Nonlinear Analysis and Convex Analysis

RIMS Workshop, August 29–31, 2022

<u>PROGRAM</u>

Each name flagged with an asterisk is the speaker of the talk.

Aug. 29 (Mon)

10:00–10:10   Masashi Toyoda (Toho University)
Opening Address

10:10–10:40   Hidefumi Kawasaki (Kyushu University)
An n-dimensional intermediate theorem and its application to strategic games

10:40–11:10   Yasunori Kimura (Toho University), Shuta Sudo* (Toho University)
Monotone operators in complete geodesic spaces

11:10–11:40   Yasunori Kimura (Toho University), Tomoya Ogihara* (Toho University)
Resolvents of equilibrium problems in a geodesic space with negative curvature

   Lunch

13:00–13:30   Koji Aoyama (Chiba University)
Fixed point theorem for a Meir–Keeler type mapping in a metric space with a transitive relation

13:30–14:00   Sachiko Atsushiba (Tokyo Woman's Christian University)
Convergence theorems for families of monotone nonexpansive mappings

14:00–14:30   Takashi Honda (Iwate University)
Classification of nonlinear projections in a Banach space

14:50–15:20   Yousuke Araya (Akita Prefectural University)
On the complete lattice approach in set optimization problem

15:20–15:50   Premyuda Dechboon*, Tamaki Tanaka (Niigata University)
Generalized cone-continuity of set-valued maps with scalarization

15:50–16:20   Longrio Platil (Niigata University), Tamaki Tanaka (Niigata University)
A generalization of fuzzy-set relations for intuitionistic fuzzy sets

Aug. 30 (Tue)

10:00–10:30   Yasunori Kimura (Toho University), Kazuya Sasaki* (Toho University)
A convex combination on geodesic spaces

10:30–11:00   Yasunori Kimura (Toho University), Tomoki Oguchi* (Toho University)
An approximation theorem to a solution to an equilibrium problem in complete CAT(1) spaces

11:00–11:30   Haruto Itagaki* (Toho University), Yasunori Kimura (Toho University)
Approximation of solutions for an equilibrium problem with a projection method in a geodesic space

   Lunch

13:00–13:30   Hiroyasu Mizuguchi (Kansai University)

On the upper bound of a geometric constant and von Neumann-Jordan constant in Radon planes

13:30–14:00   Yasunori Kimura (Toho University)

Comparison of convergence theorems in a complete geodesic space

14:00–14:30   Yasunori Kimura (Toho University), Kenzi Satô* (Tamagawa University)

The sum of powered distances from vertices or edges of a triangle

14:50–15:20   Kenjiro Yanagi (Josai University)

Refinements of bounds for entropy and relative entropy and their applications

15:20–15:50   Takanori Ibaraki (Yokohama National University), Shunsuke Kajiba* (Yokohama National University), Yukio Takeuchi (Takahashi Institute for Nonlinear Analysis)

A weak convergence theorem for common fixed points of commutative two nonlinear mappings

15:50–16:20   Mitsuhiro Hoshino (Akita Prefectural University)

On dot product type learning and closed class of states in SOM

Aug. 31 (Wed)

10:00–10:30   Yuto Ogata (Kanazawa-Gakuin University)

Robustness of multi-valued optimization problems via set relations

10:30–11:00   Syuuji Yamada (Niigata University)

Improvement of a Hessian matrix approximation method in DC programming

11:00–11:30   Toshikazu Watanabe (Tokyo University of Information Sciences)

Common fixed point theorems for Asymptotic Mappings in complete metric spaces

11:30–12:00   Masashi Toyoda (Toho University)

Fixed point theorem in a spherically complete ball space