The International Conference on Nonlinear Programming with Applications (NPA 2006)

(All sessions are to be held in Starr Building, Fudan University)

Monday 29 May		
8:30 – 12:10		Venue: AIA Hall, Chairman: X.Q. Yang
8:30 – 8:50	Opening Ceremony	
8:50 – 9:40	Keynote lecture: R. T. Rockafellar	Optimization and Economic Equilibrium
9:40 – 10:10	Invited lecture: Adrian Lewis	Structure in Nonsmooth Optimization
10:10 – 10:40	Tea Break	
10:40 – 12:10	Invited lectures:	Venue: AIA Hall, Chairman: S.Y. Wang
10:40 – 11:10	Shu-Cherng Fang	Term Structure Analysis Using Cubic L_1 Splines
11:10 – 11:40	Michel Thera	A Converse to One of Moreau's theorems
11:40 – 12:10	Y. Zhang	Solution recovery for Non-square Systems via L_1-minimization
12:10 – 2:00	Lunch	
2:00 – 4:00	Invited lectures:	Venue: AIA Hall, Chairman: Michel Thera
2:00 – 2:30	B.S. Mordukhovich	Variational Analysis in Nonsmooth Optimization and Discrete Optimal Control
2:30 – 3:00	S. Y. Wang	Some Progress in Portfolio Optimization
3:00 – 3:30	M. Teboulle	The Regularized Total Least Squares Problem via Convex Optimization
3:30 – 4:00	Jane Ye	Constraint Qualifications and KKT Conditions for bilevel Programming Problems
4:00 – 4:20	Tea Break	

Parallel Sessions		
Monday A-1, Nonsmooth Optimization, Venue: Room 301, Chairman: J.V. Burke		
4:20 – 4:40	Huifu Xu	A Regularized Sample Average Approximation Method for Stochastic Mathematical Programs with Nonsmooth Equality Constraints
4:40 – 5:00	Xiyin Zheng	Weak Sharp Minima of Piecewise Linear Multiobjective Optimization in infinite Dimensional Normed Spaces
5:00 – 5:20	Mei Qin Chen	Lower and Upper Bounds of Singular Values of an Interval Matrix
5:20 – 5:40	Sien Deng	Characterizations of the closed image of a closed set under a nonlinear mapping and applications
5:40 – 6:00	Gue Myung Lee	On Proto-differentiability of Generalized Perturbation Maps
Monday A-2, Optimality Conditions, Venue: Room 302, Chairman: Jane Ye		
4:20 – 4:40	Yuxi Jiang	Relationship between entropy regularization method and exponential penalty method
4:40 – 5:00	Zhe Chen	Generalized Augmented Lagrangian Problem and $\in$-Optimal Solutions in Nonlinear Programming
5:00 – 5:20	Xiaofei Huang	Global Optimality Conditions and the Cooperative Optimization Method
5:20 – 5:40	Yuying Zhou	A Lagrange Penalty Reformulation Method for a Constrained Optimization
5:40 – 6:00	Qian Liu	On Saddle Points of a Class of Augmented Lagrangian Functions
Monday A-3, Optimization Method, Venue: Room 303, Chairman: Y. Zhang		
4:20 – 4:40	Hua Bai	A new method for the nonlinear least square problems
4:40 – 5:00	Jiwei Zhang	A Modified Reduced-Hessian BFGS Method with Nonmonotone Line Search for Large Scale Unconstrained Optimization Problems
5:00 – 5:20	Shaohua Pan	Unconstrained Optimization Techniques for the Euclidean κ-centrum location problem
5:20 – 5:40	Hongwei Zhou	A New Restarted Conjugate Gradient Method for Unconstrained Optimization
5:40 – 6:00	Qiufeng Duan	Properties of quasi-Newton methods with a class of new quasi-Newton equations
Monday A-4, Generalized Convexity/Monotonicity, Venue: Room 503, Chairman: G. Mastroeni		
4:20 – 4:40	Shui-hung Hou	Existence Theorems for Generalized Vector Equilibrium Problems
4:40 – 5:00	Shengjie Li	Vector Equilibrium Problems with Elastic Demands and Capacity Constraints
5:00 – 5:20	Zhian Liang	The Convexity of the Functions in Multiple-objective Programming Problems and the Duality
5:20 – 5:40	Kaihong Wu	Duality Forms and Solution Existence for Implicit Vector Equilibrium Problems
5:40 – 6:00	Yunan Wu	A Vector Network Equilibrium Problems with a Unilateral Constraint

