

**The International Conference on Nonlinear Analysis and Optimization
(ICNAO2013)
National Sun Yat-sen University, Kaohsiung, Taiwan
December 20-22, 2013**

**Dedicated to the Celebration of the Occasion of Professor Wataru Takahashi's 70th
Birthday!**

Program

The Program is composed of three parallel sessions as follows:

Session A: Nonlinear Analysis and Fixed Point Theory (Conference Center Room 1005)

Session B: Optimization, Equilibrium Problems, and Set-Valued Analysis (Theater Room 1001)

Session C: Applications to Differential Equations, Finance, Machine Learning,
Stochastics, etc. (Mathematics Department Room 4011)

Day 1 (Friday, December 20, 2013)

8:30-9:35: Registration

9:35-9:50: Opening Ceremony

9:50-10:40: Chair: Hong-Kun Xu

Plenary speaker-Professor Ravi P. Agarwal (All Sessions)

10:40-11:00: *Coffee/Tea Break*

11:00-17:20: **Parallel Sessions**

Session A

Chair: Wataru Takahashi

11:00-11:30: Giuseppe Marino, On Some Auxiliary Mappings

11:30-12:00: Tae-Hwa Kim, Asymptotically Strict Quasi-pseudo-contractive Families and Their Convergence Theorems

12:00-12:30: Sachiko Atsushiba, Strong Convergence of Halpern's Type Iterations for Nonlinear Mappings

12:30-14:00: *Lunch Break*

Chair: Giuseppe Marino

14:00-14:30: Suthep Suantai, Coupled Coincidence Point Theorems and Fixed Point Theorems of Some Nonlinear Mappings on a Metric Space with a Graph

14:30-15:00: Giuseppe Marino and Luigi Muglia*, Auxiliary Mappings and Solution of Variational Inequality Problems

15:00-15:30: Dae San Kim* and Taekyun Kim, A Note on Changhee Numbers and Polynomials

15:30-15:50: *Coffee/Tea Break*

Chair: Sompong Dhompongsa

15:50-16:20: Fumiaki Kohsaka, Strong Convergence Theorem for a Strongly Relatively Nonexpansive Sequence of Mappings

16:20-16:50: Kyung Soo Kim, On the Equivalence between the Convergence of Iterative Sequences for Nonlinear Mappings in Banach Spaces

16:50-17:20: Jamnian Nantadilok, Tripled Fixed Point Theorems for Generalized Contractive Mappings in Partially Ordered G-Metric Spaces

Session B

Chair: Do Sang Kim

11:00-11:30: Qamrul Hasan Ansari, Triple Hierarchical Variational Inequalities

11:30-12:00: Seiichi Iwamoto, Yutaka Kimura* and Toshiharu Fujita, Complementarity Versus Shift Dualities

12:00-12:30: Shin-Ya Matsushita* and Li Xu, On Projections Methods in Hilbert Spaces

12:30-14:00: *Lunch Break*

Chair: Gue Myung Lee

14:00-14:30: Do Sang Kim, Characterizations of Solution Sets of Nonconvex Semi-infinite Programs

14:30-15:00: Yukio Takeuchi, Demi-closedness and Some Projection Methods

15:00-15:30: Xi Yin Zheng* and Kun-Fu Ng, Piecewise Linear Vector Optimization Problems in Banach Spaces

15:30-15:50: *Coffee/Tea Break*

Chair: Qamrul Hasan Ansari

15:50-16:20: Daishi Kuroiwa and Gue Myung Lee*, On Robust Convex Multiobjective Optimization

16:20-16:50: Yutaka Saito, Tamaki Tanaka*, Syuuji Yamada, Unification Result of Fan-Takahashi and Ricceri Theorems

16:50-17:20: Kenjiro Yanagi, Non-Hermitian Extension of Uncertainty Relation

Session C

Chair: Jen-Chih Yao

11:00-11:30: H.M. Srivastava, Some Families of λ -Generalized Hurwitz-Lerch Zeta Functions

11:30-12:00: Mikio Kato* and Takayuki Tamura, Direct sums of Banach Spaces with FPP Which are not Uniformly Non-square

12:00-12:30: Moo Young Sohn, Bounds on Locating total Domination Number of the Cartesian Product Graphs

12:30-14:00: *Lunch Break*

Chair: George Yuan

14:00-14:30: Young-Ho Kim, On Approximate Solutions for the Stochastic Differential Equations

14:30-15:00: Hiroshi Miyashita, Nonlinear Optimization Methods for Circuit Placement

15:00-15:30: Haruko Nishi, On the Signature of Area Form on the Polygon Space

15:30-15:50: *Coffee/Tea Break*

Chair: Tony Lau

15:50-16:20: George Xianzhi Yuan, G-Risk: A New Methodology for Measuring Risk

16:20-16:50: Kohtaro Watanabe, Lyapunov Type Inequalities for 2M-th Order Equations under Various Boundary Conditions

