

# 2009 非線性分析與最優化研討會

2009 Workshop on Nonlinear Analysis and Optimization

Department of Mathematics  
National Taiwan Normal University  
November 25-27, 2009

## ● Foreign Speakers

1. Prof. Shigeo Akashi, Department of Information Sciences, Tokyo University of Science, Japan.
2. Prof. Sompong Dhompongsa, Department of Mathematics, Chiang Mai University, Thailand.
3. Dr. Takashi Honda, 中山大學應用數學系.
4. Prof. Takanori Ibaraki, Information and Communication Planning Office, Nagoya University, Japan.
5. Prof. Do Sang Kim, Department of Applied Mathematics, Pukyong National University, Korea.
6. Prof. Jong Kyu Kim, Department of Mathematics, Kyungnam University, Korea.
7. Prof. Yasunori Kimura, Department of Mathematical and Computing Sciences, Tokyo Institute of Technology.
8. Prof. Liqun Qi, Department of Applied Mathematics, The Hong Kong Polytechnic University.
9. Prof. Wataru Takahashi, 中山大學應用數學系客座講座教授.
10. Dr. Sangwoon Yun, Korea Institute for Advanced Study.

## ● Local Speakers

1. 古思明教授 (Sy-Ming Guu), 元智大學企業管理學系。
2. 林來居教授 (Lai-Jiu Lin), 彰化師範大學數學系。
3. 徐洪坤教授 (Hong-Kun Xu), 中山大學應用數學系。
4. 孫菊賀博士 (Juhe Sun), 台灣師範大學數學系。
5. 黃毅青教授 (Ngai-Ching Wong), 中山大學應用數學系。
6. 張毓麟教授 (Yu-Lin Chang), 台灣師範大學數學系。
7. 蔡豐聲博士 (Feng-Sheng Tsai), 台灣師範大學數學系。
8. 龐金宗教授 (Chin-Tzong Pang), 元智大學資訊管理學系。

## ● Sponsors

College of Science, National Taiwan Normal University.  
Mathematics Division, National Center for Theoretical Sciences, (Taipei Office).

## ● Organizers

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陳界山 (Jain-Shan Chen), E-Mail: [jschen@math.ntnu.edu.tw](mailto:jschen@math.ntnu.edu.tw)

## ● Place

台北市文山區汀州路四段八十八號台灣師大數學系 M210

## **November 25, Wednesday**

09:30-10:15 Prof. Wataru Takahashi

*Equilibrium Problems and Nonlinear Operators in Optimization*

10:25-11:10 Prof. Sompong Dhompongsa

*Fixed points of multivalued mappings in Banach and metric spaces*

11:20-12:05 Prof. Lai-Jiu Lin (林來居)

*Generalized Variational Relation Problems with Applications*

### ***Lunch Break***

13:30-14:15 Prof. Hong-Kun Xu (徐洪坤)

*Splitting Methods for Monotone Operators and Their Applications in Signal Recovery*

14:25-15:10 Prof. Takanori Ibaraki

*Fixed point theorems for nonlinear mappings of nonexpansive type in Banach spaces*

15:20-16:05 Prof. Chin-Tzong Pang (龐金宗)

*Stability Analysis of Interval Systems*

16:15-17:00 Prof. Shigeo Akashi

*Hilbert's 13th problem and nonlinear approximation problems*

## **November 26, Thursday**

09:30-10:15 Prof. Liqun Qi

*Higher Order Positive Semi-Definite Diffusion Tensor Imaging and Space Tensor Conic Programming*

10:25-11:10 Prof. Sy-Ming Guu (古思明)

*On a recurrence algorithm for the continuous-time linear fractional programming problems*

11:20-12:05 Dr. Sangwoon Yun

An accelerated proximal gradient algorithm for nuclear norm regularized least squares problems

***Lunch Break***

13:30-14:15 Prof. Jong Kyu Kim

*Strong convergence of hybrid projection methods for fixed point and equilibrium problems*

14:25-15:10 Prof. Ngai-Ching Wong (黃毅青)

*An unified hybrid iterative method for zeros or fixed points of nonlinear operators*

15:20-16:05 Prof. Yasunori Kimura

*Shrinking projection methods for families of nonlinear mappings*

16:15-17:00 Prof. Do Sang Kim

*Duality and Sufficiency in Nonsmooth Multiobjective Programming*

**November 27, Friday**

09:10-09:50 Prof. Yu-Lin Chang (張毓麟)

*Strong semismoothness of Fischer-Burmeister complementarity function associated with symmetric cone*

09:55-10:35 Dr. Takashi Honda

*Nonlinear retractions in Banach spaces*

10:40-11:20 Dr. Juhe Sun (孫菊賀)

*Numerical Methods for solving cone constrained variational inequality problems*

11:25-12:05 Dr. Feng-Sheng Tsai (蔡豐聲)

*Collective Dynamics Decoding with Neural Circuit Labeling*