
FMA2024

Workshop on Financial Modeling and Analysis

Period September 4 – September 6, 2024
Venue Research Institute for Mathematical Sciences, Kyoto University
Organizer Makoto Goto, Tokyo University of Science
 Motoh Tsujimura, Doshisha University

September 4, Wednesday

- 12 : 25 – 12 : 30 Opening Address

Session 1 (Chair: Motoh Tsujimura, Doshisha University)

- 12 : 30 – 13 : 10
Financial risk transfer of Catastrophe
Uratani Tadashi (Hosei University)
- 13 : 10 – 13 : 50
Analysis of factors influencing the trend of credit cycle using credit event intensity models
Jun Hironaka (Mitsui & Co. Digital Asset Management/University of Tsukuba)

Session 2 (Chair: Kyoko Yagi, Tokyo Metropolitan University)

- 14 : 05 – 14 : 45
A Note on ESG Factor Models
Hiroshi Ishijima* (Chuo University), Akira Maeda (Tokyo University)
- 14 : 45 – 15 : 25
Economic relationships between critical minerals and fossil energies
Hiroyuki Okawa (Kobe University)

Session 3 (Chair: Hiroshi Ishijima, Chuo University)

- 15 : 40 – 16 : 20
Entry-Exit strategies for venture capitalist: A cash flow based model
Tomio Sakuma*, Motoki Suzuki, Makoto Shimoshimizu, Makoto Goto (Tokyo University of Science)
- 16 : 20 – 17 : 00
Earnouts in mergers and acquisitions under asymmetric information
Teruyoshi Suzuki (Hokkaido University), Kyoko Yagi* (Tokyo Metropolitan University)

September 5, Thursday

Session 4 (Chair: Seiya Kuno, Doshisha University)

- 09 : 30 – 10 : 10
Modelling of multivariate asset movements using dynamic skew-t copulas
Kakeru Ito (Nissay Asset Management/Tokyo Metropolitan University), Toshinao Yoshiba* (Tokyo Metropolitan University)
- 10 : 10 – 10 : 50
The agency problem in sustainability between the owner and the manager
Zhongli Wang*, Michi Nishihara (Osaka University)
- 10 : 50 – 11 : 30
Optimal Execution Price for Off-exchange Trading
Seiya Kuno (Doshisha University)

Session 5 (Chair: Hidekazu Yoshioka, Japan Advanced Institute of Science and Technology)

- 13 : 00 – 13 : 40
How do pro-ESG investors affect a firm's investment timing, financing, and sustainability decisions?
Michi Nishihara (Osaka University)
- 13 : 40 – 14 : 20
Analyzing pandemic options under a stochastic SIR model
Yuto Kitamura*, Shingo Takayanagi, Makoto Shimoshimizu, Makoto Goto (Tokyo University of Science)

Session 6 (Chair: Michi Nishihara, Osaka University)

- 14 : 35 – 15 : 15
Non-local Variational Inequality on optimal working capital problem
Hiroshi Toyozumi*, Shigeaki Koike (Waseda University)
- 15 : 15 – 15 : 55
Post-Last Exit Time Process and its Application to Loss-Given-Default Distribution
Masahiko Egami, Rusudan Kevkhishvili* (Kyoto University)
- 15 : 55 – 16 : 35
Evolutionary game on continuous action space and related mean field game
Hidekazu Yoshioka* (Japan Advanced Institute of Science and Technology), Motoh Tsujimura (Doshisha University)
- 17 : 30 – 19 : 30 Networking Reception

September 6, Friday

Session 7 (Chair: Takashi Shibata, Tokyo Metropolitan University)

- 10 : 00 – 10 : 40
Continuous-time optimal execution under a transient price impact model in a Markovian environment
Masaaki Fukasawa (Osaka University), Masamitsu Ohnishi (Yamato University), Makoto Shimoshimizu* (Tokyo University of Science)
- 10 : 40 – 11 : 20
Power Purchase Agreement Model: A Real Options Approach
Yutaro Oga*, Kazuya Ito, Ryuta Takashima (Tokyo University of Science)

Session 8 (Chair: Goto Makoto, Tokyo University of Science)

- 13 : 00 – 13 : 40
The effects of time-to-build and regulation on investment timing and size
Haejun Jeon (Tokyo University of Science)
- 13 : 40 – 14 : 20
Investment, partial irreversibility, and competition
Michi Nishihara (Osaka University), Takashi Shibata* (Tokyo Metropolitan University), Yuan Tian (Ryukoku University)
- 14 : 20 – 15 : 00
Assessing a wind power generation capacity with considering spot and capacity markets under price risk
Motoh Tsujimura* (Doshisha University), Hidekazu Yoshioka (Japan Advanced Institute of Science and Technology)
- 15 : 05 – 15 : 10 Closing Address