2019 RIMS Workshop

Theory and Its Application of Mathematical Decision Making under Uncertainty and Ambiguity

Organizer Takayuki Ueno (University of Nagasaki)

11 November – 13 November, 2019
Room 420 of Research Institute for Mathematical Sciences, Kyoto University

Programme (honorifics omitted, *:speaker)

Monday, 11 November

10:00~10:10 Opening

10:10~10:40 *Koichiro Ike, Tamaki Tanaka (Niigata Univ.)
Characterization of possibility-theoretical comparison indices for fuzzy sets and its application

10:40~11:10 Yousuke Araya (Akita Pref. Univ.)
Conjugate duality in set optimization problem

11:20~11:50 *Takuya Shibata, Hitoshi Hohjo (Osaka Pref. Univ.)
Proposal for Double Nonce Mining System

11:50~12:20 Seiichi Iwamoto (Kyushu Univ. Professor Emeritus), *Yutaka Kimura (Akita Pref. Univ.)
Semi-Fibonacci programming — odd variable —

Lunch

13:50~14:20 Kensaku Kikuta (Univ. of Hyogo Professor Emeritus)
A search problem on a finite and connected graph

14:20~14:50 *Yoshinobu Tamura, Hironobu Sone, Kodai Sugisaki (Tokyo City Univ.), Shigeru Yamada (Tottori Univ. Professor Emeritus)
A Method of Parameter Estimation Based on Deep Learning for Jump Diffusion Process Model

15:00~15:30 *Masayuki Kageyama (Nagoya City Univ.), Hiroe Tsubaki (The Institute of Statistical Mathematics)
An extension of Bayes’ theorem

15:30~16:00 Masayuki Horiguchi (Kanagawa Univ.)
On the credible set in controlled Markov set-chains with unknown transition probabilities

Tuesday, 12 November

10:00~10:30 Masaaki Fukasawa, Masamitsu Ohnishi, *Makoto Shimoshimizu (Osaka Univ.)
Optimal execution problem with generalized price impact in a discrete time setting

10:30~11:00 Yukihiro Maruyama (Nagasaki Univ.)
On a knapsack problem as a nondeterministic sequential decision process
11:10～11:40  Masamichi Kon (Hirosaki Univ.)
Fuzzy Schwarz inequality

11:40～12:10  Hiroaki Kuwano (Kanazawa Gakuin Univ.)
Fuzzy Project Risk Management Models II

Lunch

13:40～14:10  *Shinji Inoue (Kansai Univ.), Shigeru Yamada (Tottori Univ. Professor Emeritus)
On Software Reliability Modeling with Fault Debugging Difficulties

14:10～14:40  *Qi Wang, Masayuki Kageyama (Nagoya City Univ.), Jingyao Zhang (Kyoto Univ.)
Decision making method of optimal evacuation root

14:50～15:20  Hiromitsu Tanaka (Aichi-Gakuin Univ.)
A Note on the Estimation of the Importance in AHP

15:20～15:50  *Setsuko Sakai (Hiroshima Shudo Univ.), Tetsuyuki Takahama (Hiroshima City Univ.)
A Group-Wise Crossover Operation Based on Gene Grouping Using Correlation Coefficients for an Adaptive Differential Evolution Algorithm

15:50～16:20  Ryusuke Hohzaki (National Defense Academy)
A search game with the combined usage of multi-type search resources

Banquet

Wednesday, 13 November

10:00～10:30  Yuji Yoshida (Univ. of Kitakyushu)
Coherent Risk Measures Derived from Utility Functions and Risk-Sensitive Expectation

10:30～11:00  Toshikau Watanabe (Tokyo Univ. of Information Sciences)
On non-additive multi-mesures

11:10～11:40  Tsuyoshi Saito (Aichi Univ.)
A measure to stabilize management of tourism facility by attracting foreign tourists

11:40～12:10  Hideaki Takagi (Univ. of Tsukuba Professor Emeritus)
A static revenue management model with buy-up

Lunch

13:40～14:10  *Shingo Nakanishi (Osaka Institute of Technology), Masamitsu Ohnishi (Osaka Univ.)
Rotationally Symmetric Relations of Standard Normal Distribution Using Right Triangle, Circle, and Square

14:10～14:40  Toshiharu Fujita (Kyushu Institute of Technology)
On Markov Decision Process with Converging Branch System

14:40～14:50  Closing