

# 2001 ICOTA

## Saturday, December 15

---



---

### Plenary Lectures

Venue: SHB Auditorium (Rm 508)

#### Plenary Lecture I 9:40-10:20

*Optimization Approaches to Pricing Theory*

Luenberger, David G. Stanford University

Chair: Teo, K. L.

#### Plenary Lecture II 10:40-11:20

*Optimization with Extended Nonlinear Programming*

Rockafellar, Terry Univ. of Washington

Chair: Qi, L. Q.

#### Plenary Lecture III 11:20-12:00

*Some Recent Advances in Mathematical Programs with Equilibrium Constraints*

Fukushima, Masao Kyoto University

Chair: Qi, L. Q.

---



---

### SATM1 1:30-3:30

(Venue: LSB LT1)

#### Mini-Symposium on Reformulation Methods: I

Organizer: Fukushima, Masao

Organizer: Qi, L.Q.

Organizer: Yang Yufei

Chair: Chen, Xiaojun

Chair: Fukushima, Masao

#### SATM1-1 1:30

*Copositive Matrices in Mathematical Programming*

Pang, Jong-Shi

#### SATM1-2 2:10

*Algorithms for Linear Programming in Measure Spaces*

Wu, Soon-Yi

#### SATM1-3 2:30

*On the Moreau-Yosida Regularization of the Lagrangian Dual Functions*

Zhao, Gong-yun

#### SATM1-4 2:50

*A Modified Aggregate Homotopy Method for Convex Minimax Problems*

Yu, Bo\*

Qi, Liqun

Liu, Guoxin

#### SATM1-5 3:10

*Global Convergence of a Modified SQP Method for Non-linear Programs*

Wan, Zhong\*

Li, Dong-hui

Zhou, Shu-zi

---



---

### SATM2 1:30-3:10

(Venue: LSB LT2)

### Invited Session on MPECS and Error Bounds

Organizer and Chair: Ye, Jane

#### SATM2-1 1:30

*Error Bound of Abstract Linear Inequality System*

Ng, Kung Fu

Yang, Wei Hong \*

#### SATM2-2 1:50

*Error Bounds for Convex Inclusions*

Ng, Kung Fu

Zheng, Xi Yin\*

#### SATM2-3 2:10

*Sensitivity Analysis for Mathematical Program with Equilibrium Constraints*

Ye, Jane Juan-Juan

#### SATM2-4 2:30

*On Error Bounds for Lower Semicontinuous Functions on Banach Spaces*

Wu, Zili\*

Ye, Jane Juan-Juan

#### SATM2-5 2:50

*Sensitivity Analysis Based Method for Optimal Road Network Pricing*

Ying, Jiang Qian

Miyagi, Toshihiko

Liu, Bing Yi

---



---

### SATM3 1:30-2:45

(Venue: LSB LT3)

#### Best Student Paper Presentation

Chair: Zhang, Jianzhong

#### SATM3-1 1:30

*Discrete Gradient Method in Nonsmooth Optimization*

BAGIROV, A. M.

#### SATM3-2 1:55

*A New Relaxation Method for Mathematical Programs with Complementarity Constraints*

Lin, Gui-Hua\*

Fukushima, Masao

#### SATM3-3 2:20

*Approximation Algorithms for Common Due Date Assignment and Job Scheduling on Parallel Machines*

Xiao, Wen-Qiang \*

Li, Chung-Lun

---



---

### SATM4 1:30-3:30

(Venue: LSB LT4)

#### Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: I

Organizer: Schaible, Siegfried

Organizer: Yang, Xinmin

Organizer: Rubinov, Alex M.

Chair: Rubinov, Alex M.

#### SATM4-1 1:30

*Fuzzy Clustering Using Global Optimisation*

Beliakov, Gleb

SATM4-2 1:50  
*Efficient Serial and Parallel Implementations of the Cutting Angle Global Optimization Technique*  
Beliakov, Gleb\*  
Ting, Kai Ming  
Murshed, Manzur

SATM4-3 2:10  
*Numerical Analysis of Nonlinear Penalty Functions Method*  
Bagirov, A. M.\*  
Rubinov, Alex M.

SATM4-4 2:30  
*Necessary and Sufficient Conditions for a Class of Nonlinear Exact Penalty Functions of Constrained Multiobjective Programs*  
Huang, X. X.\*  
Yang, X. Q.

SATM4-5 2:50  
*Solving Molecular Distance Geometry Problems by a Continuation Approach via the Gaussian Transform*  
Le Thi, Hoai An

SATM4-6 3:10  
*D. C. (Difference of Convex Functions) Programming for Solving an Inverse Problem for an Elliptic Equation*  
Le Thi, Hoai An  
Pham Dinh, Tao\*  
Dinh Nho, Hao

---

---

**SATM5 1:30-3:30**  
(Venue: LSB LT5)  
**Contributed Session on Scheduling: I**  
Chair: Brucker, Peter

SATM5-1 1:30  
*Single-Machine Stochastic Scheduling with Due Date Windows and Earliness-Tardiness Cost*  
Cai, Xiaoqiang  
Sun, Xiaoqian  
Zhou, Xian

SATM5-2 1:50  
*A New Genetic Scheduling Algorithm*  
Meng, L.  
Wu, Q. H.  
Yong, Z. Z.

SATM5-3 2:10  
*A Flexible On-line Scheduling Algorithm for Batch Machine with Infinite Capacity*  
Poon, Chung Keung  
Yu, Wenci

SATM5-4 2:30  
*Complexity Results for Flow-Shop Problems with a Single Server*  
Brucker, Peter  
Knust, Sigrid  
Wang, Guoqing

SATM5-5 2:50

*Group Scheduling with Controllable Setup and Processing Times: Minimizing Total Weighted Completion Time*  
Ng, C. T. Daniel  
Cheng, T.C.E.  
Janiak, Adam  
Kovalyov, Mikhail Y.

SATM5-6 3:10  
*Minimizing Completion Time Variance with Compressible Processing Times*  
Ng, C. T. Daniel  
Cai, X.  
Cheng, T.C.E.

---

---

**SATM6 1:30-3:30**  
(Venue: LSB LT6)  
**Contributed Session on Optimization Applications: I**  
Chair: Yang, J. B.

SATM6-1 1:30  
*A Fuzzy-Logic-Based Composite Structure Methodology for Design-Decision Support*  
Sii, H. S.  
Wang, J.  
Yang, J. B.

SATM6-2 1:50  
*A Fuzzy Threat-Judgment Model for Air Targets*  
Wang, Jianming  
Chen, Shouyu  
Wang, Dehu  
Huang, Xiancheng

SATM6-3 2:10  
*Optimal Solution of a General Investment and Consumption Problem*  
Zhang, Weiguo\*  
Nie, Zankan

SATM6-4 2:30  
*Optimization for Monetary and Fiscal Policies in a Monetary Economy*  
Hu, Zhineng\*  
Xu, Jiuping

SATM6-5 2:50  
*Optimum Design of Discrete Reinforced Concrete Sections Using Genetic Algorithms*  
Chau, Kwok Wing  
Albermani, F.

