

# The 5th Sino-Japan Optimization Meeting

SEPTEMBER 26-29, 2011

BEIJING, CHINA

## Conference Schedule

### September 26, Monday

**08:30-09:10 Opening Ceremony**

(Lecture Hall, Si-Yuan Building)

**08:30-08:50 Welcome Address**

**08:50-09:10 Group Photo**

**09:10-09:30 Coffee Break**

**09:30-12:00 Invited Talks I1**

**Chair: Wenyu Sun (Lecture Hall, Si-Yuan Building)**

**09:30-10:20 Tamás Terlaky**, Cone Linear Optimization (CLO): from LO, SOCO and SDO towards mixed integer CLO

**10:20-11:10 Mikio Kubo**, Trend in Supply Chain Optimization and Humanitarian Logistics

**11:10-12:00 Xiaoling Sun**, Modeling and Algorithmic Challenges from Financial Optimization

**12:00-13:30 Lunch (4th Floor, Wu-Ke Restaurant)**

**13:30-15:10 Invited Talks I2**

**Chair: Tetsuzo Tanino (Lecture Hall, Si-Yuan Building)**

**13:30-14:20 Soon-Yi Wu**, On finite convergence of an explicit exchange method for convex semi-definite programming problems with second-order cone constraints

**14:20-15:10 Zaiwen Wen**, Optimization with orthogonality constraints and its applications

**15:10-15:30 Coffee Break**

**15:30-18:30 Contributed Talks C1 & C2**

**C1, Chair: Mikio Kubo (Lecture Hall, Si-Yuan Building)**

- 15:30-16:00** **Shinji Mizuno**, Klee-Minty's LP and Upper Bounds for Dantzig's Simplex Method
- 16:00-16:30** **Xin Liu**, Limited Memory Block Krylov Subspace Optimization for Computing Dominant Singular Value Decompositions (Changed)
- 16:30-17:00** **Chao Zhang**, A New Active Set Method For Nonnegative Matrix Factorization
- 17:00-17:30** **Jiming Peng**, Sparse Solutions to Classes of Quadratic Programming Problems
- 17:30-18:00** **Wei Bian**, Smoothing Neural Network for Constrained Non-Lipschitz Optimization with Applications
- 18:00-18:30** **Yanfang Zhang**, Moreau-Yosida regularization for stochastic linear variational inequalities

**C2, Chair: Yu-Hong Dai (Room 712, Si-Yuan Building)**

- 15:30-16:00** **Rui Diao**, A New Family of Matrix Completion Quasi-Newton Methods (Changed)
- 16:00-16:30** **Mituhiko Fukuda**, High performance software package for SDP: SDPA version 7
- 16:30-17:00** **Wanyou Cheng**, An Adaptive Gradient Algorithm for Large-scale Nonlinear Bound Constrained Optimization
- 17:00-17:30** **Cong Sun**, A Hybrid Algorithm for Power Maximization Interference Alignment Problem of MIMO Channels
- 17:30-18:00** **Zaikun Zhang**, Sobolev Seminorm of Quadratic Functions with Applications to Derivative-Free Optimization
- 18:00-18:30** **Zhengyong Zhou**, A discretization method for nonlinear semi-infinite programming based on the flatten aggregate constraint homotopy method for solving the discretized problem

- 18:40** **Dinner (Xiang Lin Tian Xia Restaurant)**
- 20:00** **SJOM Steering Committee Meeting**  
(Room 305, Institute of Computational Mathematics and Scientific/Engineering Computing)

## September 27, Tuesday

### **08:30-10:10 Invited Talks I3**

**Chair: Masao Fukushima (Lecture Hall, Si-Yuan Building)**

**08:30-09:20 Xiaojun Chen**, Expected Residual Minimization for Stochastic Variational Inequalities

**09:20-10:10 Marc Teboulle**, First Order Algorithms for Well Structured Optimization Problems

### **10:10-10:30 Coffee Break**

### **10:30-12:00 Contributed Talks C3 & C4**

**C3, Chair: Xiaojun Chen (Lecture Hall, Si-Yuan Building)**

**10:30-11:00 Bingsheng He**, on the  $O(1/t)$  convergence rate of the alternating direction methods for convex optimization and monotone variational inequalities

**11:00-11:30 Keiji Tatsumi**, A sufficient condition for chaos in a steepest decent system with sinusoidal perturbation for global optimization

**11:30-12:00 Bo Jiang**, An improved model for truck dispatching in open pit mine

**C4, Chair: Satoru Iwata (Room 712, Si-Yuan Building)**

**10:30-11:00 Shunsuke Hayashi**, Semi-infinite program with infinitely many conic constraints: optimality condition and algorithms