Monday A-5, Optimal Control, Venue: Room 603, Chairman: B.S. Mordukhovich		
4:20 – 4:40	E.N. Mahmudov	Optimal Control of Neumann Problem for Elliptic Differential Inclusions and Duality
4:40 – 5:00	Jinghao Zhu	A Numerical Method of the Optimal Control Approach to Nonlinear Programming Problems
5:00 – 5:20	Yan Gao	Determining the viability for a class of nonlinear control systems on a region with nonsmooth boundary
5:20 – 5:40	Shikang Ken Li	Collocation Methods for Solving Optimal Control Problems
5:40 – 6:00	Wenyu Sun	Optimization Methods with Second Order Line Searches
Tuesday 30 May		
8:30 – 10:20		Venue: AIA Hall, Chairman: M. Teboulle
8:30 – 9:20	Keynote lecture: A. Auslender	Building Algorithms for Convex Problems with Differentiable Data via Methods for Variational Inequalities
9:20 – 10:20	Invited lectures:	
9:20 – 9:50	D. Gao	Canonical Duality Theory in Global Optimization and Applications
9:50 – 10:20	V. Jeyakumar	Quadratic Support Functions for Nonconvex Global Optimization
10:20 – 10:40	Tea Break	
Parallel Sessions		
Tuesday M-1, Nonsmooth Optimization, Venue: Room 301, Chairman: N. Hadjisavvas		
10:40 – 11:00	Yiran He	Directional differentiability of metric projection onto degenerate convex sets
11:00 – 11:20	Chong Li	Strong CHIP in the Space of Vector-valued functions with Applications in Convex Constraint Approximation
11:20 – 11:40	Wen Song	Error bounds for convex constrained systems in Banach spaces
11:40 – 12:00	Lulin Tan	Nonsmooth Variational Inequality Problems
12:00 – 12:20	Chunlin Sha	Optimality Conditions and Approximation Algorithm of a Class of Nonsmooth Optimization Problems
Tuesday M-2, Optimality Conditions, Venue: Room 302, Chairman: D.T. Luc		
10:40 – 11:00	G. Mastroeni	Some Topics in Vector Optimization via Image Space Analysis
11:00 – 11:20	Xiao-ming Yuan	First order optimality conditions for generalized semi-infinite min-max problems
11:20 – 11:40	Qinghong Zhang	Optimality Conditions for a Nonsmooth Programming Problem with Infinitely Many Nonlinear Equality and Inequality Constraints