16:50-17:20: Vittorio Colao, Equilibrium problems in Hadamard manifolds

All Sessions

17:30-18:20: Chair: Jen-Chih Yao

Plenary speaker-Professor Mau-Hsiang Shih (All Sessions)

18:30-20:30: *Dinner (reception buffet)*

20:30: *Bus leaving for Hotel Kingship*

Day 2 (Saturday, December 21, 2013)

8:30-9:00: Registration

9:00-9:50: Chair: Hong-Kun Xu

Plenary speaker-Professor Wataru Takahashi (All sessions)

9:50-10:30: *Conference Group Photo and Coffee/Tea Break*

10:30-17:20: **Parallel Sessions**

Session A

Chair: Wataru Takahashi

10:30-11:00: Sompong Dhompongsa, Note on Attractive Point Sets

11:00-11:30: Kichi-Suke Saito, James Constant of Two Dimensional Lorentz Sequence Spaces

Chair: Koji Aoyama

11:30-12:00: Somboon Niyom* and Narin Petrot, Some Fixed Point Theorems for a Class of Fuzzy Mappings

12:00-12:30: Huimin Shi and Yuanheng Wang*, A Modified Mixed Ishikawa Iteration for Two Asymptotically Quasipseudo-contractive Type Nonself-maps

12:30-14:00: *Lunch Break*

Chair: Somyot Plubtieng

14:00-14:30: Jong Kyu Kim, Split Equality Fixed Point Problem for Totally Asymptotically Nonexpansive Mappings in Hilbert Spaces

14:30-15:00: Toshiharu Kawasaki, Existence and Mean Approximation of Fixed Points of Generalized Hybrid Non-self Mappings in Hilbert Spaces and Some Examples

15:00-15:30: Narin Petrot* and Warut Saksirikun, Fixed Point Theorems on a Space of Fuzzy Sets Induced by a class of \mathcal{R} -Functions

15:30-15:50: *Coffee/Tea Break*

Chair: Tomonari Suzuki

15:50-16:20: Koji Aoyama, Viscosity Approximation Methods with a Sequence of Contractions

16:20-16:50: Wei-Shih Du, New Approaches to the Existence of Fixed Points for Caristi Type Mappings without Lower Semicontinuity Assumptions

16:50-17:20: Kasamsuk Ungchittrakool*, Somyot Plubtieng, and Duangkamon Kumtaeng, An Iterative Shrinkage Metric f -Projection Method for Finding a Common Fixed Point of two Quasi Strict f -Pseudo-contractions and Applications in Hilbert Spaces

Session B

Chair: Mau-Hsiang Shih

10:30-11:00: Hang-Chin Lai, Multipliers and Invariant Operators in Banach Space Functions on LCA Group

11:00-11:30: Jong Soo Jung, Iterative Methods for Generalized Mixed Equilibrium Problems, Fixed Point Problems and Minimization Problems

Chair: Suthep Suantai

11:30-12:00: Rabian Wangkeeree*, Rattanaporn Wangkeeree, Pakkapon Preechasilp, Holder Continuity of the Solution Maps to Parametric Generalized Vector Quasiequilibrium Problems

12:00-12:30: Chih-Sheng Chuang, Algorithms for The Mathematical Program with Generalized Equation Constraint in A Hilbert Space with Applications

12:30-14:00: *Lunch Break*

Chair: Hang-Chin Lai

14:00-14:30: Bingsheng He, Customized PPA for Convex Optimization-Motivation and Applications

14:30-15:00: Yen-Cherng Lin, Well-posedness for Generalized Set Equilibrium Problems

15:00-15:30: Uamporn Witthayarat and Poom Kumam*, Approximating Common Solution of Variational Inequalities and Fixed Point Problems for Nonlinear Operators with Applications

15:30-15:50: *Coffee/Tea Break*

Chair: Ching-Feng Wen

15:50-16:20: A. Farajzadeh and S. Plubteing*, $\alpha - \eta$ -Pseudomonotonicity and Equilibrium Problem in Topological Vector Spaces

16:20-16:50: Yi Chou Chen, Infinitely Many Quasi-coincidence Polynomial Solutions for Vector-valued Polynomial Problems

16:50-17:20: Shun-Chin Ho* and Hang-Chin Lai, Nonsmooth Multiobjective Fractional Programming with Generalized Exponential Invexity

Session C

Chair: Vittorio Colao

10:30-11:00: Naoki Shioji, Uniqueness of Positive Radial Solutions of
$$\Delta u + g(r)u + h(u)u^p = 0$$

11:00-11:30: Slawomir Rybicki, Symmetry Breaking of Solutions of Elliptic Differential Equations

Chair: Kohtaro Watanabe

11:30-12:00: Hiroko Manaka, On the Boundary Conditions for Fixed Point Theorems of a Nonlinear Mapping in a Banach Space

