

非線形解析学と凸解析学の研究  
2015 RIMS Workshop on Nonlinear Analysis and Convex Analysis

September 7–9, 2015

**PROGRAM**

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

Sep. 7 (MON)

- 9:05 ~ 9:25 Satoshi Kodama\*, Shin-ya Kameyama, Shigeo Akashi, Yuka Ozeki, Akio Minagawa (Tokyo University of Science, Japan)  
Inequality theoretic relations of the variance of a probability distribution and the gradient vectors characterized by its density function
- 9:25 ~ 9:50 Do Sang Kim (Pukyong National University, Korea)  
Approximate solutions for nonsmooth multiobjective optimization problems
- 9:50 ~ 10:15 Gue Myung Lee (Pukyong National University, Korea)  
On stability and genericity for semi-algebraic compact programs
- 10:30 ~ 10:55 Jong Kyu Kim (Kyungnam University, Korea)  
Fixed point theorems and convergence theorems for Lipschitzian type mapping in CAT(0) spaces
- 10:55 ~ 11:20 Jong Soo Jung (Dong-A University, Korea)  
An iterative algorithm for generalized mixed equilibrium problems, monotone mappings and pseudocontractive mappings
- 11:20 ~ 11:45 Koji Aoyama (Chiba University, Japan)  
Strongly quasinonexpansive mappings
- 13:05 ~ 13:30 Toshiharu Kawasaki (Nihon University, Japan), Masashi Toyoda\* (Tamagawa University, Japan)  
Fixed point theorem and fractional differential equations related with neuron models
- 13:30 ~ 13:55 Wei-Shih Du (National Kaohsiung Normal University, Taiwan)  
New existence results of best proximity points and fixed points for  $\mathcal{MT}(\lambda)$ -functions
- 13:55 ~ 14:20 Ruey-Lin Sheu (National Cheng Kung University, Taiwan)  
On general  $p$ -regularized subproblems for  $p > 2$
- 14:35 ~ 14:55 Hirohito Inoue, Shoichi Kamada\*, Koichiro Naito (Kumamoto University, Japan)  
Transference principle on simultaneous approximation problems of  $p$ -adic numbers and construction of lattice based cryptosystems
- 14:55 ~ 15:15 Yi-Chou Chen (National Army Academy, Taiwan)  
Infinitely many solutions of extended eigenvalue polynomial problems
- 15:15 ~ 15:35 Ing-Jer Lin\*, Ya-Ling Chang (National Kaohsiung Normal University, Taiwan)  
Some new generalizations of Karapinar's theorems
- 15:50 ~ 16:20 Hang-Chin Lai\*, Cheng Te Liu, Jin-Chirng Lee (National Tsing Hua University, Taiwan)  
An inverse problem of the isomorphism theorem for  $A^p(G)$ -algebras,  $1 \leq p < \infty$
- 16:20 ~ 16:50 Sehie Park (Seoul National University, Korea)  
On the KKM theory of locally  $p$ -convex spaces

Sep. 8 (TUE)

