stable process models in finance

14:30 – 15:30 Hidehiro Kaise  
Max-plus stochastic control and risk-sensitivity: general framework  
related with risk-averse limit of optimal consumption problem

16:00 – 17:00 Huyên Pham  
Optimal investment with counterparty risk: a default-density  
approach

Wednesday, August 5

- 9:00 – 10:00 Nizar Touzi  
Dual Formulation of Second Order Target Problems
- 10:10 – 11:10 Yuri Kabanov  
TBA
- 11:20 – 12:20 Jiro Akahori  
A heat kernel approach to interest rate models.  
(joint work with Y. Hishida, J. Teichmann, and T. Tsuchiya)  
—*excursion*—
- 18:30 – —*reception at Kyoto Tokyu Hotel (2F Banquet Hall)*—

Thursday, August 6

- 9:00 – 10:00 Lane Hughston  
Modelling Information Flows in Financial Markets
- 10:10 – 11:10 Alexander Schied  
Market impact, price manipulations, and the positive portfolio problem
- 11:20 – 12:20 Arturo Kohatsu-Higa  
Approximations for SDEs Driven by Lévy Processes
- 14:30 – 15:10 Stefan Geiss  
BMO and an application to the approximation of stochastic integrals
- 15:10 – 15:50 Takashi Kato  
Optimal Execution Problem with Market Impact
- 16:20 – 17:00 Nicolas Privault  
The Dothan model revisited
- 17:00 – 17:40 Dorje Brody  
Informed Trader

Friday, August 7

- 9:30 – 10:10 Bernhard Meister  
Application of the Kelly Criterion to Portfolio Optimization
- 10:20 – 11:00 Toshiyuki Nakayama  
Support theorem and Consistency Problem for interest rate models
- 11:10 – 11:50 Ashkan Nikeghbali  
On some universal sigma-finite measures
- 14:00 – 15:00 Jun Sekine  
Some asymptotic results for probability maximizing/minimizing portfolios
- 15:30 – 16:30 Martin Schweizer  
Utility maximisation over variable time horizons
- 16:40 – 17:40 Hans Föllmer  
Dynamic risk measures: time consistency and the role of bubbles
- 17:40 – 17:50 —*Closing*—