12:00-12:30: Young Whan Lee, Yang-Hi Lee, and Gwang Hui Kim*, Superstability of the Functional Equation with a Cocycle Function Related to Distance Measures

12:30-14:00: *Lunch Break*

Chair: Naoki Shioji

14:00-14:30: Shigeo Akashi, A Version of the Periodicity Conjecture for Generalized Collatz Mappings

14:30-15:00: Masashi Toyoda, Generalization of Knezevic-Miljanovic's Theorem to a Class of Fractional Differential Equations

15:00-15:30: Makoto Tsukada, Convergence of σ -Fields, Convex Sets and Operator Algebras

15:30-15:50: *Coffee/Tea Break*

Chair: Dae San Kim

15:50-16:20: Kiyoko Furuya, Path Integrals for Dirac Equations Represented by an L^2 -valued Measure

16:20-16:50: Mitsuhiro Hoshino, On Variable Learning Rate and Nonexpansivity in Self-organizing Maps

16:50-17:20: Tacksun Jung* and Q-Heung Choi, Critical Point Results for Some Singular Potential Hamiltonian System

All Sessions

17:30-21:00: *Dinner (Banquet)*

17:30: *Bus leaving for Banana Pie for Banquet*

Day 3 (Sunday, December 22, 2013)

8:30-9:00: Registration

9:00-9:50: Chair: Ngai-Ching Wong

Plenary speaker-Professor Anthony To-Ming Lau (All sessions)

9:50-10:10: *Coffee/Tea Break*

10:10-15:30: **Parallel Sessions**

Session A

Chair: Jong Kyu Kim

10:30-11:00: Tomonari Suzuki. (TBA)

11:00-11:30: Mayumi Hojo* and Wataru Takahashi, The Split Common Null Point Problem and Strong Convergence Theorems in Hilbert Spaces

Chair: Jong Soo Jung

11:30-12:00: Takanori Ibaraki, Strong Convergence Theorems for Zero Point Problems in a Banach Space and Its Applications

12:00-12:30: Tomoyoshi Ohwada, On a Monotone Function and the Triangle Inequality in Normed Linear Spaces

12:30-14:00: *Lunch Break*

Chair: Narin Petrot

14:00-14:30: M. Mursaleen, Compact Matrix Operators between Some Sequence Spaces

14:30-15:00: Hong-Kun Xu and Huu Quang Nguyen*, The Supporting Hyperplane and an Alternative to Solutions of Variational Inequalities

15:00-15:30: Izhar Uddin* and Mohammad Imdad, On Certain Convergence of Hybrid Pair of Mappings in CAT(0) Spaces

15:30-15:50: *Coffee/Tea Break*

Session B

Chair: Poom Kumam

10:30-11:00: Jein-Shan Chen, From Symmetric Cone Optimization to Non-symmetric Cone Optimization

11:00-11:30: Ching-Feng Wen, Approximate Solutions for Continuous-Time Quadratic Fractional Programming Problems

Chair: Jein-Shan Chen

11:30-12:00: Zenn-Tsun Yu, General System of Split Monotonic Variational Inclusion Problem with Applications

12:00-12:30: Lai-Jiu Lin, Hierarchical Problems and Mathematical Programming with Split Monotone Variational Inclusion Constraints

12:30-14:00: *Lunch Break*

Chair: Bingsheng He

14:00-14:30: Hongjin He, A Fast Splitting Method Tailored for Dantzig Selector

14:30-15:00: Nguyen Huy Chieu, Convexity of Sets and Functions via Second-order Subdifferentials

15:00-15:30: Xiaopeng Zhao, Quasi-Slater and Farkas-Minkowski Qualifications for Semi-infinite Programming with Applications

15:30-15:50: *Coffee/Tea Break*

Session C

Chair: Hong-Kun Xu

10:30-11:00: Meng Su* and Xiaocong Fan, Distances in Experience Space of Naturalistic Decision Making

11:00-11:30: Jun Kawabe, The Choquet Integral Representation Problem for Nonlinear Functionals

Chair: Slawomir Rybicki

11:30-12:00: M. Ali Khan and Nobusumi Sagara*, Weak Sequential Convergence in $L^1(\mu, X)$ and an Exact Version of Fatou's Lemmas

12:00-12:30: Yasunori Kimura, Iterative Methods for a Family of Mappings on a Complete Geodesic Space

12:30-14:00: *Lunch Break*

Chair: Meng Su

14:00-14:30: Kenzi Sato, An application to the image recovery problem of Halpern iteration on a CAT(1) space

14:30-15:00: Takashi Honda, The Orthogonal Decomposition in Banach Spaces and Its Applications

15:00-15:30: Satoshi Kodama, The Oscillation Problem Accompanying the Discontinuous-point-detecting Method

All sessions

15:30-15:50: *Coffee/Tea Break*

15:50: Closing