RIMS workshop

"Decision making theories under uncertainty and its applications: the extensions of mathematics for programming"

Location : Rm 111 of Research Institute for Mathematical Sciences, Kyoto University

15 November – 17 November 2017

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

Programme(honorifics omitted, *:speaker)

Wednesday, 15 November 9:00 AM – 11:50 AM, morning sessions

9:10 Opening

9:15〜9:40 Hitoshi Inui (Inst Business Finance, Waseda Univ)
American Monte Carlo and Multilevel Monte Carlo

9:40〜10:05 Yasuhiro Saito (Japan Coast Guard Acad), Tadashi Dohi (Hiroshima Univ)
Trend Renewal Process-based Software Reliability Models

Break

10:10〜10:35 Yuka Minamino (Grad Sch Eng, Tottori Univ), Shinji Inoue (Fac Inform, Kansai Univ), Shigeru Yamada (Grad Sch Eng, Tottori Univ)
Bivariate Software Reliability Growth Modeling Based on CES Type Testing-Time Function

10:35〜11:00 Masayuki Kageyama(Grad Sch Desg Arch, Nagoya City Univ, Tsinghua Univ.), Qi Wang(Aichi University)
Weighted Quasi-arithmetic Means on Two-dimensional Spaces and Their Application to Utility Functions

Break

11:10〜11:35 Fumio Ohi (Professor Emeritus Nagoya Inst Tech)
On Importance Measure of a Multi-state System

11:35〜12:00 Takashi Shinzato (Tamagawa Univ)
Replica Analysis for Error Function of Linear Regression Model

Wednesday, 15 November 13:20 PM – 16:05 PM, afternoon sessions

13:10〜13:35 *Takumi Ishikawa (Tokyo Met Univ[1]), Takashi Shinzato (Tamagawa Univ), Taishin Nakamura[1], Xiao Xiao [1], Tomoaki Akiba[1], Hisashi Yamamoto[1]
Proposal of Calculation Method using Combined System for Reliability of Linear Connected-(1,2)-or-(2,1)-out-of-(m,n): F System

13:35〜14:00 *Daichi Tada (Tokyo Met Univ[1]), Takashi Shinzato (Tamagawa Univ), Xiao Xiao[1], Hisashi Yamamoto[1]
Random Matrix Approach to Maximal/Minimal Investment Concentration with Constraints of Budget and Investment Risk

14:00〜14:25 Nozer D. Singpurwalla (Col Sci Eng, City Univ Hong Kong)
The Dinegentropy of Diagnostic and Detection Tests

Break

14:35〜15:00 *Shingo Nakanishi (Comp center, Osaka Inst Tech) and Masamitsu Ohnishi (Grad Sch Econ, & Center Math Modeling and Data Sci, Osaka Univ)
Geometrical Characterizations of Standard Normal Distribution

15:00〜15:25 *Setsuko Sakai (Fac Commercial Sci, Hiroshima Shudo Univ), Tetsuyuki Takahama (Grad Sch Inform Sci, Hiroshima City Univ)
A Blend Crossover Introducing Transformation to Resolve Dependency Between Variables

Break

15:35〜16:00 Yuji Yoshida (Fac Econ and Business Admin, Univ Kitakyushu)
Weighted Quasi-arithmetic Means on Two-dimensional Spaces and Their Application to Utility Functions

16:00〜16:25 Seiya Kuno (Fac of Commerce, Doshisha Univ), *Masamitsu Ohnishi (Grad Sch Econ, Osaka Univ), Makoto Himoshimizu (Grad Sch Econ, Osaka Univ)
Optimal Execution Strategies under Generalized Discrete-time Price Impact Models

16:25〜16:50 Xiaoxia Huang (Donlinks Sch Econ Mang, Univ Sci Tech Beijing)
Towards uncertain portfolio selection

Thursday, 16 November 9:10 AM – 11:50 AM, morning sessions

9:00〜9:25 Masayuki Horiguchi (Fac Sci, Kanagawa Univ)
Controlled Markov set chains and Bayesian Decision Analysis

9:25〜9:50 Jue Wang (Smith Sch Business, Queen's Univ)
Bayes-optimal Fine-tuning under Imperfect Observations

9:50〜10:15 Masahiko Sakaguchi (Kanagawa Canc Cent Res Inst, Intgr Cent Adv Med Tech of Kochi Med Sch)
A Minimal Imbedding for Associative Dynamic Programming with Bitonicity

Break

[Chair: Takayuki Ueno (Univ Nagasaki)]

10:20〜10:45 Seiichi Iwamoto (Professor Emeritus Kyushu Univ) and Yutaka Kimura (Fac Systm Sci Tech, Akita Pref Univ )
Nonhomogeneous Semi-Fibonacci Programming

10:45〜11:10 *Yutaka Saito (Fac Systm Sci Tech, Akita Pref Univ[1]), Yutaka Kimura[1], Yousuke Araya[1]
On Set-valued Analysis for an Optimal Solution of DC Programming Problem

Break

11:15〜11:40 *Yousuke Araya (Fac Systm Sci Tech, Akita Pref Univ[1]), Yutaka Saito[1], Yutaka Kimura[1]
A New Method of Cluster Analysis by Using Scalarization in Vector Optimization

