

The International Workshop on Nonlinear Analysis and Convex Analysis

Research Institute for Mathematical Sciences, Kyoto University
Oiwake-town Kita-Shirakawa, Sakyou-ward, Kyoto-city, JAPAN

This Workshop is qualified by Research Institute for Mathematical Sciences as one of the series of important mathematical research activities in 2014.

Directed by Wataru Takahashi(Keio University and National Sun Yat-sen University)
and organized by Shigeo Akashi(Tokyo University of Science)

This workshop begins at 9:00 on the 19th of August in 2014 and ends at 16:30 on the 21st, and the conference venue is Room 420 on the fourth floor in the inside of the building for RIMS.

Please refer to <http://www.kurims.kyoto-u.ac.jp/~kyodo/workshop-en.html>

August 19 (Tuesday)

- 9:00 ~ 9:05 Wataru Takahashi*(Keio Univ. and National Sun Yat-sen Univ.)
Opening Address
- 9:05 ~ 9:40 Hang-Chin Lai*(National Tsing Hua Univ., Taiwan)
Jin-Chirng Lee(Chung Yuan Christian University, Taiwan)
Cheng-Te Liu(Chung Yuan Christian University, Taiwan)
Optimality Conditions(necessary / sufficient) for a Semi-preinvex Programming Problem
- 9:40 ~ 10:05 Yasunori Kimura*(Toho Univ.)
An Iterative Scheme for a Family of Mappings Defined on a Complete Geodesic Space
- 10:05 ~ 10:30 Hirohito Inoue(Kumamoto Univ.)
Koichiro Naito*(Kumamoto Univ.)
The Shortest Vector Problems in P -adic Approximation Lattices and Their Applications to Cryptography
- 10:30 ~ 10:40 Tea Break
- 10:40 ~ 11:15 Do Sang Kim*(Pukyong National Univ., Korea)
Liguo Jiao(Pukyong National Univ., Korea)
Some New Properties of Lagrange Function
- 11:15 ~ 11:40 Valentin Gutev(Univ. of Malta)
Takamitsu Yamauchi*(Ehime Univ.)
On Factorizations of Lower Semicontinuous Set-valued Mappings
- 11:40 ~ 12:05 Satoshi Suzuki*(Shimane Univ.)
Daishi Kuroiwa(Shimane Univ.)
On Surrogate Strong and Min-max Duality for Quasiconvex Programming
- 12:05 ~ 13:15 Lunch Time
- 13:15 ~ 13:50 Jong Soo Jung*(Dong-A Univ., Korea)
Strong Convergence of Iterative Algorithms for Solving Optimization Problems

- 13:50 ~ 14:15 Toshiharu Kawasaki*(Tamagawa Univ.)
Masashi Toyoda(Tamagawa Univ.)
Note on Cauchy Problems for α order Fractional Differential Equations with $1 < \alpha \leq 2$
- 14:15 ~ 14:40 Shogo Kobayashi*(Niigata Univ.)
Yutaka Saito(Niigata Univ.)
Tamaki Tanaka(Niigata Univ.)
Convexity Properties for Compositions of Set-valued Map and Monotone Scalarizing Function
- 14:40 ~ 14:50 Tea Break
- 14:50 ~ 15:15 Ryotaro Tanaka*(Niigata Univ.)
Kichi-Suke Saito(Niigata Univ.)
Masahiro Sato(Niigata Univ.)
When is $J(X^*)=J(X)$ for a Banach space X ?
- 15:15 ~ 15:40 Kazuhiro Hishinuma*(Meiji Univ.)
Hideaki Iiduka(Meiji Univ.)
Parallel Algorithm for Nonsmooth Convex Optimization
- 15:40 ~ 15:50 Tea Break
- 15:50 ~ 16:15 Mayumi Hojo*(Shibaura Institute of Tech.)
Wataru Takahashi(Keio Univ. and National Sun Yat-sen Univ.)
Generalized Split Feasibility Problem Governed by Widely More Generalized Hybrid Mappings in Hilbert Spaces
- 16:15 ~ 16:50 Mau-Hsiang Shih*(National Taiwan Normal Univ., Taiwan)
Multiscale Network Equations of Pulse-Coupled Model Neurons

August 20 (Wednesday)

- 9:00 ~ 9:05 Announcement
- 9:05 ~ 9:40 Sehie Park*(The National Academy of Sciences and Seoul National Univ., Korea)
Remarks on the Concept of Abstract Convex Spaces
- 9:40 ~ 10:05 Koji Aoyama*(Chiba Univ.)
Viscosity Approximation Process for Nonexpansive Mappings and Quasinonexpansive Mappings
- 10:05 ~ 10:30 Kichi-Suke Saito*(Niigata Univ.)
Ryotaro Tanaka(Niigata Univ.)
Beckner's Inequalities and New Geometric Properties of Banach Spaces
- 10:30 ~ 10:40 Tea Break
- 10:40 ~ 11:15 Gue Myung Lee*(Pukyong National Univ., Korea)
On Second-order Subdifferentials and Second-order Optimality Conditions
- 11:15 ~ 11:40 Issei Kuwano*(Kanagawa Univ.)
A New Scalarization Approach for Set Optimization Problems
- 11:40 ~ 12:05 Seiichi Iwamoto(Kyushu Univ.)
Yutaka Kimura*(Akita Prefectural Univ.)
Toshiharu Fujita(Kyushu Institute of Tech.)
Primal-Dual Optimization through A-G Inequality
- 12:05 ~ 13:15 Lunch Time

