
FMA2025

Workshop on Financial Modeling and Analysis

Period August 27 – August 29, 2025
Venue Research Institute for Mathematical Sciences, Kyoto Univ.
Organizer Makoto Goto, Tokyo Univ. of Science
 Motoh Tsujimura, Doshisha Univ.

August 27, Wednesday

- 12 : 55 – 13 : 00 Opening Address

Session 1 (Chair: Motoh Tsujimura, Doshisha Univ.)

- 13 : 00 – 13 : 40
Valuation of Pandemic Option of SIS Model
Makoto Goto (Tokyo Univ. of Science), Yuto Kitamura (Tokyo Univ. of Science), Itsuki Watanabe (Univ. of Oita), Hiroshi Toyozumi* (Waseda Univ.)
- 13 : 40 – 14 : 20
American Pandemic Option under a Stochastic SIR Model
Yuto Kitamura* (Tokyo Univ. of Science), Makoto Shimoshimizu (Tokyo Univ. of Science), Makoto Goto (Tokyo Univ. of Science), Yuan Tian (Ryukoku Univ.)

Session 2 (Chair: Seiya Kuno, Doshisha Univ.)

- 14 : 35 – 15 : 15
Design and Valuation of Pandemic Callable Convertible Bonds Based on the Heterogeneous Infectious Disease Model
Kyoko Yagi (Tokyo Metropolitan Univ.), Katsushige Sawaki* (Aoyama Gakuin Univ.)
- 15 : 15 – 15 : 55
Analysis of Factors Influencing the Trend of Credit Cycle Using Credit Event Intensity Models
Jun Hironaka (Univ. of Tsukuba/Mitsui & Co. Digital Asset Management, Ltd.)

August 28, Thursday

Session 3 (Chair: Michi Nishihara, Osaka Univ.)

- 10 : 00 – 10 : 40
A New Perspective on Cryptocurrency Price Formation
Daisuke Yoshikawa (Kansai Univ.)

- 10 : 40 – 11 : 20
Optimal Contracts for Off-Exchange Trading with Generalized Price Impact Model
Mikito Hiruki* (The Univ. of Tokyo), Seiya Kuno (Doshisha Univ.)

Session 4 (Chair: Takashi Shibata, Hosei Univ.)

- 13 : 00 – 13 : 40
Generalization and Adaptation in Option Hedging Strategies Using Deep Learning
Seiya Kuno (Doshisha Univ.)
- 13 : 40 – 14 : 20
Continuous-time Optimal Pair-trade Execution with Cross-impacts and Common Risk Factors
Masamitsu Ohnishi* (Yamato Univ.), Makoto Shimoshimizu (Tokyo Univ. of Science)

Session 5 (Chair: Masamitsu Ohnishi, Yamato Univ.)

- 14 : 35 – 15 : 15
Real Option to Invest in a High-growth Market
Michi Nishihara (Osaka Univ.)
- 15 : 15 – 15 : 55
Investment, Quantity, Partial irreversibility, and Competition
Takashi Shibata* (Hosei Univ.), Michi Nishihara (Osaka Univ.)

August 29, Friday

Session 6 (Chair: Akira Maeda, The Univ. of Tokyo)

- 10 : 00 – 10 : 40
Optimal Bidding Strategy: Renewable Energy Investments under Feed-in Premium in Japan
Shingo Takayanagi* (Tokyo Univ. of Science), Makoto Goto (Tokyo Univ. of Science)
- 10 : 40 – 11 : 20
Bidding Strategies for Capacity Market
Motoki Suzuki* (Tokyo Univ. of Science), Makoto Goto (Tokyo Univ. of Science)

Session 7 (Chair: Goto Makoto, Tokyo Univ. of Science)

- 13 : 00 – 13 : 40
Assessing the Value of Renewable Energy Power Source under Uncertainty
Motoh Tsujimura* (Doshisha Univ.), Hidekazu Yoshioka (Japan Advanced Institute of Science and Technology)
- 13 : 40 – 14 : 20
A U-Shaped Curve Model for the ESG-Performance Relationship
Akira Maeda* (The Univ. of Tokyo), Hiroshi Ishijima (Chuo Univ.)
- 14 : 20 – 14 : 25 Closing Address