SATM6-6 3:10  
*The Application of Optimization Method in Agriculture*  
Zhao, Qingzhen  
Wang, Changyu

---

---

**SATP1 3:50-5:50**  
(Venue: LSB LT1)  
**Mini-Symposium on Reformulation Methods: II**  
Organizer: Fulushima, Masao  
Organizer: Qi, L.Q.  
Organizer: Yang Yufei  
Chair: Pang, J. S.  
Chair: Ralph, Danny

SATP1-1 3:50  
*Numerical Validation of Solutions of Linear and Non-linear Complementarity Problems*  
Alefeld, G.

SATP1-2 4:10  
*A Multisplitting Method for Solving Box Constrained Affine Variational Inequality Problems*  
Zeng, J. P.\*  
Cao, B. W.

SATP1-3 4:30  
*Modified Fixed-Point Equations to Variational Inequalities*  
Xiu, Naihua\*  
Wang, Yiju

SATP1-4 4:50  
*An Inexact Newton Method with New NCP Function for Variational Inequality Problems*  
Pu, Dingguo\*  
Qi, Liqun

SATP1-5 5:10  
*A Truly Globally Convergent Feasible Newton-type Method for Mixed Complementarity Problems*  
Han, Deren

SATP1-6 5:30  
*No Arbitrage Interpolation of Option Price Function and its Reformulation*  
Wang, Yaping  
Yin, Hongxia\*

---

---

**SATP2 3:50-5:50**  
(Venue: LSB LT2)  
**Invited Session on Continuous Methods for Optimization**  
Organizer and Chair: Liao, Lizhi

SATP2-1 3:50  
*A Gradient-based Continuous Method for Large-Scale Optimization Problems*  
Liao, Li-Zhi  
Qi, Liqun  
Tam, Hon Wah

SATP2-2 4:10  
*A Relaxed Approximate Proximal Point Algorithm*  
He, Bingsheng\*  
Yang, Zhenhua

SATP2-3 4:30  
*Topological Structure of Chaos in Discrete-time Neural Networks with generalized Input-Output Function*  
Jing, Zhujun  
Zhang, Xiangsun\*

SATP2-4 4:50  
*Compression of Smooth Sequence by Discrete-time Recurrent Neural Networks*  
Li, Leong Kwan

SATP2-5 5:10

*A Hybrid Neural-Genetic Algorithm for Frequency Assignment Optimization in Satellite Communications*  
Salcedo-Sanz, Sancho  
Bousono-Calzon, Carlos

SATP2-6 5:30  
*Path Tracking for a 6 DOF Tensegrity Structure Using a Neural Network*  
Kanchanasaratool, Narongsak  
Williamson, Darrell

---

---

**SATP3 3:50-5:50**  
(Venue: LSB LT3)  
**Invited Session on Applications of Optimization in Signal Processing**  
Organizer and Chair: Leung, Y.H.

SATP3-1 3:50  
*Efficient Design of Robust Pulse Shapes for Communications Using Average Performance Criteria*  
Davidson, Timothy N.

SATP3-2 4:10  
*An Application of Second-Order Cone Programming to Robust Adaptive Beamforming*  
Vorobyov, Sergiy A.  
Gershman, Alex B.  
Luo, Zhi-Quan

SATP3-3 4:30  
*Fisher Information Decision Directed Quantisation: A Fast Sub-Optimal Solution to Discrete Optimization Problems with Applications in Wireless Communications*  
Manton, Jonathan H.  
Vo, Ba-Ngu  
Ali, Hassan

SATP3-4 4:50  
*Optimum Digital Pre-Compensation in IQ Modulators Using State-Space Approach*  
Lim, A. G.  
Sreeram, V.

SATP3-5 5:10  
*A Unified Quadratic Semi-Infinite Programming Approach to Time and Frequency Domain Constrained Digital Filter Design*  
Tseng, C. H.  
Liu, Y.  
Teo, K. L.

SATP3-6 5:30  
*ILP-Based Approximations for Retargetable Code Optimization*  
Kastner, Daniel

---

---

**SATP4 3:50-5:30**  
(Venue: LSB LT4)  
**Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: II**  
Organizer: Schaible, Siegfried  
Organizer: Yang, Xinmin  
Organizer: Rubinov, Alex M.  
Chair: Rubinov, Alex M.

SATP4-1 3:50  
*A Comparison of Non-Linear Lagrange and Penalty Functions for Problems with a Single Constraint*  
Rubinov, Alex M.  
Giri, J. S.\*

SATP4-2 4:10  
*Exact Penalty Representations with Modified Nonlinear Penalty Functions*  
Yang, X. Q.\*  
Huang, X. X.

SATP4-3 4:30  
*Parametric Versions of Ekeland's Variational Principle and Selection Theorems*  
Georgiev, Pando Gr.

SATP4-4 4:50  
*The Equivalence of Nonlinear Convolution Functions*  
Rubinov, Alex M.\*  
Gasimov, Rafail N.

SATP4-5 5:10  
*On Saddle Points of Augmented Lagrangian for Non-convex Programming*  
Sun, X. L.\*  
Li, D.

---

---

**SATP5 3:50-5:50**

(Venue: LSB LT5)  
**Contributed Session on Scheduling: II**  
Chair: Zhou, Xian

SATP5-1 3:50  
*Preemptive Scheduling with Agreeable Due Dates to Minimize Total Tardiness*  
Tian, Z.J.  
Ng, C. T.  
Cheng, T.C.E.

SATP5-2 4:10  
*Preemptive Scheduling with Availability Constraints to Minimize Total Weighted Completion Times*  
Wang, Guoqing  
Sun, Hongyi  
Chu Chenbin

SATP5-3 4:30  
*Scheduling Two Groups of Jobs with Incomplete Information*  
Zhang, Guochuan  
Cai, Xiaoqiang\*  
Wong, C.K.

SATP5-4 4:50  
*Two-Machine Flowshop Batching and Scheduling*  
Lin, Bertrand M.T.  
Cheng, T.C.E.

SATP5-5 5:10  
*The Economic Lot Scheduling Problem without Capacity Constraints*  
Yao, Ming-Jong

SATP5-6 5:30

*Nonlinear Programming Model for an Integrated Production-Inventory System with Variable Production Rates*  
Lin, Gary C.

---

---

**SATP6 3:50-5:50**

(Venue: LSB LT6)  
**Contributed Session on Optimization Applications: II**  
Chair: Wu, Q. H.

SATP6-1 3:50  
*The Application of Sequential Linear-Quadratic Programming Method to the Optimum Design of Locomotive and Diesel Engine*  
Ding, Pei Jie  
Wu, Chang Hua

SATP6-2 4:10  
*New Training Methods in Hidden Markov Models for Analysis Biological Sequences*  
Gu, Yanhong\*  
Shi, Dinghua  
Wang, Yifei

SATP6-3 4:30  
*Error-Center-Based Optimization --- A New Algorithm for Support Vector Machine Training*  
Meng, L.  
Wu, Q. H.