11:40 – 12:00	Houchun Zhou	Duality and Lagrange Multiplies Without a Constraint Qualification for Nonsmooth Multiobjective Programming with Generalized Convex Functions
12:00 – 12:20	Fu-sheng Bai	Sequential Lagrange Multiplier Condition of ε-Optimal Solution in Convex Programming
Tuesday M-3, Optimization Method, Venue: Room 303, Chairman: Shu-cherng Fang		
10:40 – 11:00	Han Huang	A Stochastic Algorithm for Non-linear Programming Based on Experience
11:00 – 11:20	Shu-shang Zhu	Basic Line Algorithm for Linear Programs: An Extension of Simplex Method
11:20 – 11:40	Yunhai Xiao	An Active Set Limited Memory BFGS Algorithm for Large-Scale Bound Constrained Optimization
11:40 – 12:00	Peiai Zhang	A Path-Following Method for LPs Based on An Algebraically Equivalent Path
12:00 – 12:20	Yi-bing Lv	A globally convergent method for solving the linear bilevel programming problem
Tuesday M-4, Financial Optimization, Venue: Room 503, Chairman: Xiaoling Sun		
10:40 – 11:00	Xue Feng	A New Approach to Insurance Pricing
11:00 – 11:20	Siu Fai Leung	An Economic Application of the Dubovitskii-Milyutin Version of the Maximum Principle
11:20 – 11:40	Yihua Li	Maximum Profits from Subcontracting Optimization
11:40 – 12:00	Yi-rong Ying	Quadratic Programming: An Efficient Asset Pricing Approach
12:00 – 12:20	Kai Zhang	Power Penalty Method for Two-asset American Option Pricing
Tuesday M-5, Games, Venue: Room 603, Chairman: D. Gao		
10:40 – 11:00	Chengguo E.	Repeated N-Person Stochastic Cooperative Games: The Certainty Equivalents
11:00 – 11:20	Fasheng Hu	The conditions of balanced growth of a sort of macroeconomic system
11:20 – 11:40	Dash Wu	Stochastic dynamic bundle-pricing with DEA
11:40 – 12:00	Hongming Yang	Dynamic Equilibrium of Power Market with Complex Network Constraints Based on Nonlinear Complementarity Method
12:00 – 12:20	Jiuping Xu	Research of county cycle economy based on system dynamics and multi-objective decision-making model
Tuesday 30 May		
2:00 – 4:00		Venue: AIA Hall, Chairman: Xuexiang Huang
2:00 – 2:30	J.V. Burke	Eigenvalues and Variational Analysis
2:30 – 3:00	G.Y. Chen	On Generalized Variational Inequality for Discontinuous Set-valued Function
3:00 – 3:30	J. Sun	The Rate of Convergence of the Augmented Lagrangian Method for Nonlinear Semidefinite Programming

3:30 – 4:00	Daoli Zhu	The Inverse Problem Involving the Bi-criterion Network Equilibrium Problem with Infinitely Many Differentiated Classes of Customers
4:00 – 4:20	Tea Break	
Parallel Sessions		
Tuesday A-1, Optimality Conditions, Venue: Room 301, Chairman: J.E. Martinez-Legaz		
4:20 – 4:40	J. Zafarani	Monotonicity and Invexity of Non-differentiable Functions
4:40 – 5:00	Hong-ying Liu	Some Applications of Alternative Theorem and Semidefinite Programming Duality in Discrete Linear Time Invariant Systems
5:00 – 5:20	Guoyin Li	On Generalization D-Gap Functions for Nonsmooth Variational Inequality Problems
5:20 – 5:40	Jinli Guo	The Approximate Extremal Principle for Global Optimization and Weakly Completeness of Normed Linear Spaces
5:40 – 6:00	Roxin Zhang	On Minimal Subgradients and the Growth Functions
Tuesday A-2, Optimization Method, Venue: Room 302, Chairman: Qin Ni		
4:20 – 4:40	Liang Chen	An Approximately Fast Algorithm with 0(n3) Expected Time Complexity for Solving 3-SAT Problem
4:40 – 5:00	Xuewen Mu	A Branch and Bound Method with Pretreatment for the Binary Quadratic Programming
5:00 – 5:20	Tao Tan	A Continuous Approach to 0-1 Programming
5:20 – 5:40	Shuzhen Pan	Filter SQP Method with New Defined Function
5:40 – 6:00	Chungen Shen	Global Convergence of A Line Search SQP Algorithm with A Three Dimensional Filter
Tuesday A-3, Financial Optimization, Venue: Room 303, Chairman: Lai-jiu Lin		
4:20 – 4:40	Guohua Chen	A possibilistic mean variance Var portfolio selection model
4:40 – 5:00	Xi-min Rong	Multi-Period Model of Portfolio Investment and Adjustment Based on Genetic Algorithm
5:00 – 5:20	Yi Wang	The return-risk analysis about a new class of coherent risk measures
5:20 – 5:40	Kwok Wai Yu	Portfolio Selection: The Sharpe Rule and Incremental VaR Approach
5:40 – 6:00	Lili Zhang	The entropic measure of risk and its application in portfolio theory
Tuesday A-4, VI and VCP, Venue: Room 503, Chairman: M. Fukushima		
4:20 – 4:40	Y.J. Wang	A Projection Method for a System of Nonlinear Equations with Convex Constraints
4:40 – 5:00	Deren Han	Pseudomonotone operators: Cyclicity, maximality, and their application to solution methods of variational inequalities