11:40〜12:05 Hidefumi Kawasaki(Fac Math, Kyushu Univ)
Fixed point theorems for discrete contraction mappings and pure-strategy equilibria

Thursday, 15 November 13:20 PM – 16:50 PM, afternoon sessions

13:10〜13:35 *Shinji Inoue (Fac Inform, Kansai Univ) and Shigeru Yamada (Grad Sch Eng, Tottori Univ)
Internval Estimation of Software Reliability Assessment Measures Based on a Discretized Reliability Model

13:35〜14:00 *Yoshinobu Tamura (Tokyo City Univ) and Shigeru Yamada (Grad Sch Eng, Tottori Univ)
Application Software Based on NW.js for Software Reliability Assessment and Optimal Release Problems

Break

[Chair: Yutaka Kimura (Fac Systm Sci Tech, Akita Pref Univ )]

14:05〜14:30 Koichiro Ike (Grad Sch Sci Tech, Niigata Univ), Tamaki Tanaka*(Grad Sch Sci Tech, Niigata Univ)
Sublinear-like Scalarization Scheme for Sets and its Application to Fuzzy Sets

14:30〜14:55 *Masamichi Kon (Fac Sci Tech, Hirosaki Univ)
Fuzzy norm and fuzzy distance

Break

[Chair: Masamichi Kon (Fac Sci Tech, Hirosaki Univ)]

15:00〜15:25 *Kurata Sumito (Grad sch Eng Sci, Osaka Univ) and Hamada Etsuo (Grad sch Eng Sci, Osaka Univ)
Statistical Methods to Analyze the Pairwise Comparison Matrices for the AHP and the ANP

15:25〜15:50 A Consistency Diagnosis of Pairwise Comparison Matrix(4×4) in AHP
Hiromitsu Tanaka (Fac Mang, Aichi-Gakuin Univ)

Break

[Chair: Hiroaki Kuwano (Fac Business Admin Inform Sci, Kanazawa Gakuin Univ)]

16:00〜16:25 Kensaku Kikuta (Sch Business Admin, Hyogo Pref Univ)
A Search Game on a Network with Cycles

16:25〜16:50 Mitsushi Tamaki (Dept Business Admin, Aichi Univ)
Optimal Selection from a Sequence of Relatively Best Objects

Banquet: after finishing the Thursday's sessions.

Friday, 17 November 9:10 AM – 12:15 PM, morning sessions

[Chair: Hitoshi Hohjo (Grad Sch Eng, Osaka Pref Univ)]

9:10〜9:35 Kouta Fujishima (Grad Sch Edu, Chiba Univ), Toru Nakai (Fac Edu, Chiba Univ)
On a Bayesian Optimization Problem

9:35〜10:00 Tetsuya Miyata (Grad Sch Sci Eng, National Defense Acad) and Ryusuke Hohzaki (Dept Comp Sci, National Defense Acad)
A Search Game with Private Information on a Target and a searcher

10:00〜10:25 Ryusuke Hohzaki (National Defense Acad)

A Network Interdiction Game with Multiple Invasions

Break

[Chair: Toshiharu Fujita (Grad Sch Eng, Kyushu Inst Tech)]

10:35〜11:00 Yu Ogasawara (Grad Sch Med, Hirosaki Univ)
Approximate Solutions in Choice-based Seating Position Model

11:00〜11:25 Hideaki Takagi (Professor Emeritus Univ Tsukuba)
Comments on the Extension of Littlewood's Rule in Revenue Management

11:25〜11:50 Hirokatsu Fukuda (Fac Business Admin Inform Sci, Kanazawa Gakuin Univ), Hiroaki Kuwano (Fac Business Admin Inform Sci, Kanazawa Gakuin Univ)
On an Effectiveness Scale of Risk Responses in a Project Risk Management.

Friday, 15 November 13:30 PM – 16:20 PM, afternoon sessions

13:30〜13:55 Tsuyoshi Saito (Dept Business Adm Aichi Univ)
A Plan for Reducing FX Risk Held by Foreign Tourists to Japan from Particular Currency Regions

13:55〜14:20 Masayo Tsurumi, (National Univ Corp of Tsukuba Univ Tech)
Voting Power Analysis of Parliamentary Groups in a City Counsil

14:20〜14:45 Yumi Yahagi(Tokyo Univ Inform Sci)
A Consideration on the Solution of One-dimensional Keller-Segel Systems

Break

14:55〜15:20 Toshiharu Fujita (Grad Sch Eng, Kyushu Inst Tech) and Naoki Saikawa (Fac Eng, Kyushu Inst Tech)
A Decision Process Model with Converging Branch System

15:20〜15:45 Toshikazu Watanabe (Tokyo Univ Inform Sci) and Masashi Toyoda (Toho Univ)
Fixed Point Theorems in Partially Ordered Metric Spaces

15:45〜16:10 Hitoshi Hohjo (Grad Sch Eng, Osaka Pref Univ)
A two-person timing game with a general utility function and a constant discount rate

16:10 Closing

WS Organizer: Masayuki Horiguchi (Kanagawa Univ.)