SATP6-4 4:50  
*The Function  $g(c_0, x)$  and Its Applications*  
Bai, Guozhong

SATP6-5 5:10  
*Optimization of the Gear Shifting Map*  
Pfau, Ralf Uwe

SATP6-6 5:30  
*Dispatching Vehicles in A Mega Container Terminal*  
Bish, Ebru K.  
Chen, F. Y.  
Leong, Y. T.  
Liu, Q. Z.  
Nelson, B. L.  
Ng, J. W. C.  
Simchi-Levi, D.

---

---

**2001 ICOTA**  
**Sunday, December 16**

**Plenary Lectures**  
Venue: SHB Auditorium (Rm 508)

**Plenary Lecture IV 8:30-9:10**  
*From Local to Global and From Convexity to Non-convexity in Optimization*  
Pardalos, P. M University of Florida  
Chair: Li, D.

**Plenary Lecture V** **9:10-9:50**  
*The Flight from Earth to Mars and Back via Optimal Trajectories*  
Miele, Angelo  
Chair: Li, D.  
Rice University

---

---

**SUNA1** **10:10-12:10**  
(Venue: LSB LT1)  
**Mini-Symposium on Reformulation Methods: III**  
Organizer: Fulushima, Masao  
Organizer: Qi, L.Q.  
Organizer: Yang Yufei  
Chair: Alefeld, G.  
Chair: Sun, Wenyu

SUNA1-1 10:10  
*Smoothing Methods in Mathematical Programs with Complementarity Constraints (MPCCs)*  
Ralph, Daniel

SUNA1-2 10:30  
*A Smoothing Method for a Mathematical Program with P-Matrix Linear Complementarity Constraints*  
Chen, Xiaojun\*  
Fukushima, Masao

SUNA1-3 10:50  
*Stability Analysis of Proximal Projection Algorithms for Nonsmooth Optimization Problems*  
Alber, Yakov

SUNA1-4 11:10  
*One Scattered Data Spline Defined by Optimization Properties and Its Application*  
Guan, Lutai\*  
Lui, Xiaoming  
Lu, Feng

SUNA1-5 11:30  
*A Strongly Semismooth Integral Function and Its Applications*  
Qi, Liqun  
Yin, Hongxia\*

SUNA1-6 11:50  
*Superlinear Convergence of a Class of Infeasible Interior Point Methods for Semidefinite Programming*  
Liu, Taowen

---

---

**SUNA2** **10:10-12:10**  
(Venue: LSB LT2)  
**Mini-Symposium on Financial Optimization: I**  
Organizer and Chair: Wang, Shouyang

SUNA2-1 10:10  
*Characterizations of Weak No-Arbitrage in Frictional Markets*  
Deng, Xiaotie  
Li, Zhongfei\*  
Wang, Shouyang  
Yang, Hailiang

SUNA2-2 10:30

*Complexity of Scenario Based Portfolio Optimization Model with VaR Objective*  
Yang, Xiaoguang\*  
Tao, Shuo  
Liu, Rongjun

SUNA2-3 10:50  
*Martingale Measure Method for Optimal Consumption in Discrete-time Incomplete Markets*  
Li, Ping\*  
Huang, Guangdong  
Wang, Shouyang

SUNA2-4 11:10  
*Optimal Classification of Off-Site Commercial Banking Regulation Based on Self-Organizing Feature Map*  
Xiong, Xiong  
Zhang, Wei\*

SUNA2-5 11:30  
*A Multiobjective Genetic Algorithm for Solving Portfolio Selection Problem*  
Lin, Dan\*  
Wang, Shouyang  
Yan, Hong

SUNA2-6 11:50  
*Alternative Statistical Specifications of Commodity Price Distribution with Fat Tail*  
Deng, Shi-Jie\*  
Jiang, Wenjiang  
Xia, Zhendong

---

---

**SUNA3** **10:10-11:50**  
(Venue: LSB LT3)  
**Invited Session on Recent Advances in Global Optimization**  
Organizer and Chair: Kuno, Takahito

SUNA3-1 10:10  
*Global Optimization Method for Solving the Minimum Maximal Flow Problem*  
Gotoh, Junya  
Thoai, Nguyen Van  
Yamamoto, Yoshitsugu

SUNA3-2 10:30  
*Global Optimization of Mixed-Integer Nonlinear Programming Problems in Chemical Processes*  
Zhu, Yushan

SUNA3-3 10:50  
*Efficient Tabu Search-Based Procedure for Optimal Redundancy Allocation in Complex System Reliability*  
Caserta, Marco  
Ryoo, Hong Seo

SUNA3-4 11:10  
*Conical Partition Algorithm for Maximizing the Sum of Several dc Ratios*  
Yang, Dai  
Shi, Jianming

SUNA3-5 11:30  
*A Finite Algorithm for Separable Reverse Convex Programs*

Kuno, Takahito

---

---

**SUNA4** **10:10-12:10**

(Venue: LSB LT4)

**Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: III**

Organizer: Schaible, Siegfried

Organizer: Yang, Xinmin

Organizer: Rubinov, Alex M.

Chair: Schaible, Siegfried

SUNA4-1 10:10  
*Connectedness of the Solution Set for the Weak Vector Equilibrium Problem*

Cheng, Yonghong\*

Lin, Hongwei

Zhu, Daoli

SUNA4-2 10:30  
*On the Stability of Generalized Vector Quasi-Variational Inequality Problems*

Li, S. J.\*

Chen, G. Y.

Teo, K. L.

SUNA4-3 10:50  
*Generalizations of Pseudolinear Functions for Optimization and Variational Inequalities*

Schaible, Siegfried

SUNA4-4 11:10  
*Scalarization Methods for Vector Prevariational Inequality*

Mishra, Shashi K.

SUNA4-5 11:30  
*On the Stampacchia and Minty Variational-Like Inequalities*

Mishra, Shashi K.\*

Rueda, Norma G.

SUNA4-6 11:50  
*On the Existence and Approximation of Solutions for Set-Valued Variational Inclusions*

Zeng, Liu-Chuan\*

---

---

**SUNA5** **10:10-12:10**

(Venue: LSB LT5)

**Invited Session on Optimization Theory and Related Topics**

Organizer and Chair: Lai, Hangchin

Organizer and Chair: Tanaka, Tamaki

SUNA5-1 10:10  
*Parameter-Free Dual Models for Fractional Programming with Generalized Invexity*

Lai, Hang-Chin

SUNA5-2 10:30  
*Some Observations of Iterative Methods for Approximation of Fixed Points of Nonexpansive Nonself-Mappings*

Matsushita, Shin-Ya\*

Kuroiwa, Daishi

SUNA5-3 10:50

*Some Existence Theorems of Set Optimization with Weighted Criteria*

Kuroiwa, Daishi

SUNA5-4 11:10  
*Well-Defined Efficient Points in the Vector Optimization*

Georgiev, Pando Gr.\*

Todorov M.

Helbig S.

Tanaka T.