5:00 – 5:20	Tao Huang	A Non-Interior-Point Smoothing Algorithm for the Nonlinear Complementarity Problem with a P*Function
5:20 – 5:40	Xin Wang	A New Derivative-free Descent Method for Monotone Complementarity Problem
5:40 – 6:00	Hongli Yang	A Newton Type Method with Strong Convergence for Variational Inequality
Tuesday A-5, Nonsmooth Optimization, Venue: Room 603, Chairman: S.H. Hou		
4:20 – 4:40	Xianfu Wang	Fitzpatrick Functions and Continuous Linear Monotone Operators
4:40 – 5:00	Lihui Peng	Well-posedness of the Perturbed Optimization Problem in Banach Spaces
5:00 – 5:20	Minru Bai	On Variational Inequalities under Generalized Monotonicity in Normed Spaces
5:20 – 5:40	Jianyu Li	A New Smooth Merit Function for Variational Inequality Problems
Wednesday 31 May		
8:30 – 10:20		Venue: AIA Hall, Chairman: Adrian Lewis
8:30 – 9:20	Keynote lecture: A.D. Ioffe	Tame Optimization : State of the Art and Perspectives
9:20 – 10:20	Invited lectures:	
9:20 – 9:50	J.E. Martinez-Legaz	On the Representation of Monotone Operators by Convex Functions
9:50 – 10:20	D.T. Luc	On a Duality Approach to Solving Concave Vector Maximization Problems
10:20 – 10:40	Tea Break	
Wednesday M-1, Optimality Conditions, Venue: Room 301, Chairman: V. Jeyakumar		
10:40 – 11:00	Zhiyou Wu	Global Optimality Conditions for Quadratic Optimization Problems
1:00 – 11:20	Chunguang Liu	Merit Functions in Vector Optimization
11:20 – 11:40	Majid Fakhar	Generalized R-KKM Theorems and their Applications
11:40 – 12:00	Toba Jabarootian	Characterizations of Preinvex and Prequasiinvex Set-valued Maps
12:00 – 12:20	Lianshuan Shi	A Two-step Algorithm for Layout Optimization of Structures with Discrete Variables
Wednesday M-2, Optimization Method, Venue: Room 302, Chairman: J. Sun		
10:40 – 11:00	Qin Ni	Incomplete Jacobian Newton Method for Nonlinear Equations
1:00 – 11:20	Zengxin Wei	A Nonmonotone BFGS Method with Global and Superlinear Convergence for Symmetric Nonlinear Equations
11:20 – 11:40	Zheng Peng	A Modified Stochastic Implementation of the Level-Value Estimation Method
11:40 – 12:00	Zhenhua Yang	Approximate Proximal Point Algorithm in Banach Spaces

