

RIMS Workshop

Comprehensive Developments in Decision Theory in Uncertain and Ambiguous Environments

Organizer: Teruo Tanaka (Hiroshima City University)

Date 9 November (Mon.) – 11 November (Wed.), 2026

Venue Room 420 (4th floor), Research Institute for Mathematical Sciences, Kyoto University, Kitashirakawa-Oiwakecho, Sakyo-ku, Kyoto 606-8502

Access `https://www.kurims.kyoto-u.ac.jp/en/access-01.html`

Programme (*: speaker)

Monday, 9 November

09:50–10:00 Teruo Tanaka (Hiroshima City University)
Opening

10:00–10:30 *Qi Wang (Hiroshima Shudo University), Jingyao Zhang (Kyoto University), Buheeerdun Yang (Inner Mongolia Normal University)
Multinomial Logit Estimation of Movement Direction Choice in Cellular Automaton Evacuation Models

10:30–11:00 *Masayuki Horiguchi (Kanagawa University), Yu-Chen Cheng (Kanagawa University, M1), Ryuya Minamoto (Kanagawa University, D1)
On Interval Bayesian Risk Evaluation in Markov Decision Processes

Break

11:10–11:40 *Tsuneshi Obata (Otemon Gakuin University), Shunsuke Shiraishi (Hiroshima Institute of Technology)
Structural Equivalence and Classification of Consistency of Pairwise Comparison Matrices

11:40–12:10 * Hideaki Takagi (University of Tsukuba, Professor Emeritus), Brian L. Mark (George Mason University, U.S.A.)

Markov Process Model of Infectious Disease Spreading for a Finite Population with Catastrophes

Lunch Break

13:35–14:00 *Kazuma Abe (University of Tsukuba, D3), Tuan Phung-Duc (University of Tsukuba)
Load Balancing in Parallel Infinite-Server Queues with Action Delay: Weighting Delayed Information and Minimizing the Stationary Variance of Imbalance

14:00–14:30 *Takako Hoshiyama (IE Tech – Research Institute), Katsuhiro Nishinari (The University of Tokyo)
Departure-Interval Distributions in a Two-Dimensional TASEP Model and Their Possible Connection to General-Distribution Queueing Models

14:30–15:00 *Toshikazu Watanabe (Kanagawa University), Masayuki Horiguchi (Kanagawa University)
On the Common Fixed Point Theorem for ϕ-Type Contraction Mappings in Stochastic Metric Spaces with a Quasi-b-Metric

Break

15:15–15:40 *Kei Danura (Hiroshima University, B4), Hiroyuki Okamura (Hiroshima University), Tadashi Dohi (Hiroshima University)
On the Equilibrium between Vendors and Users in Security Patch Management

15:40–16:10 * Jingchi Wu (Hiroshima University), Zhengpu Zhang (Hiroshima University, M2), Tadashi Dohi (Hiroshima University), Junjun Zheng (Hiroshima University), Hiroyuki Okamura (Hiroshima University)
Further Results on the Dependence of Software Reliability Prediction on Information Criteria

16:10–16:40 *Yoshinobu Tamura (Yamaguchi University), Shigeru Yamada (Tottori University, Professor Emeritus)
Comparison of OSS Reliability Prediction Methods Based on Deep Learning

Tuesday, 10 November

10:00–10:25 *Ryuya Minamoto (Kanagawa University, D1), Yu-Chen Cheng (Kanagawa University, M1), Masayuki Horiguchi (Kanagawa University)
An Infinite-Dimensional Linear Programming Approach to Markov Decision Processes under the Expected Discounted Total Cost Criterion

10:25–10:50 Koki Nakayama (Hiroshima University, D1)
Sinkhorn-Projected EM for Bernstein Copulas and Its Mathematical Properties

Break

11:00–11:25 Shingo Murakami (Kyushu University, D2)
An Extension of PNSCMs using Algebraic Conditional Plausibility Measures

11:25–11:55 Shingo Nakanishi (Osaka Institute of Technology)

Reconsidering Visualizations of Modified Pascal Triangles and These Related Sequences

Lunch Break

13:30–13:55 *Taisei Hishinuma (Kanagawa University, M2), Kimitoshi Sato (Nanzan University)
Adaptive Price Cap Design in Dynamic Pricing for Social Welfare

13:55–14:20 *Shuya Kumata (Akita Prefectural University, M2), Yosuke Araya (Akita Prefectural University), Mitsuhiro Hoshino (Akita Prefectural University)
On the Influence of Training Data Characteristics on Population-Based Convergence Measures for SOMs

14:20–14:50 Yumiharu Nakano (Institute of Science Tokyo)
A Numerical Method for Potential Mean-Field Games via Kernel-MMD Penalty

14:50–15:20 Katsunori Ano (Bunkyo Gakuin University)
On the Characterization of Optimal Stopping Times for Multiple Stopping Problems under Itô Diffusions with Derivative Applications

Break

15:35–16:05 Seiichi Iwamoto (Kyushu University, Professor Emeritus), *Yutaka Kimura (Akita Prefectural University)
Quadruple Duality (II) – Both Fixed Points –

16:05–16:35 Teruo Tanaka (Hiroshima City University)
Transitivity in Discrete Time Multiparameter Optimal Stopping Problems

Banquet: After the Tuesday sessions

Wednesday, 11 November

10:00–10:30 *Syouji Nakamura (Kinjo Gakuin University), Natsuhi Hirata (Kinjo Gakuin University), Kari Baba (Yokkaichi Nursing and Medical Care University), Hitoshi Yamakawa (Kinjo Gakuin University)
Application of Wavelet Interpolation for Cumulative Time-Series Data

10:30–11:00 Ohi Fumio (Nagoya Institute of Technology, Professor Emeritus)
Importance Measure of a Group of Components – Risk Achievement Worth –

Break

11:10–11:40 Masamichi Kon (Hirosaki University)
Non-Cooperative Game in Strategic Form with Strict Partial Order on Payoffs

11:40–12:10 Riki Kawase (Institute of Science Tokyo)
Finite-Sample Analysis for Cost Recovery of Congestible Facilities

Lunch Break

13:30–14:00 Kensaku Kikuta (University of Hyogo, Professor Emeritus)
A Class of Normal Form Games

14:00–14:25 *Yuki Watanabe (Osaka Metropolitan University, M2), Hitoshi Hohjo (Osaka Metropolitan University)
Behavioral Changes of Agents in a Minority Game Model with Dynamic Winning Criteria

14:25–14:50 *Wang Yizhou (Osaka Metropolitan University, M2), Hitoshi Hohjo (Osaka Metropolitan University)
Evolution of Minority Game with Multi-Layer Network Co-Evolution

☕ Break

15:05–15:30 *Tahiro Taniguchi (Osaka Metropolitan University, M2), Hitoshi Hohjo (Osaka Metropolitan University)
Conditions for Innovation Diffusion in the Phase-Transition Binary Naming Game

15:30–15:55 *Mizuki Nakamura (Osaka Metropolitan University, M2), Hitoshi Hohjo (Osaka Metropolitan University)
A Multi-Stage Signaling Game for Active Cyber Defense

15:55–16:25 Toshiharu Fujita (Kyushu Institute of Technology)
Construction Problem of Convex Polyhedra by Origami Units – Determining Congruence of Polyhedra –

16:25–16:30 Teruo Tanaka (Hiroshima City University)
Closing