SUNA5-5 11:30  
*Existence Results for Cone Saddle Points by Using Vector Variational-Like Inequalities*

Kalmoun, El Mostafa

Kimura, Kenji

Tanaka, T.\*

SUNA5-6 11:50  
*Estimation of Failure Probability Using Semi-Definite Programming*

Konno, H.

Kawadai, N.

Wu, D.

---

---

**SUNA6** **10:10-12:10**

(Venue: LSB LT6)

**Contributed Session on Control**

Chair: Chu, D. L.

SUNA6-1 10:10  
*On the Influence of the Observability and Controllability to the Optimal Control Quality*

Dimitrov, Boyan

Green, Jr., David

Rykov, Vladimir

SUNA6-2 10:30  
*A Constraint Optimization Problem in Singular Control Theory: Where is the Nearest Non-Index-at-Most-One Matrix Pencil?*

Chu, Delin

SUNA6-3 10:50  
*Global Approximate Controllability and Finite Dimensional Exact Controllability of Parabolic Equation with Mobile Point Controls*

Sun, Bo

Zhao, Yi

SUNA6-4 11:10  
*Control Parametrization Enhancing Technique for Solving a Special Class of ODE with State Dependent Switch*

Lee, Heung Wing Joseph

Teo, K.L.

SUNA6-5 11:30  
*A Numerically Reliable Non-Iterative Method for the Computation of the Infimum in  $H_\infty$ -Optimization*

Chu, Delin

SUNA6-6 11:50  
*The Nonsmooth Optimizations on Reachable Sets of Non-linear Systems*

Zhu, Jinghao  
Ye, Lin\*

---

---

**Plenary Lectures**

Venue: SHB Auditorium (Rm 508)

**Plenary Lecture VI**

**1:30-2:10**

*General Problem Solvers for Combinatorial Optimization Problems by Metaheuristics*

Ibaraki, Toshihide

Kyoto University

Chair: Cai, X. Q.

---

---

**SUNM1**

**2:30-3:30**

(Venue: LSB LT1)

**Mini-Symposium on Reformulation Methods: IV**

Organizer: Fulushima, Masao

Organizer: Qi, L.Q.

Organizer: Yang Yufei

Chair: Rubinov, A.

Chair: Wu, Soon-Yi

SUNM1-1

2:30

*Strong Semismoothness of Matrix Functions and Matrix Optimization Problems*

Sun, Jie\*

Sun, Defeng

Qi, Liqun

SUNM1-2

2:50

*Quasiconjugate Method for Reverse Convex Programming*

Shi, Jianming

SUNM1-3

3:10

*An Active-Set Projected Trust Region Algorithm for Nonsmooth Equations with Bounded Constraints*

Qi, Liqun

Tong, Xiaojiao\*

Li, Donghui

---

---

**SUNM2**

**2:30-3:50**

(Venue: LSB LT2)

**Mini-Symposium on Financial Optimization: II**

Organizer: Wang, Shouyang

Chair: Deng, Xiaotie

SUNM2-1

2:30

*Impact on the Efficient Frontier of Portfolio of Varying Capital Structure*

Chen, Shou\*

Deng, Xiaotie

Liu, Weiguo

Wang, Shouyang

SUNM2-2

2:50

*No-Arbitrage and Optimal Consumption-Portfolio with Transaction Cost*

Lai, K. K.

Wang, Shou-Yang

Yu, Mei\*

SUNM2-3

3:10

*On Universal Portfolios*

Deng, Xiaotie

Hu, Qiyong\*

Wang, Shouyang

SUNM2-4

3:30

*Optimizing the Arbitrage Opportunity with Transaction Costs*

Zhang, Yuzhong\*

Xu, Shimeng

---

---

**SUNM3**

**2:30-3:50**

(Venue: LSB LT3)

**Invited Session on Linear and Nonlinear Programming**

Organizer and Chair: Yuan, Yaxiang

SUNM3-1

2:30

*An Extended Class of Nonlinear Conjugate Gradient Methods*

Dai, Y. H.\*

Yuan, Ya-xiang

SUNM3-2

2:50

*A New Trust Region Algorithm with Trust Region Radius Converging to Zero*

Fan, Jin-yan\*

Yuan, Ya-xiang

SUNM3-3

3:10

*Wide-Neighborhood-Following Algorithms for Linear Programming*

Ai, Wenbao

SUNM3-4

3:30

*On the Replacement Criteria for Unary Optimization*

Chen, Lihua\*

Zhang, Jianzhong

Deng, Naiyang

---

---

**SUNM4**

**2:30-3:50**

(Venue: LSB LT4)

**Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: IV**

Organizer: Schaible, Siegfried

Organizer: Yang, Xinmin

Organizer: Rubinov, Alex M.

Chair: Yang, X. Q.

SUNM4-1

2:30

*$\Phi$ -Convexity for Fuzzy Sets*

Syau, Yu-ru

SUNM4-2

2:50

*Convexification, Concavification for Some Classes of Global Optimization Problems*

Wu, Z. Y.\*

Zhang, L. S.

Bai, F.S.

SUNM4-3

3:10

*Generalized Invexity and Generalized Monotonicity*

Yang, X. M.\*

Yang, X. Q.

Teo, K. L.

SUNM4-4 3:30  
*Hadamard-Type Inequalities for Quasiconvex Functions in Higher Dimensions*  
Rubinov, Alex M.  
Dutta, J.

---

**SUNM5 2:30-3:50**  
(Venue: LSB LT5)  
**Invited Session on Least Squares and Quadratic Forms**  
Organizer and Chair: Tsuchiya, Takashi  
Organizer and Chair: Iri, Masao

SUNM5-1 2:30  
*Endoharmony in the Method of Least Squares*  
Iri, Masao

SUNM5-2 2:50  
*Local Convergence Properties of Structured Quasi-Newton Methods for Nonlinear Least Squares Problems*  
Yabe, Hiroshi  
Ogasawara, Hideho

SUNM5-3 3:10  
*On Cones of Nonnegative Quadratic Functions*  
Zhang, Shuzhong  
Sturm, Jos F.

SUNM5-4 3:30  
*A Variant of the Vavasis-Ye Layered Least Squares Step Interior Point Method for Linear Programming*  
Monteiro, Renato D. C.  
Tsuchiya, Takashi

---

**SUNM6 2:30-3:50**  
(Venue: LSB LT6)  
**Invited Session on Geometric Theory of Optimization**  
Organizer and Chair: Banks, S. P.

SUNM6-1 2:30  
*An Overview of Geometric Optimization Theory --- Lagrangian Manifolds, Maslov Index and Viscosity Solutions*  
BANKS, S. P.

SUNM6-2 2:50  
*Optimal Control of Nonlinear Systems by Orthogonal Expansion*  
Tomas Rodriguez, M.  
Banks, S. P.

SUNM6-3 3:10  
*Approximations to Characteristics of the HJB Equation and Viscosity Solutions*  
Cimen, T.  
Banks, S. P.

SUNM6-4 3:30  
*Lagrangian Manifolds and Nonlinear Optimal Regulators*  
McCaffrey, D.  
Banks, S. P.

