



September 24–26, 2025

## PROGRAM

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

### Sep. 24 (WED)

- 9:05~9:35 Shunsuke Shiraishi\* (Hiroshima Institute of Technology, Japan), Tsuneshi Obata (Otemon Gakuin University, Japan)  
 Theoretical study of characteristic polynomial of 4th order PCM in AHP
- 9:35~10:05 Yousuke Araya\* (Akita Prefectural University, Japan), Masamichi Kon (Hirosaki University, Japan), Yutaka Kimura (Akita Prefectural University, Japan)  
 On two-person games with set payoffs
- 10:05~10:35 Yasunori Kimura (Toho University, Japan)  
 Approximation technique and projection method for convex minimization problems
- 10:45~11:15 Koji Aoyama (Chiba University, Japan)  
 Some variants of Schu's lemma
- 11:15~11:45 Shin-ya Matsushita (Akita Prefectural University, Japan)  
 On the convergence of the inertial splitting method
- 11:45~12:15 Seiichi Iwamoto (Kyushu University, Japan), Yutaka Kimura\* (Akita Prefectural University, Japan)  
 Quadruple dual-basic model–

### LUNCH

- 13:30~14:00 Daishi Kuroiwa (Shimane University, Japan), Narin Petrot\* (Naresuan University, Thailand), Kazuki Seto (Shimane University, Japan)  
 Set optimization perspectives in bilevel problems: existence and approximation concepts
- 14:00~14:30 Poom Kumam\*, Wiparat Worapitpong, Parin Chaipunya, Sani Salisu (King Mongkut's University of Technology Thonburi, Thailand)  
 Convexity in iterative techniques for optimization in nonlinear spaces
- 14:30~15:00 Chung-Chuan Chen (National Taichung University of Education, Taiwan)  
 Disjoint dynamics of composition operators
- 15:10~15:40 Liguojiao\* (Northeast Normal University, China), Jae Hyoung Lee (Pukyong National University, Korea), Tien-Son Pham (Dalat University, Vietnam)  
 Optimality conditions at infinity in semialgebraic vector optimization
- 15:40~16:10 Do Sang Kim (Pukyong National University, Korea)  
 Nonsmooth minimax fractional semi-infinite optimization problems with applications
- 16:10~16:40 Gue Myung Lee\*, Gwi Soo Kim (Pukyong National University, Korea), Moon Hee Kim (Tongmyong University, Korea)  
 Robust conic linear optimization problems

### Sep. 25 (THU)

- 9:05~9:35 MD Ziaul Huq, Tamaki Tanaka\* (Niigata University, Japan)  
 Characterization of set-relations in set optimization via twofold scalar optimization problems
- 9:35~10:05 Yuto Ogata (Kanazawa Gakuin University, Japan)  
 Calculation algorithm of dual forms for set inequalities and its application
- 10:05~10:35 Ryota Iwamoto\*, Tamaki Tanaka (Niigata University, Japan)  
 Scalarization methods with a characterizing function of an ordering cone in set optimization
- 10:45~11:15 Mitsuhiro Hoshino (Akita Prefectural University, Japan)  
 On the state preservation of update node value functions in inner product-based learning self-organizing maps
- 11:15~11:45 Hiroko Manaka (Nihon University, Japan)  
 Results with tools of Bregman distance in Banach spaces

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- 13:00~13:30 Min-Chi Wang, Ruey-Lin Sheu\* (National Cheng Kung University, Taiwan), Huu-Quang Nguyen (Vinh University, Vietnam)  
Last two pieces of puzzle for un-solvability of a system of two quadratic (in)equalities
- 13:30~14:00 Jein-Shan Chen (National Taiwan Normal University, Taiwan)  
Smoothing functions for sparse optimization: a unified framework
- 14:00~14:30 Tone-Yau Huang\*, Chia-Yu Hsu (Feng-Chia University, Taiwan)  
Second-ordered duality modules for a complex multi-objective fractional programming
- 14:30~15:00 Cheng-Feng Hu (National Chiayi University, Taiwan)  
A study on environmental sustainability performance assessment from the water-energy-food nexus perspective
- 15:10~15:40 Chih-Sheng Chuang (National Chiayi University, Taiwan)  
Inertial algorithms for the inverse mixed variational inequality problems in Hilbert spaces
- 15:40~16:10 Wei-Shih Du (National Kaohsiung Normal University, Taiwan)  
On multi-comparatively quasi-contractions: New existence results and applications
- 16:10~16:40 Lai-Jiu Lin\*, Sung-Yu Wang (National Changhua University of Education, Taiwan)  
Applications of proximal point algorithms to characterize the existence convergence of zero point problems

Sep. 26 (FRI)

- 9:05~9:35 Toshiharu Kawasaki (Tamagawa University/Chiba University, Japan)  
Fixed point theorem for weighted generalized pseudocontractions in metric spaces
- 9:35~10:05 Toshikazu Watanabe (Kanagawa University, Japan)  
On common fixed point theorem for  $\phi$ -contractive type mappings in Meanger spaces
- 10:05~10:35 Takanori Ibaraki (Yokohama National University, Japan), Shunsuke Kajiba\* (Chiba Reimei High School, Japan)  
Shrinking projection method with allowable ranges for zero point problems in a Banach space
- 10:45~11:15 Masamichi Kon (Hirosaki University, Japan)  
Set-valued optimization by using total order relation between vectors
- 11:15~11:45 Kenjiro Yanagi (Yamaguchi University, Japan)  
Weighted multivariate Hermite-Hadamard inequality and its application
- 11:45~12:15 Hiroyasu Mizuguchi (Ritsumeikan University, Japan)  
A function associated with orthogonalities in normed spaces

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- 13:30~14:00 Yoshikazu Kobayashi (Niigata University and Chuo University, Japan)  
Semigroups of Lipschitz operators and abstract Cauchy problems in Banach spaces
- 14:00~14:30 Sachiko Atsushiba (Tokyo Woman's Christian University, Japan)  
Nonlinear mean convergence theorems for monotone generalized nonexpansive-type mappings
- 14:30~15:00 Masayuki Horiguchi\*, Wang Handong, Rikuto Suzuki, Ryuya Minamoto (Kanagawa University, Japan)  
On an optimization algorithm for estimating transition laws in controlled Markov-set chains.
- 15:10~15:40 Kanata Oowada\*, Hideaki Iiduka (Meiji University, Japan)  
Improvements of computational efficiency and convergence rate of Riemannian stochastic gradient descent with increasing batch size
- 15:40~16:10 Ellen H. Fukuda (Kyoto University, Japan)  
Second-order approximate KKT conditions for nonlinear conic optimization
- 16:10~16:40 Syuuji Yamada (Niigata University, Japan)  
A procedure for listing FJ points in a reverse convex quadratic programming problem