

非線形解析学と凸解析学の研究  
2013 RIMS Workshop on Nonlinear Analysis and Convex Analysis

October 9–11, 2013

**PROGRAM**

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

Oct. 9 (WED)

- 9:00 ~ 9:20    Mayumi Hojo\* (Niigata University, Japan)  
Weak and strong convergence theorems for generalized nonlinear mappings in Hilbert spaces
- 9:20 ~ 9:40    Jitsupa Deepho\*, Poom Kumam (King Mongkut's University of Technology Thonburi, Thailand)  
Mann's type extragradient for solving split feasibility and fixed point problems of Lipschitzian continuous and asymptotically quasi-nonexpansive mappings
- 9:40 ~ 10:20    Tae Hwa Kim (Pukyong National University, Korea)  
Review on differentiability for the norms of Banach spaces
- 10:30 ~ 11:10    Jong Kyu Kim (Kyungnam University, Korea)  
Weak and strong convergence theorems of solutions to split feasibility problem for non-spreading type mapping in Hilbert spaces
- 11:10 ~ 11:50    Jong Soo Jung (Dong-A University, Korea)  
Strong convergence of iterative methods for continuous pseudocontractive mappings
- 13:00 ~ 13:40    Hang-Chin Lai (National Tsing Hua University, Taiwan)  
Multicriteria minimax theorems in two-person zero-sum dynamic game
- 13:40 ~ 14:20    Zenn-Tsun Yu (Nan Kai University of Technology, Taiwan), Lai-Jiu Lin\* (National Changhua University of Education, Taiwan), Chih-Sheng Chuang (National Sun Yat-Sen University, Taiwan)  
Mathematical programming with multiple sets split monotone variational inclusion constraints
- 14:20 ~ 15:00    Ruey-Lin Sheu (National Cheng Kung University, Taiwan)  
An SDP parametric approach for solving single ratio quadratic fractional programming
- 15:15 ~ 15:40    Yasunori Kimura (Toho University, Japan)  
Approximation of common fixed point by the shrinking projection method with errors
- 15:40 ~ 16:05    Hiromichi Miyake (Japan)  
On the existence of the mean values for certain order-preserving operators in  $L^1$
- 16:05 ~ 16:30    Masashi Toyoda\* (Tamagawa University, Japan), Toshiharu Kawasaki (Niigata University, Japan)  
Kannan mapping theorems in partially ordered sets
- 16:30 ~ 16:55    Shigeo Akashi\* (Tokyo University of Science, Cisco Networking Academy, Japan), Satoshi Kodama, Yasutaka Yamamoto, Yuuta Watanabe (Tokyo University of Science, Japan)  
Collatz conjecture and topological dynamics

Oct. 10 (THU)

- 9:10 ~ 9:35    Toshiharu Kawasaki (Nihon University, Japan)  
Existence and mean approximation of fixed points of generalized hybrid non-self mappings in Hilbert spaces
- 9:35 ~ 10:00    Sachiko Atsushiba (University of Yamanashi, Japan)  
Strong convergence theorems for nonlinear mappings by Halpern's type iterations
- 10:00 ~ 10:40    Mau-Hsiang Shih (National Taiwan Normal University, Taiwan)  
Dynamics of nonnegative matrices
- 10:50 ~ 11:15    Satoshi Kodama\* (Tokyo University of Science, Japan), Shigeo Akashi (Tokyo University of Science, Cisco Networking Academy, Japan)  
Discontinuous-point-detecting method based on Fourier series and Cesaro summation

- 11:15 ~ 11:40 Jen-Tang Liu (Chung Yuan Christian University, Taiwan)  
Study on two-person zero-sum dynamic game
- 13:00 ~ 13:40 Do Sang Kim\*, Jiao Liguu (Pukyong National University, Korea)  
Mixed duality for nonsmooth multiobjective fractional programming without a constraint qualification
- 13:40 ~ 14:20 Gue Myung Lee (Pukyong National University, Korea)  
On strong and weak SOS-convex polynomials
- 14:20 ~ 15:00 Sehie Park (Seoul National University, Korea)  
Recollecting basic theorems of the KKM theory
- 15:15 ~ 15:40 Hirohito Inoue, Koichiro Naito\* (Kumamoto University, Japan)  
Simultaneous rational approximations of p-adic numbers by the LLL lattice basis reduction algorithm
- 15:40 ~ 16:05 Koji Aoyama (Chiba University, Japan)  
alpern iterations and hybrid steepest descent methods
- 16:05 ~ 16:45 Wataru Takahashi (Tokyo Institute of Technology, Keio University, Japan; National Sun Yat-sen University, Taiwan)  
Weak and Strong Convergence Theorems for Semigroups of Not Necessarily Continuous Mappings

Oct. 11 (FRI)

- 9:10 ~ 9:30 Yutaka Saito\*, Tamaki Tanaka, Syuuji Yamada (Niigata University, Japan)  
Association of Fan-Takahashi and Ricceri Theorems Using a certain Map
- 9:30 ~ 9:55 Rieko Kubota (Yokohama So-gakukan High School, Japan), Wataru Takahashi (Tokyo Institute of Technology, Keio University, Japan; National Sun Yat-sen University, Taiwan), Yukio Takeuchi\* (Takahashi Institute for Nonlinear Analysis, Japan)  
On some properties of projection methods for variational inequality problems
- 9:55 ~ 10:20 Syuuji Yamada\*, Tamaki Tanaka (Niigata University, Japan), Tetsuzo Tanino (Osaka University, Japan)  
Optimality conditions for a cone-dc vector optimization problem
- 10:30 ~ 10:55 Satoshi Suzuki\*, Daishi Kuroiwa (Shimane University, Japan), Gue Myung Lee (Pukyong National University, Korea)  
Surrogate duality for quasiconvex programming under data uncertainty via robust optimization
- 10:55 ~ 11:15 Ryohei Harada\*, Daishi Kuroiwa (Shimane University, Japan)  
Lagrange-type duality in DC programming and its application
- 11:15 ~ 11:35 Yusuke Saeki\*, Daishi Kuroiwa (Shimane University, Japan)  
On some conjugates of convex functions
- 13:15 ~ 13:40 Mitsuhiro Hoshino (Akita Prefectural University, Japan)  
On variable learning rate in self-organizing maps on general input space
- 13:40 ~ 14:05 Toshikazu Watanabe\*, Issei Kuwano, Syuuji Yamada, Tamaki Tanaka (Niigata University, Japan)  
On saddle point for convex programming in chain complete partially ordered vector spaces
- 14:05 ~ 14:30 Yousuke Araya (Ritsumeikan University, Japan)  
Minimal element theorems and Ekeland's variational principles in set optimization