---

---

**SUNP1 4:10-5:50**  
(Venue LSB LT1)  
**Mini-Symposium on Reformulation Methods: V**  
Organizer: Fulushima, Masao  
Organizer: Qi, L.Q.  
Organizer: Yang Yufei  
Chair: Billups, Stephen C.  
Chair: Sun, Jie

SUNP1-1 4:10  
*Penalization and Reformulation in Constrained Non-smooth and Nonconvex Optimization*  
Rubinov, Alex M.

SUNP1-2 4:30  
*Proximal Point Algorithm for Minimization of DC Function*  
Sampaio, Raimundo J.B. de  
Sun, Wenyu\*

SUNP1-3 4:50  
*Global Search Strategy for Solving Nonconvex Optimization Problems by Using a Reformulation Method*  
Denijs, Han  
Li, Wu\*

SUNP1-4 5:10  
*New Step-Size Rules for Optimization Problems*  
Wei, Zengxin\*  
Qi, L. Q.

SUNP1-5 5:30  
*Smoothing Trust Region Methods for Nonlinear Complementarity Problems with  $P_0$ -Functions*  
Yang, Yufei\*  
Qi, Liqun

---

**SUNP2 4:10-6:10**  
(Venue: LSB LT2)  
**Mini-Symposium on Financial Optimization: III**  
Organizer: Wang, Shouyang  
Chair: Lai, K. K.

SUNP2-1 4:10  
*Portfolio Selection Models with Transaction Costs: Crisp Case and Interval Number Case*  
Lai, K. K.  
Wang, Shouyang  
Zeng, Jianhua\*  
Zhu, Shushang

SUNP2-2 4:30  
*Comparison Between the Complexities of Chinese and Hong Kong Stock Markets*  
Song, Xuefeng\*  
Feng, Xia

SUNP2-3 4:50  
*A Method for Portfolio Choice with Transaction Costs*  
Yang, Fengmei\*  
Wang, Shouyang

SUNP2-4 5:10  
*Robust Optimal Portfolios*



Quineche Reyna, Fernando Rolfi\*  
Melo Mendes, Beatriz Vaz de  
Duarte Jr, Antonio Marcos  
Porto, Oscar

SUNP2-5 5:30  
*ARFIMA Modeling and Persistence of Shocks to the Exchange Rates: Do the Optimal Periodogram Ordinates Matter?*  
Soofi, Abdol S. \*  
Payesteh, Sayeed

SUNP2-6 5:50  
*Grey Model for the Investment Portfolio Optimization Under the Condition of No Short Sale*  
Lin, Chunyan\*  
Feng, Enmin

---

---

**SUNP3 4:10-6:10**

(Venue: LSB LT3)

**Contributed Session on Global Optimization**

Chair: Shimizu, Kiyotaka

SUNP3-1 4:10  
*A Sequential Constrained Minimization Method for Constrained Global Optimization*  
Ng, Chi-Kong\*  
Li, Duan

SUNP3-2 4:30  
*Dynamic Mathematical Programming --- A New Global Optimization Algorithm by Dynamic Control*  
Shimizu, Kiyotaka  
Suzaki, Kosuke

SUNP3-3 4:50  
*Stochastic Methods for Global Optimization and Numerical Experience*  
Yang, Qingzhi  
Zhao, Jingling  
Li, Xiaojun

SUNP3-4 5:10  
*Complexity of Random Search Algorithms for Global Optimization --- A Theoretic Framework*  
Shi, Dinghua

SUNP3-5 5:30  
*A Method In Searching Roots And Extremes*  
Sheng, Pingxing

SUNP3-6 5:50  
*A Parallel Software Package for Nonlinear Global Optimization*  
Hu, Chenyi\*  
Kearfott, Baker  
Xu, Shanying  
Yang, Xiaoguang

---

---

**SUNP4 4:10-6:10**

(Venue: LSB LT4)

**Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: V**

Organizer: Schaible, Siegfried  
Organizer: Yang, Xinmin

Organizer: Rubinov, Alex M.  
Chair: Chen, G. Y.

SUNP4-1 4:10  
*Scalarization and Nonmonotonic Equilibrium*  
Yu, Hui

SUNP4-2 4:30  
*Optimality Conditions of Nondominated-like Solutions for Set-Valued Optimization Problem*  
Hou, S. H.  
Chen, G. Y.\*

SUNP4-3 4:50  
*On Set-Valued Optimization Problems with Nondominated-like Solutions*  
Hou, S. H.  
Chen, G. Y.  
Wu, Y. N.\*

SUNP4-4 5:10  
*Convergence Results for Mathematical Program with Equilibrium Constraints*  
Wu, Y. N.

SUNP4-5 5:30  
*On Preinvex Set-Valued Optimization Problem*  
Peng, Jianwen\*  
Yang, Xinmin

SUNP4-6 5:50  
*Generalized Constraint Qualifications, Weakly Efficient Solutions, and Optimality Conditions for Set-Valued Vector Optimization*  
Huang, Yongwei

---

---

**SUNP5 4:10-6:10**

(Venue: LSB LT5)

**Contributed Session on Nonlinear Programming I**

Chair: Muramatsu, Masakazu

SUNP5-1 4:10  
*Duality Between Entropy Regularization and Exponential Penalty Methods*  
Pan, ShaoHua\*  
Li, Xingsi

SUNP5-2 4:30  
*Karush-Kuhn-Tucker Systems of Constrained Minimax Problem*  
Gao, Yan

SUNP5-3 4:50  
*A Unified Class of Directly Solvable Semidefinite Programming Problems*  
Muramatsu, Masakazu

SUNP5-4 5:10  
*A Sequential Linearization Algorithm for Solving Bilevel Programming Problems*  
Liu, G.S.\*  
Wang, Shouyang  
Zhang, J. Z.

SUNP5-5 5:30

*An extended Entropy Method for Min-Max Problems and Linear Semi-Infinite Programming*  
Yang, Qingzhi  
Yu, Hong

SUNP5-6 5:50  
*Smoothing Techniques for Min-Max Problems via Exponential Penalty Methods*  
Li, Xingsi\*  
Zhang, Peiai  
Pan, Shaohua

---

---

**SUNP6 4:10-5:50**  
(Venue: LSB LT6)  
**Contributed Session on Multiobjective Optimization**  
Chair: Nakayama, Hirotaka

SUNP6-1 4:10  
*Goal Programming Model for Patient Diet Problems*  
Jablonsky, Josef

SUNP6-2 4:30  
*Estimating Both Weights and Utilities in Multicriteria Decision Analysis Through Evidential Reasoning and Nonlinear Programming*  
Yang, J. B.  
Deng, M.  
Xu, D. L.