12:00 – 12:20	Gaohang Yu	A Derivative-free Iterative Method for Solving Large-scale Nonlinear Systems of Equations
Wednesday M-3, Generalized Convexity/Monotonicity, Venue: Room 303, Chairman: J.C. Yao		
10:40 – 11:00	Xieping Ding	Collectively Fixed Point, Generalized Game and System of Generalized Vector Quasi-Equilibrium Problems in Product FC-Spaces
11:00 – 11:20	Xun-hua Gong	Existence Theorem of Solutions for the Systems of Generalized Vector Quasi-equilibrium Problems
11:20 – 11:40	Lai-Jiu Lin	Systems of Generalized Quasi-Variational Inclusion Problems with Applications to Variational Analysis
11:40 – 12:00	Jianwen Peng	A system of set-valued variational inclusions with (H, η)-monotone operators
12:00 – 12:20	S.K. Mishra	Nonsmooth Continuous-Time Optimization Problems under Generalized Convexity
Wednesday M-4, Applications, Venue: Room 503, Chairman: G.Y. Chen		
10:40 – 11:00	Yuan Chen	Multiobjective Optimization Model for Packing Proposals in R&D Project Review
11:00 – 11:20	Jiuping Xu	A class of bifuzzy model and its application to multi-objective inventory problem
11:20 – 11:40	Ming Zhou	Structural Optimization – Methods and Applications
11:40 – 12:00	Mei Ding	FDH Technologies for interactive program: primal and dual models
12:00 – 12:20	Qi Zhang	Semi-Infinite Programming Based on Kriging Reliability Analysis
Wednesday 31 May		
2:00 – 4:00	Invited lectures:	Venue: AIA Hall, Chairman: D.L. Zhu
2:00 – 2:30	M. Fukushima	Linear Complementarity Problems under Uncertainty
2:30 – 3:00	N. Hadjisavvas	Pseudomonotone Operators: Cyclicity, Maximality, and their Application to Solution Methods of Variational Inequalities
3:00 – 3:30	X.X. Huang	Characterizing the Nonemptiness and Compactness of the Solution Set of a Vector Variational Inequality Problem and Applications
3:30 – 4:00	J. C. Yao	Approximate Proximal Algorithms for Generalized Variational Inequalities with Monotone Operators
4:00 – 4:20	Tea Break	
Wednesday A-1, Financial Optimization, Venue: Room 301, Chairman: D.H. Li		
4:20 – 4:40	Xiaoling Sun	Discrete Models of Financial Optimization and Algorithms
4:40 – 5:00	Qi Wang	An Algorithm to Study the RHS Sensitivity Analysis of Two Kinds of Two-Level Programming
5:00 – 5:20	Guangmin Wang	A Globally Convergent Parallel Genetic Algorithm for a Class of Bilevel Nonlinear Programming

5:20 – 5:40	Ting Wu	Solving Unconstrained Optimization Problem with a Filter-based Nonmonotone Pattern Search Algorithm
Wednesday A-2, Supply Chain, Venue: Room 302, Chairman: Qinghong Zhang		
4:20 – 4:40	Yuan Jiang	Synchronizing delivery and production cycles : Co-ordinating a single-vendor multi-buyer supply chain
4:40 – 5:00	Yanyan Li	A Dual Approach to Knapsack Problem
5:00 – 5:20	Yindong Shen	Scheduling Buses and Crew Using Heuristics
5:20 – 5:40	Xiaojiao Tong	Stable Solution Analysis on Power Systems with Transient Stability
5:40 – 6:00	Xiu-su Chen	Some Properties of S-orlicz Convex Functions and its Application in Optimization
Wednesday A-3, Applications, Venue: Room 303, Chairman: Wen Song		
4:20 – 4:40	Zhaosheng Feng	Burgers-Korteweg-de Vries Equation and Its Traveling Solitary Waves
4:40 – 5:00	Ming Han	Application of Optimum Method in Obtaining Optimum Solution of Prior Parameters
5:00 – 5:20	Suyan He	A self-adjusting interior point Algorithm for Frictional Contact Problems
5:20 – 5:40	Nanjing Huang	The Generalized f-Projection operator with an Application
5:40 – 6:00	Jinping Zeng	Convergence of Domain Decomposition Methods for Obstacle Problems
Wednesday A-4, Neural Network, Venue: Room 503, Chairman: Sien Deng		
4:20 – 4:40	Jianliang Li	A Learning Algorithm for Neural Networks Based on the Collinear Scaling Quadratic Approximation
4:40 – 5:00	Jianliang Li	Some Methods of Accelerating Neural Networks Training Based on Vector Epsilon Algorithm
5:00 – 5:20	Shouju Li	Estimation of Aquifer parameters with Hybrid Ant Colony Optimization
5:20 – 5:40	Bo Liu	Incremental Learning Approach in Training Least Squares Support Vector Machines
5:40 – 6:00	Xiaoxia Rong	On Integrated Chance Constraints model of stochastic programming