- 13:15 ~ 13:50 Shyh-Nan Lee*(Chun Yuan Christian Univ., Taiwan)
A Matroid Version of Sperner's Lemma without Boundary Condition
- 13:50 ~ 14:15 Yutaka Saito*(Niigata Univ.)
Tamaki Tanaka(Niigata Univ.)
Syuuji Yamada(Niigata Univ.)
On Generalization of Ricceri's Theorem into Set-valued Maps via Scalarization
- 14:15 ~ 14:40 Kenji Kimura*(Niigata Institute of Tech.)
Tamaki Tanaka(Niigata Univ.)
Masakazu Higuchi(Saitama Univ.)
On a Multi-valued Two-person Game
- 14:40 ~ 14:50 Tea Break
- 14:50 ~ 15:15 Yoshifumi Kusunoki*(Osaka Univ.)
Tetsuzo Tanino(Osaka Univ.)
Characterization of Irreducible Cost Matrices in Minimum Cost Arborescence Problems
- 15:15 ~ 15:40 Takanori Ibaraki*(Yokohama National Univ.)
Weak Convergence Theorems for Generalized Nonexpansive Mappings with Bregman Distances
- 15:40 ~ 15:50 Tea Break
- 15:40 ~ 16:15 Sachiko Atsushiba*(Univ. of Yamanashi)
Approximation of Fixed Points and Attractive Points of Nonlinear Mappings
- 16:15 ~ 16:50 Wataru Takahashi*(Keio Univ., and National Sun Yat-sen Univ.)
Unique Fixed Point Theorems for Nonlinear Mappings in Hilbert Spaces
- 18:00 ~ 20:30 Welcome Party

August 21 (Thursday)

- 9:00 ~ 9:05 Announcement
- 9:05 ~ 9:40 Zenn-Tsun Yu(Nan Kai Univ. of Tech., Taiwan)
Lai-Jiu Lin*(National Changhua Univ. of Education, Taiwan)
Multiple Level Equilibrium Problem with Applications (I)
- 9:40 ~ 10:05 Fumiaki Kohsaka*(Oita Univ.)
Fixed Point Approximation for Firmly Nonexpansive-like Mappings in Banach Spaces
- 10:05 ~ 10:30 Mitsuhiro Hoshino*(Akita Prefectural Univ.)
On Absorbing Property and Learning Rates Factor in Self-organizing Maps on One-dimensional Input Space
- 10:30 ~ 10:40 Tea Break
- 10:40 ~ 11:15 Shun-Chin Ho*(Chung-Jen Junior College of Nursing, Health Sciences and Management, Taiwan)
Hang-Chin Lai(National Tsing Hua Univ., Taiwan)
Duality in Minimax Programming with Second Order Involving (F, ρ) -Convexity
- 11:15 ~ 11:40 Rieko Kubota(Yokohama So-Gakukan High School)
Yukio Takeuchi*(Takahashi Institute for Nonlinear Analysis)
A Simple Way to Some Fixed Point Theorems for Families of Commuting Nonexpansive Mappings in Banach Spaces

- 11:40 ~ 12:05 Masakazu Higuchi*(Saitama Univ.)
Kenji Kimura(Niigata Institute of Tech.)
Tamaki Tanaka(Niigata Univ.)
Classification of Graphical Images of Payoff Functions for Bicriteria Non-square Matrix Games
- 12:05 ~ 13:15 Lunch Time
- 13:15 ~ 13:50 Yi-Chou Chen*(National Army Academy, Taiwan)
Hang-Chin Lai(National Tsing Hua Univ., Taiwan)
Minimax Programming Involving Semi-preinvex Functions
- 13:50 ~ 14:15 Toshikazu Watanabe*(Nihon Univ.)
Issei Kuwano(Kanagawa Univ.)
On Egoroff's Theorem for Non-additive Multi Measures
- 14:15 ~ 14:40 Shunsuke Yamamoto*(Shimane Univ.)
Daishi Kuroiwa(Shimane Univ.)
Constraint Qualifications for Convex Optimization which is Constrained by Locally Lipschitz Functions
- 14:40 ~ 14:50 Tea Break
- 14:50 ~ 15:15 Shin-ya Matsushita*(Akita Prefectural Univ.)
Li Xu(Akita Prefectural Univ.)
On Convergence of the Douglas-Rachford Method
- 15:15 ~ 15:40 Hiromichi Miyake*
On Compactness in L^1 and Its Application
- 15:40 ~ 16:05 Tomoya Mizutani*(Tokyo Univ. of Science)
Yusuke Goto(Tokyo Univ. of Science)
Yasushi Kikuchi(Tokyo Univ. of Science)
Satoshi Kodama(Tokyo Univ. of Science)
Shigeo Akashi(Tokyo Univ. of Science)
Simplification of Kolmogorov-Arnold Representation Related to Hilbert's 13th Problem