SUNP6-3 4:50  
*Multiobjective Genetic Algorithms Applied to Optimization Design of a Centrifugal Compressor Impeller*  
Li, Jun  
Liu, Lijun  
Tsukamoto, Hiroshi

SUNP6-4 5:10  
*Optimization with Unknown Objective Functions Using Computational Intelligence --- A Comparative Study with RSM*  
Nakayama, Hirotaka  
Arakawa, Masao  
Sasaki, Rie

SUNP6-5 5:30  
*Support Vector Machines Formulated as Multi Objective Linear Programming*  
Nakayama, Hirotaka  
Asada, Takeshi

---

---

## 2001 ICOTA Monday, December 17

---

---

### Plenary Lectures

Venue: SHB Auditorium (Rm 508)

**Plenary Lecture VII 8:30-9:10**  
*Semidefinite Programming for Discrete and Global Optimization: Approximation, Computation and Applications*

Ye, Yinyu University of Iowa  
Chair: Wu, Henry

**Plenary Lecture VIII 9:10-9:50**  
*L<sub>1</sub> Splines for Shape-preserving Multiscale Geometric Modeling*  
Fang, Shu-Cherng North Carolina State Univ.  
Chair: Wu, Henry

---

---

**MONA1 10:10-12:10**  
(Venue: LSB LT1)  
**Contributed Session on Dynamic Optimization and Dynamic Game**  
Chair: Piunovskiy, A. B.

MONA1-1 10:10  
*Controlled Jump Markov Processes with Interventions*  
Piunovskiy, A. B.

MONA1-2 10:30  
*An Algorithm for Multiparametric Dynamic Optimization*  
Sakizlis, Vassilis  
Perkins, John  
Pistikopoulos, Stratos

MONA1-3 10:50  
*Characteristic Functions for Dynamic Games*  
Petrosjan, Leon A.  
Yeung, David W.K.  
Zaccour, George

MONA1-4 11:10  
*Infinite Overlapping-generations Stochastic Differential Games with Uncertain Number and Types of Players*  
Yeung, David W. K.

MONA1-5 11:30  
*The Optimal Model of Technology Innovation Diffusion*  
Xu, Jiuping\*  
Hu, Minan

MONA1-6 (Cancelled) 11:50  
*Optimal Stopping Model of Project's Investment Timing Under Uncertainty*  
Huang, Wei

---

---

**MONA2 10:10-12:10**  
(Venue: LSB LT2)  
**Mini-Symposium on Financial Optimization: IV**  
Organizer: Wang, Shouyang  
Chair: Shi, Yong

MONA2-1 10:10  
*Portfolio Selection Based on the Internet*  
Dong, Jichang\*  
Du, Helen S.  
Wang, Shouyang

MONA2-2 10:30  
*Fuzzy Credible Degree Pricing Method for Contingent Claim in Finite Security Market with Linear Programming*  
Wu, Chongfeng  
Qin, Xuezhi\*

MONA2-3 10:50  
*Optimal Liquidation Strategy of the Open-end Fund*  
Liu, Hai-long\*  
Wu, Chongfeng  
Zhong, Li-ming

MONA2-4 (Cancelled) 11:10  
*The Multi-Period Portfolio Model with Skewness for a Property-Liability Insurance Company*  
Wang, Chunfeng\*  
Yang, Jianlin

MONA2-5 11:30  
*Classification for Three-Group of Credit Cardholders' Behavior via A Multiple Criteria Approach*  
Peng, Yi  
Shi, Yong\*  
Xu, Weixuan

MONA2-6 11:50  
*A Group Multi-Objective Decision Making Model for Portfolio Investment*  
Hu, Yu-Da  
Qin, Zhi-Lin\*

---

---

**MONA3 10:10-11:30**  
(Venue: LSB LT3)  
**Invited Session on Nonconvex Optimization: Local and Global**  
Organizer and Chair: Shi, Jianming

MONA3-1 10:10  
*On a Parameter-Involved Iterative Algorithm Solving Nonlinear Systems*  
Li, Chunguang

MONA3-2 10:30  
*Barrier Functions Applied to Non-Convex Optimization*  
Liu, Xian

MONA3-3 10:50  
*Optimization over the Efficient and Weakly Efficient Sets By D.C. Programming*  
Le Thi, Hoai An

MONA3-4 11:10  
*The DC (Difference of Convex Functions) Programming and DCA Revisited with DC Models of Real World Nonconvex Optimization Problems*  
Pham Dinh, Tao  
Le Thi, Hoai An

---

---

**MONA4 10:10-12:10**  
(Venue: LSB LT4)  
**Mini-Symposium on Generalized Convexity and Non-linear Lagrangians: VI**  
Organizer: Schaible, Siegfried  
Organizer: Yang, Xinmin  
Organizer: Rubinov, Alex M.  
Chair: Craven, B. D.

MONA4-1 10:10  
*Stability of Convex Multiobjective Programs to Small Perturbations*

Craven, B. D.

MONA4-2 10:30  
*Efficiency Conditions and Duality for a Class of Multi-objective Fractional Programming Problems*  
Liang, Zhi-an\*  
Huang, Hong-xuan  
Pardalos, Panos M.

MONA4-3 10:50  
*A New Method for Solving Goal Programming by Measuring Priority Factor with Number*  
Wang, Qi

MONA4-4 11:10  
*Nondifferentiable Vector Optimization Problems for Subinvex Functions*  
Mishra, Shashi K.

MONA4-5 11:30  
*Sharp Augmented Lagrangians for the Problems with A Single Constraint*  
Gasimov, Rafail N.  
Rubinov, Alex M.

MONA4-6 11:50  
*Symmetric Dual Multiobjective Fractional Variational Problems*  
Gulati, T. R.  
Husain, I.  
Ahmed, A.\*

---

---

**MONA5 10:10-12:10**  
(Venue: LSB LT5)  
**Contributed Session on Nonlinear Programming II**  
Chair: Eberhard, A.

MONA5-1 10:10  
*Porosity and Differentiability in Smooth Banach Spaces*  
Georgiev, Pando Gr.

MONA5-2 10:30  
*Second-order Clarke Subdifferential of  $C^{1,1}$  Functions*  
Georgiev, Pando Gr.

MONA5-3 10:50  
*Some Results in the Calculus of Subhessians*  
Eberhard, Andrew  
Nyblom, M.  
Sivakumaran, R.

MONA5-4 11:10  
*An Inexact Newton Method Derived from Efficiency Analysis*  
Deng, Naiyang\*  
Xue, Yi  
Zhang, Jianzhong  
Zhong, Ping

MONA5-5 11:30  
*Perturbation for Broyden Algorithms*  
Pu, Dingguo  
Yu, Dexing\*

MONA5-6 11:50

*Equilibrium Problems with Applications to Eigenvalue Problems*

Chadli, O.

Wong, N. C.

Yao, J. C.

---

---

**MONA6** **10:10-12:10**

(Venue: LSB LT6)

**Invited Session on Optimization in Engineering Structure**

Organizer: Sui, Yongkang

Chair: Siu, Yongkang

Chair: Chung, K. C.

MONA6-1 10:10

*Optimal Design of Stepped Annular Plates for Minimax Deflection*

Chung, K.C.

Wang, C.M.

