Winter Workshop on Operations Research, Finance and Mathematics, 2017

February 20 -24, Jozankei, Sapporo, Japan

Invited Speakers:

Konstantin Borovkov, Nan Chen, Min Dai,
Tom Fischer, Juri Hinz, Sebastian Jaimungal,
Yuri Kabanov, Hyeng Keun Koo, Yue Kuen Kwok,
Alex Novikov, Christopher Ting, Lioudmila Vostrikova,
Mikhail Zhitlukhin, Xunyu Zhou

Committee: M. Kijima, K. Nishide, T. Shibata, K. Yagi
Local Organizer: M. Goto, T. Suzuki
Venue: Jozankei View Hotel (www.karakami-kankou.jp/en/jv/)
Conference Room on lobby ground (2nd) floor
Registration Fee: Free for academic staffs, JPY 20,000 for others.
Organized by:
The Operations Research Society of Japan, Hokkaido Branch
Sponsor:

- Research Center for Quantitative Finance, Tokyo Metropolitan University

- ♦ JSPS Grant-in-Aid
  - for Scientific Research (A) (Principal Investigator: M. Kijima),
  - for Scientific Research (B) (PI: T. Suzuki)
  - for Bilateral Joint Research Projects (PI: T. Suzuki)
- ♦ Joint Usage and Research Center, Institute of Economic Research, Kyoto University
- ♦ Credit Pricing Corporation (www.credit-pricing.com/e/index.html)

Schedule

Feb. 20

Session 1 (Chair: Masaaki Kijima)

15:00 – 15:40

Yuri Kabanov, TBA

15:40 – 16:20

Nan Chen, TBA

Session 2 (Chair: Lioudmila Vostrikova)

16:35 – 17:15

Alex Novikov, "On Limit Distributions of Statistics Arising in Irregular Cusp-type Statistical Models: The Case of fBm"

17:15 – 17:40

Kazutoshi Yamazaki, "Optimal Double Stopping of a Brownian Bridge"

Session 3 (Chair: Mikhail Zhitlukhin)

17:55 – 18:35

Min Dai, "Optimal Tax-timing with Transaction Costs"

18:35 – 19:00

Yuan Tian, "Debt Rollover, Bankruptcy, and Debt Maturity"

Feb. 21

9:00 – 13:00

Advanced Lecture: "Introduction to Asset Pricing in Economics I" by Chiaki Hara, Kyoto University (in Japanese)

Session 4 (Chair: Christopher Ting)

15:00 – 15:40

Lioudmila Vostrikova, “On Distributions of Exponential Functionals of the Processes with Independent Increments”

15:40 – 16:20

Mikhail Zhitlukhin, “On Quasi-convex Probabilities and Related Functionals”

Session 5 (Chair: Takashi Shibata)

16:35 – 17:15

Sebastian Jaimungal, “Trading Algorithms with Learning in Latent Alpha Model”

17:15 – 17:40

Michi Nishihara, “Bankruptcy Decision under Asymmetric Information”

Session 6 (Chair: Alex Novikov)

17:55 – 18:35

Konstantin Borovkov, “On Limit Order Books Modelling”

18:35 – 19:00

Koichi Matsumoto, “Optimal Hedging Strategy in an Uncertain Model”

Feb. 22

9:00 – 13:00

Advanced Lecture: "Introduction to Asset Pricing in Economics II" by Chiaki Hara, Kyoto University (in Japanese)

Session 7 (Chair: Konstantin Borovkov)

15:00 – 15:40

Yue Kuen Kwok, “Saddlepoint Approximation Methods for Pricing Financial Options on Discrete Realized Variance”

15:40 – 16:00

Takefumi Amaba, “A Discrete-Time Clark–Ocone Formula and its Application to an Error Analysis”

16:00 – 16:20

Go Yuki, “Convergence Implications via Dual Flow Method”

Session 8 (Chair: Yue Kuen Kwok)

16:35 – 17:15

Christopher Ting, “Application of Stochastic Calculus to Price a Quanto Spread”

17:15 – 17:40

Kazuhiro Yasuda, “An Optimal Investment Strategy for Insurance Companies with a Linear Gaussian Stochastic Factor Model”

Session 9 (Chair: Juri Hinz)

17:55 – 18:35

Hyeng Keun Koo, “Optimal Consumption and Portfolio Selection with Early Retirement Option”

18:35 – 19:00

Yong Hyun Shin, “An Optimal Consumption, Gift, Investment, and Voluntary Retirement Choice Problem with Quadratic and HARA Utility”

Feb. 23

9:00 – 13:00

Advanced Lecture: "Asset Pricing Theory I" by Katsumasa Nishide, Hitotsubashi University (in Japanese)

Session 10 (Chair: Xunyu Zhou)

15:00 – 15:40

Juri Hinz, “Optimal Energy Supply Shift with Battery Storages”

15:40 – 16:00

Kum-Hwan Roh, “An Optimal Consumption and Investment Problem with Quadratic Utility and Negative Wealth Constraints”

Session 11 (Chair: Yuri Kabanov)

16:15 – 16:55

Tom Fischer, "Derivatives and Debt in the Structural Model of Financial Networks"

16:55 – 17:20

Katsumasa Nishide, "Default Contagion and Systemic Risk in the Presence of Credit Default Swaps"

Session 12 (Chair: Teruyoshi Suzuki)

17:35 – 18:15

Xunyu Zhou, "Weighted Discounting — On Group Diversity, Time-inconsistency, and Consequences for Investment"

18:15 – 18:40

Takanori Adachi, "A Category of Probability Spaces"

Feb. 24

9:00 – 13:00

Advanced Lecture: "Asset Pricing Theory II" by Katsumasa Nishide, Hitotsubashi University (in Japanese)

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