- 9:05 ~ 9:25 Shin-ya Matsushita\*, Li Xu (Akita Prefectural University, Japan)  
On convergence of the methods for the best approximation problem
- 9:25 ~ 9:50 Jae Hyoung Lee\*, Gue Myung Lee (Pukyong National University, Korea)  
On solving a dc optimization problem with SOS-convex polynomials and a support function
- 9:50 ~ 10:15 Chih-Sheng Chuang (National Sun Yat-Sen University, Taiwan), Zenn-Tsun Yu (Nan Kai University of Technology, Taiwan), Lai-Jiu Lin\* (National Changhua University of Education, Taiwan)  
Mathematical programming for the sum of two convex functions with applications to lasso problem, split feasibility problems and image deblurring problem
- 10:30 ~ 10:55 Jein-Shan Chen (National Taiwan Normal University, Taiwan)  
How to construct complementarity functions and merit functions for circular cone complementarity problem
- 10:55 ~ 11:20 Yu-Lin Chang\*, Jein-Shan Chen (National Taiwan Normal University, Taiwan)  
Construction of convex functions on Euclidean space
- 11:20 ~ 11:45 Sachiko Atsushiba (University of Yamanashi, Japan)  
Attractive points, acute points, fixed points and convergence theorems for nonlinear mappings
- 13:15 ~ 13:40 Yasunori Kimura (Toho University, Japan)  
Calculation errors of the iterative sequence in a geodesic space
- 13:40 ~ 14:05 Shuechin Huang\* (National Dong Hwa University, Taiwan), Yasunori Kimura (Toho University, Japan)  
A projection method for quasinonexpansive mappings in complete metric spaces
- 14:05 ~ 14:30 Shyh-Nan Lee (Chung Yuan Christian University, Taiwan)  
Matrix computation of octahedral projection
- 14:45 ~ 15:10 Yukio Takeuchi (Takahashi Institute for Nonlinear Analysis, Japan)  
Acute points, attractive points, and fixed points
- 15:10 ~ 15:35 Jiawei Chen (Southwest University, China), Yeong-Cheng Liou\* (Cheng Shiu University, Taiwan), Jen-Chih Yao (Kaohsiung Medical University, Taiwan)  
Bilevel vector pseudomonotone equilibrium problems: duality and existence
- 15:50 ~ 16:20 Mau-Hsiang Shih (China Medical University, Taiwan)  
The tendency toward a moving equilibrium
- 16:20 ~ 16:50 Wataru Takahashi (Tokyo Institute of Technology, Keio University, Japan)  
Iterative methods for split common fixed point problems in Banach spaces and applications

Sep. 9 (WED)

- 9:00 ~ 9:20 Mayumi Hojo\* (Shibaura Institute of Technology, Japan), Wataru Takahashi (Tokyo Institute of Technology, Keio University, Japan)  
The strong convergence theorem for the split common fixed point problem in Banach spaces
- 9:20 ~ 9:40 Nirattaya Khamsemanan\*, Cholwich Nattee (Thammasat University, Thailand), Masayuki Numao (Osaka University, Japan)  
A first-order logic and metric space
- 9:40 ~ 10:00 M. Ali Khan (Johns Hopkins University, USA), Nobusumi Sagara (Hosei University, Japan)  
Strongly measurable selectors of multifunctions in measure-compact Banach spaces
- 10:15 ~ 10:40 Suthep Suantai (Chiang Mai University, Thailand)  
Fixed point theorems for G-nonexpansive mappings in Banach spaces with graphs
- 10:40 ~ 11:05 Somyot Plubtieng\*, Tadchai Yuying (Naresuan University, Thailand)  
Strong convergence theorems by hybrid and shrinking projection methods for sums of two monotone operators
- 11:05 ~ 11:30 Poom Kumam (King Mongkut's University of Technology Thonburi, Thailand)  
Fuzzy games for a general Bayesian abstract fuzzy economy model
- 13:00 ~ 13:20 Araya Yousuke (Chiba Institute of Technology, Japan)  
On set equilibrium problems as a unified approach

- 13:20 ~ 13:40 Mitsuhiro Hoshino (Akita Prefectural University, Japan)  
On conservation of states and learning processes in basic self-organizing maps with one-dimensionally indexed array
- 13:40 ~ 14:00 Hiromichi Miyake (Tokyo City University, Japan)  
Almost everywhere convergence of ergodic averages of certain order-preserving operators on  $L^1$
- 14:15 ~ 14:35 Ryohei Harada\* , Daishi Kuroiwa (Shimane University, Japan)  
Another Lagrange-type duality theorem for DC programming problem
- 14:35 ~ 14:55 Kazuki Seto\* , Daishi Kuroiwa (Shimane University, Japan)  
Observation of the Picard iteration whose mapping has multiple fixed points
- 14:55 ~ 15:15 Satoshi Suzuki\* , Daishi Kuroiwa (Shimane University, Japan)  
Necessary and sufficient optimality conditions for quasiconvex programming
- 15:30 ~ 15:50 Toshiharu Kawasaki (Nihon University, Tamagawa University, Japan)  
Fixed point theorems for contractively widely more generalized hybrid mappings in metric spaces
- 15:50 ~ 16:10 Toshikazu Watanabe\* (Nihon University, Japan), Masashi Toyoda (Tamagawa University, Japan)  
Applied results of a fixed point theorem in partially ordered sets to fractional order boundary value problems