MONA6-2 10:30

*Modeling and Optimization of Topology Design for Skeleton and Continuum Structure*

Sui, Yun Kang

MONA6-3 10:50

*Substructure Method of Displacement Sensitivity Analysis*

Wan, Chaoyan

Zhao, Wenzhong\*

Xie, Suming

MONA6-4 11:10

*Applications and Difficulties of Structural Optimum Design in Railway Vehicles*

Xie, Suming

Zhao, Wenzhong\*

Wan, Chaoyan

MONA6-5 11:30

*Reliability-Based Structure Optimum Design of Offshore Jacket Platforms*

Feng, Sheng\*

Song, Yupu

Zhai, Gangjun

MONA6-6 11:50

*The Fuzzy Shape Optimum Design for Jacket Platforms*

Zhai, Gangjun\*

Liu, Xiang-bin

Feng, Sheng

Xu, Facong

---

---

**MONM1** **1:30-3:50**

(Venue: LSB LT1)

**Invited Session on Optimization in Wireless Communication**

Organizer and Chair: Nordholm, Sven

MONM1-1 1:30

*A Robust Approach to the Synthesis of Dolph-Chebyshev Beampatterns for Uniform Circular Arrays*

Lau, B. K.

Leung, Y. H.\*

Liu, Y.

Teo, K. L.

MONM1-2 1:50  
*Optimum Laguerre Filter Architectures for Look Ahead Decision Feedback (LADF) Sigma-Delta ( $\Sigma\Delta$ ) Demodulators*

Abeysekera, Saman S.

Zang, Zhuquan\*

MONM1-3 2:10

*On the Robust Filter Design for Echo Cancellation with Double-Talk*

Huo, J. Q.\*

Yiu, K.F.C.

Teo, K.L.

MONM1-4 2:30

*Design of Complex Spreading Sequences*

Dam, Hai Huyen\*

Zepernick, Hans-Jurgen

Nordberg, Jorgen

Nordholm, Sven

MONM1-5 2:50

*A Posteriori Probability Decoding of Linear Block Codes over Prime Fields*

Zepernick, Hans-Jurgen

MONM1-6 3:10

*Applied Complex Chebyshev Optimization Using Dual Nested Complex Approximation*

Claesson, Ingvar\*

Dahl, Mattias

Nordebo, Sven

MONM1-7 3:30

*Design of ODMA Digital Waveforms Using Nonconvex Optimization Methods*

Zang, Zhuquan\*

Nordholm, Sven

---

---

**MONM2** **1:30-3:50**

(Venue: LSB LT2)

**Invited Session on Control Theory, Techniques and Applications**

Organizer and Chair: Liu, Wanquan

MONM2-1 1:30

*Optimization of Fired Rules of Fuzzy Systems Using Genetic Algorithms*

Chan, P. T.

Rad, A. B.

MONM2-2 1:50

*Blind Adaptive Equalization of FIR and IIR Systems*

Thorne, Jeremy S.

Moore, John B.

MONM2-3 2:10

*Lyapunov Equations for Stable Singular Systems*

Li, Shujin

Liu, Wanquan

MONM2-4 2:30

*Frequency-Weighted Model Reduction Methods for Discrete Systems and Error Bounds*

Wang, G.  
Sreeram, V.  
Lim, A. G.

MONM2-5 2:50  
*Decentralized Bezout Factorizations for Generalized Decentralized Control Systems*

Gao, Zhiwei  
Liu, Wanquan  
So, Albert T. P.

MONM2-6 3:10  
*Asymptotic Stability and Stabilization for Descriptor Systems via Lyapunov Methods*

Yao, B.  
Zhang, Q. L.  
Yang, D. M.  
Sreeram, V.

MONM2-7 3:30  
*An Optimal Control Approach to Therapeutic Intervention in HIV Infection*

Wong, K.H.

---

---

**MONM3 1:30-3:50**

(Venue: LSB LT3)

**Invited Session on Industrial Optimization**

Organizer and Chair: Caccetta, Louis

MONM3-1 1:30  
*Graphs and Network Optimization*

Caccetta, L.

MONM3-2 1:50  
*A Numerical Technique for Optimal Boundary Control of a Parabolic System*

Chuedoung, M.  
Wu, Y. H.  
Siew, P. F.

MONM3-3 2:10  
*A New Global Approach to Nonlinear Mixed Discrete Optimization Problems*

Lee, W. R.  
Rehbock, V.  
Teo, K. L.  
Caccetta, L.

MONM3-4 2:30  
*Numerical Solution of Optimal Control Problems with Discrete-Valued System Parameters*

Lee, W. R.  
Rehbock, V.  
Caccetta, L.  
Teo, K. L.

MONM3-5 2:50  
*Solution of an Inverse Problem of Fluid Flow in Porous Media Using a Genetic Algorithm*

Tang, Z. H.  
Siew, P. F.  
Wu, Y. H.

MONM3-6 3:10

*Optimal Successive Estimation of Observed Data*

Torokhti, A.  
Howlett, P.  
Pearce, C.

MONM3-7 3:30  
*A Stabilized Gradient Flow Approach to Constrained Nonlinear Programming Problems*

Wang, S.  
Yang, X. Q.  
Teo, K. L.

---

---

**MONM4 1:30-3:50**

(Venue: LSB LT4)

**Contributed Session on Discrete Optimization**

Chair: Deng, X. T.

MONM4-1 1:30  
*A Comparative Study on Algorithms for Vehicle Routing Problems with Stochastic Demands*

Teng, S.Y.  
Ong, H.L.  
Huang, H.C.

MONM4-2 (Cancelled) 1:50  
*A Modified Ant Colony System for Traveling Salesman Problems*

Lan, Kuen-Ming  
Chiu, Chui-Yu  
Chen, Mu-Chen

MONM4-3 2:10  
*Approximate Sequencing for Variable Length Tasks*

Cai, Mao-cheng\*  
Deng, Xiaotie  
Wang, Lusheng

MONM4-4 2:30  
*Comparison of Meta-heuristics for the Two-dimensional Orthogonal Packing Problem*

Leung, T.W.  
Chan, Chi Kin  
Troutt, Marvin D.

MONM4-5 2:50  
*Complexity of Some Reverse Network Problems with Bound Constraints*

Yang, Xiaoguang

MONM4-6 3:10  
*Optimal Path Planning Based on Maximum Visibility*

Wang, Paul K.C.

MONM4-7 3:30  
*Solution Concepts in Minimum Spanning Tree Games and Their Generalized Games*

Tsurumi, Masayo  
Tanino, Tetsuzo  
Inuiguchi, Masahiro

---

---

**MONM5 1:30-3:30**

(Venue: LSB LT5)

## Invited Session on

### 1. Lot-Sizing, Telecommunications Planning and Data Modeling

Organizer and Chair: Leung, Janny

- MONM5-1 1:30  
*Dynamic Lot Size Problems with One-Way Product Substitution*  
Hsu, Vernon N.  
Li, Chung-Lun  
Xiao, Wen-Qiang
- MONM5-2 1:50  
*A Modified Dual Ascent Procedure with Valid Inequalities for the Multi Level Concentrator Location Problem*  
Murthy, Ishwar  
Sastry, Trilochan
- MONM5-3 2:10  
*A Location, Routing and Assignment Problem with Cost and Load Balancing Criteria*  
Lin, Carrie K. Y.  
Chow, C. K.
- MONM5-4 2:30  
*Data Modeling in Hospital Lift System Simulation*  
Chu, Sydney C. K.  
Lin, Carrie K. Y.  
Lam, S. S.