**11:00-11:30 Ryan Loxton**, Optimal Control Problems with Stopping Constraints

**11:30-12:00 Lishun Zeng**, On the Separation in 2-Period Double Round Robin Tournaments with Minimum Breaks

### **12:00-13:30 Lunch (4th Floor, Wu-Ke Restaurant)**

### **13:30-15:10 Invited Talks I4**

**Chair: Naihua Xiu (Lecture Hall, Si-Yuan Building)**

**13:30-14:20 Hiroshi Yamashita**, Primal-dual Interior Point Methods for Nonlinear SDP - Local and Global Analysis

	<b>14:20-15:10 Yu-Hong Dai</b> , Joint Power and Admission Control for a SISO Interference Channel: Complexity Analysis, Algorithm Design, and Distributed Implementation
<b>15:10-15:30</b>	<b>Coffee Break</b>
<b>15:30-17:00</b>	<b>Contributed Talks C5 &amp; C6</b>
	<b>C5, Chair: Hiroshi Yamashita (Lecture Hall, Si-Yuan Building)</b>
<b>15:30-16:00</b>	<b>Naihua Xiu</b> , <i>S</i> -goodness: Low-Rank Matrix Recovery from Sparse Signal Recovery
<b>16:00-16:30</b>	<b>Hidefumi Kawasaki</b> , An application of a discrete fixed point theorem for contraction mappings to a game in expansive form
<b>16:30-17:00</b>	<b>Lingchen Kong</b> , Exact Low-rank Matrix Recovery via Non-convex $M_p$ -Minimization
	<b>C6, Chair: Jiawang Nie (Room 712, Si-Yuan Building)</b>
<b>15:30-16:00</b>	<b>Qun Lin</b> , Optimal Fleet Sizing via Dynamic Programming and Golden Section Search
<b>16:00-16:30</b>	<b>Yasushi Narushima</b> , A smoothing conjugate gradient method for solving nonsmooth systems of equations
<b>16:30-17:00</b>	<b>Lei Guo</b> , M-Stationarity and Stability Analysis for Mathematical Programs with Complementarity Constraints
<b>17:10</b>	<b>Dinner (3rd Floor, Wu-Ke Restaurant)</b>

## September 28, Wednesday

### **08:30-10:10 Invited Talks I5**

**Chair: Jie Sun (Lecture Hall, Si-Yuan Building)**

**08:30-09:20 Yin Zhang**, Some Recent Advances in Alternating Direction Methods: Practice and Theory

**09:20-10:10 Satoru Iwata**, Submodular Optimization and Approximation Algorithms

### **10:10-10:30 Coffee Break**

### **10:30-12:00 Contributed Talks C7 & C8**

**C7, Chair: Bingsheng He (Lecture Hall, Si-Yuan Building)**

**10:30-11:00 Hiroshi Yabe**, Conjugate gradient methods based on secant conditions that generate descent search directions for unconstrained optimization

**11:00-11:30 Xiao Wang**, An Augmented Lagrangian Trust Region Algorithm for Equality Constrained Optimization

**11:30-12:00 Congpei An**, Regularized least squares approximation over the unit sphere using spherical designs

**C8, Chair: Zaiwen Wen (Room 712, Si-Yuan Building)**

**10:30-11:00 Ying Lu**, Plan Postponement Strategy: A Definition and Research Model

**11:00-11:30 Min Li**, Inexact Solution of NLP Subproblems in MINLP

**11:30-12:00 Atsushi Kato**, Global and superlinear convergence of inexact sequential quadratically constrained quadratic programming method for convex programming

### **12:00-13:30 Lunch (4th Floor, Wu-Ke Restaurant)**

### **13:30-15:10 Invited Talks I6**

**Chair: Soon-Yi Wu (Lecture Hall, Si-Yuan Building)**

**13:30-14:20 Luís Nunes Vicente**, Sparse and Smoothing Methods for Non-linear Optimization Without Derivatives

**14:20-15:10 Ye Lu**, Optimal Policy for an Inventory System with Convex Variable Cost and a Fixed Cost

### **15:10-15:30 Coffee Break**

**15:30-16:20 Invited Talks I7**

**Chair: Yin Zhang (Lecture Hall, Si-Yuan Building)**

**15:30-16:20 Jiawang Nie, Jacobian SDP Relaxation for Polynomial Optimization**

**16:20-16:30 Closing Ceremony**

**(Lecture Hall, Si-Yuan Building)**

**16:50 Bus to Conference Banquet**

**(Conference Banquet at Da Zhai Men Restaurant)**

## September 29, Thursday

7:00          Set off from Jade Palace

Morning      Half-day Tour to Great Wall

Afternoon    Half-day Tour to Ming Dynasty Tombs