### 2. Network Design, Routing and Scheduling

Organizer and Chair: Leung, Janny

- MONM5-5 2:50  
*Uncapacitated Multicommodity Network Design Problem with Zero Flow Cost*  
Ng, Ada S. F.  
Leung, Janny M. Y.  
Cai, Xiaoqiang
- MONM5-6 3:10  
*Map-Based Logistics Support with Stochastic Routing*  
Wong, Jacky C. F.  
Leung, Janny M. Y.  
Cheng, C. H.  
Fung, Paul T. W.

---

---

### MONM6 1:30-3:50

(Venue: LSB LT6)

#### Invited Session on Optimization Techniques in Information Processing and Defense Applications

Organizer and Chair: Lim, Cheng-Chew

- MONM6-1 1:30  
*A Comparative Study and Extension to K-Medoids Algorithms*  
Chu, Shu-Chuan  
Roddick, John F.  
Pan, J. S.
- MONM6-2 1:50  
*A Note on Optimal RED (Random Early Detection) Queue Management*  
Hu, J.  
Walkiewicz, M.

Nelson, R.  
Sekercioglu, A.

- MONM6-3 2:10  
*Implementation of RSA Encryptor Using DSP --- A Maximum Speed Oriented Approach*  
Hu, J.  
Wen, Qiang  
Xi, Zhiping
- MONM6-4 2:30  
*K-means Clustering Applied to Texture Segmentation with Complex Wavelet Features*  
Ng, Brian W.  
Bouzerdoum, Abdesselam
- MONM6-5 2:50  
*On Initialising nu-Support Vector Machine Training*  
Chew, Hong-Gunn  
Lim, Cheng-Chew  
Bogner, Robert E.
- MONM6-6 3:10  
*Sensitivity of the PMHT-c Algorithm to Classifier Model Mismatch*  
Davey, S. J.  
Gray, D. A.
- MONM6-7 3:30  
*Signal Separation Using Multi-Rate Signal Processing*  
Nordberg, J.  
Dam, H. H.  
Nordholm, S.

---

---

### MONP1 4:10-5:10

(Venue: LSB LT1)

#### Invited Session on Optimization in Statistics

Organizer and Chair: Fang, K. T.

- MONP1-1 4:10  
*Optimization in Statistical Experimental Design*  
Fang, Kai-Tai
- MONP1-2 4:30  
*Applications of the Optimization Heuristic Threshold Accepting in Statistics*  
Winker, Peter
- MONP1-3 4:50  
*The Threshold Accepting Heuristic for Index Tracking*  
Gilli, Manfred  
Kellezi, Evis

---

---

### MONP2 4:10-5:30

(Venue: LSB LT2)

#### Invited Session on Conic Optimization: Method and Applications

Organizer and Chair: Zhang, Shuzhong

- MONP2-1 4:10  
*Optimal Transceiver Design via Convex Programming*  
Luo, Zhi-Quan
- MONP2-2 4:30

*A Revisit to Primal-Dual Large-Update Interior-Point Methods for Linear Optimization*

Peng, Jiming  
Terlaky, Tamas

MONP2-3 4:50  
*Robust Versions of Convex Quadratic and Conic-Quadratic Problems*

Ben-Tal, A.  
Nemirovski, A.  
Roos, C.

MONP2-4 5:10  
*Semidefinite Programming for Global Quadratic Optimization*  
Ye, Y.

---

---

**MONP3 4:10-5:10**  
(Venue: LSB LT3)

**Invited Session on Electricity Markets**  
Organizer and Chair: Ralph, Danny

MONP3-1 4:10  
*Modeling Optimal Offers in Electricity Markets*  
Anderson, E. J.  
Xu, H.\*

MONP3-2 4:30  
*Market Distribution Functions in the Electric Power Industry*  
Philpott, A.  
Pritchard, Geoffrey\*  
Neame, P.  
Zakeri, G.

MONP3-3 4:50  
*Nash Equilibria for Games in Competitive Electricity Markets Under Network Constraints*  
Hu, Xinmin\*  
Ralph, Daniel

---

---

**MONP4 4:10-5:30**  
(Venue: LSB LT4)

**Invited Session on Optimization in Supply Chain**  
Organizer and Chair: Yan, Houmin

MONP4-1 4:10  
*The Stochastic Knapsack Revisited, with Applications to Dynamic Pricing*  
Yao, David D.

MONP4-2 4:30  
*Newsvendor Problem with Mean-Variance Objectives*  
Choi, Tsan-Ming  
Li, Duan  
Yan, Houmin

MONP4-3 4:50  
*Newsvendor Pricing Game*  
Yan, Houmin  
Yao, Li  
Sethi, Suresh

MONP4-4 5:10

*Optimal Spacecraft Support in Telecommunications Task Scheduling*

Kumar, Sanjay  
Dawande, Milind  
Sriskandarajah, Chelliah  
Bagchi, Tapan P

---

---

**MONP5 4:10-5:10**  
(Venue: LSB LT5)  
**Contributed Session on Nonlinear Programming III**  
Chair: Yao, J. C.

MONP5-1 4:10  
*A Modified Extragradient-Type Method for Variational Inequalities and Verification of the Existence of Solutions*  
Zhang, Jianzhong  
Wang, Yiju  
Xiu, Naihua\*

MONP5-2 (Cancelled) 4:30  
*On the Computational Cost of a Hybrid Algorithm for Solving Convex Programming Problems*  
Shi, Yixin

MONP5-3 4:50  
*Solvability of Implicit Complementarity Problems*  
Kalashnikov, Vyacheslav V.  
Isac, George

---

---

**MONP6 4:10-5:30**  
(Venue: LSB LT6)

**Invited Session on Operations Management Applications in Thailand**  
Organizer: Vairaktarakis, George L.  
Chair: Madan, Manohar Shrinivasan

MONP6-1 4:10  
*Setting Standard Data for Optimal Production Planning*  
Kutintarat, Issadee\*  
Kanjanapanyakom, Rachavarn

MONP6-2 4:30  
*A Heuristic Approach for Solving Dynamic Lot-Sizing Problem in SME*  
Bunchanartborpit, Jiroat\*  
Kanjanapanyakom, Rachavarn

MONP6-3 4:50  
*Effects from Simultaneously Considering Financing Aspects on Project Selection: Implications on the Perfect Capital Market Assumptions*  
Phusavat, Kongkiti\*  
Pitakchaicharn, Nipon  
Darapanitch, Winitchaya

MONP6-4 5:10  
*Integration of the Life Cycle Costing Methodology for Capacity Replacement Planning*  
Phusavat, Kongkiti  
Charnsethikul, Peerayuth  
Asavapaiboon, Thanawan\*