

The 6th International Conference on Optimization and Control with Applications (OCA 2015)

December 11th – 14th, 2015, Changsha, China

Full Program

December 11th, 2015 - Friday		
8:00-20:30	Registration	Reception Hall of International Academic Exchange Center (in Chinese:国际学术交流中心接待大厅)
18:00-20:00	Dinner	1 st Floor, Yunying Hall of International Academic Exchange Center

Morning, December 12, 2015 (Saturday)			
Opening Ceremony and Plenary Speeches, 2 nd Floor, Main Meeting Room of International Academic Exchange Center			
8:30-9:00	Opening Ceremony	Prof. Mingyong Lai President of Changsha University of Science and Technology	Chair: Changbo Jiang
	About the OCA Conference Series	Prof. Kok Lay Teo	
9:00-10:00	Plenary Speech	Prof. Shige Peng	Chair: Mingyong Lai
10:00-10:20	Group Photo and Coffee Break		
10:20-11:20	Plenary Speech	Prof. Ian Peterson	Chair: Cheng Chew Lim
11:20-12:20	Plenary Speech	Prof. Shinji Mizuno	Chair: Song Wang
12:20-14:00	Lunch		1 st Floor, Yunying Hall of International Academic Exchange Center

Afternoon, December 12, 2015 (Saturday), 1 st Floor, No. 1 Meeting Room of International Academic Exchange Center				
Parallel Session: Spatial-Temporal Evolutionary Processes and Systems				
1	14:00-14:20	A Distributed Parameter Model Identification Approach for a Micro-Manipulator	Chenkun Qi, Shanghai Jiao Tong University, Shanghai	Organizers: Wei He, University of Science and Technology of Beijing Chenkun Qi, Shanghai Jiaotong University Jie Qi, Donghua University Hongye Su, Zhejiang University Chao Xu, Zhejiang University Chair: Hongye Su
2	14:20-14:40	Multi-robot Formation Control on a Plane via PDE Approach	Shuxia Tang, University of California, San Diego	
3	14:40-15:00	Parameter Estimation for Ginzburg-Landau Equation via Implicit Sampling	Shan Guo, Zhejiang University, Hangzhou	
4	15:00-15:20	A Rapid Computational Optimization Method for Model Reduction Based on POD Number	Shichao Zhou, Zhejiang University, Hangzhou	
5	15:20-15:40	Parameter Identification Techniques Applied to an Environmental Pollution Model	Yuepeng Wang, Nanjing University of Information Science and Technology, Nanjing	
	15:40-16:00	Coffee Break		

Afternoon, December 12, 2015 (Saturday), 1 st Floor, No. 1 Meeting Room of International Academic Exchange Center				
Parallel Session: Extremal Problems in Autonomous Robotics				
6	16:00-16:20	An Indirect Foot Force Estimation Approach for Legged Walking Robot	Chenkun Qi, Shanghai Jiao Tong University, Shanghai	Organizers: Yong Liu, Zhejiang University Chenkun Qi, Shanghai Jiaotong University Chao Xu, Zhejiang University Chair: Chao Xu
7	16:20-16:40	Moving Object Tracking and Touching by AR.Drone Quadrotor	Changchun Ye, Zhejiang University, Hangzhou	
8	16:40-17:00	Path Planning for Wave-propelled Autonomous Surface Vehicle in Dynamic Ocean Environment	Chunlin Zhou, Zhejiang University, Hangzhou	
9	17:00-17:20	A Novel Demonstration Based Control Framework for Robot Assisted Rehabilitation	Jin Hu, Zhejiang University, Hangzhou	
10	17:20-17:40	Semantic Regularized ICP Algorithm	Yiyi Liao, Zhejiang University, Hangzhou	

Afternoon, December 12, 2015 (Saturday), 1 st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization Applications				
1	14:00-14:20	Constrained Programming Models for Partially Ordered Strip Packing with Applications in Stockyard Management	Lanbo Zheng, Wuhan University of Technology, Wuhan	Chair: Wah June Leong
2	14:20-14:40	Spherical Section Property for Matrix Schattern-p Minimization	Yifu Feng, Jilin Normal University, Siping	
3	14:40-15:00	q-ball Projection Gradient Method for Quadratic Compressed Sensing	Ailing Yan, Beijing Jiaotong University, Beijing	
4	15:00-15:20	Kernel Function-based Interior-point Methods for the Cartesian $P_*(\kappa)$ -LCP over Symmetric Cones	Guoqiang Wang, Shanghai University of Engineering Science, Shanghai	
5	15:20-15:40	Performance Analysis and Optimization of Cognitive Radio Networks with Retransmission Control	Yuan Zhao, Northeastern University, Qinhuangdao	
	15:40-16:00	Coffee Break		

Afternoon, December 12, 2015 (Saturday), 1 st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Computational Techniques in Financial Engineering				
6	16:00-16:20	An Interior Penalty Method for a Finite-dimensional LCP in Financial Engineering	Song Wang, Curtin University, Perth	Organizers: Song Wang, Curtin University Shuhua Zhang, Tianjin University of Finance and Economics Kai Zhang, Shenzhen University Chair: Kai Zhang
7	16:20-16:40	Pricing American Options with Integral Representation in Fractional Brownian Motion	Songbin Wu, Shenzhen University, Shenzhen	
8	16:40-17:00	Numerical Methods for Pricing European and American Options Under Jump-diffusion Model	Xiaoting Gan, Tongji University, Shanghai	
9	17:00-17:20	Fireworks Algorithm for Markowitz Portfolio Optimization	Zhifeng Liu, Hainan University, Haikou	
10	17:20-17:40	Modelling and Computation for the Valuation of Two-period R&D Projects by Option Games	Shuhua Zhang, Tianjin University of Finance and Economics, Tianjin	

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Modelling and Optimization in Industrial Engineering				
1	14:00-14:20	Optimal Harvesting Control in a Delayed Bioeconomic System with Beddington-DeAngelis Functional Response	Chao Liu, Northeastern University, Shenyang	Chair: Ryan Loxton
2	14:20-14:40	A Multi-server Queueing-inventory System with Emergency Replenishment and Non-homogeneous Poisson Arrival	Guoxi Zhao, Yanshan University, Qinhuangdao	
3	14:40-15:00	Study on the Supply Chain Financing Decision and Its Coordination Considering Fairness Preference	Xiudong Pan, Central South University, Changsha	
4	15:00-15:20	An Improved Differential Evolution Algorithm for Parameter Identification in an Asset Flow Model	Benchawan Wiwatanapataphee, Curtin University, Perth	
5	15:20-15:40	Maximum A Posteriori Estimation for Linear Markovian Jump Systems with Uncertain Time Delays	Peng Shi, The University of Adelaide, Adelaide	
	15:40-16:00	Coffee Break		

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Modelling and Optimization in Industrial Engineering				
6	16:00-16:20	Research on Decision of Financing on Retailer's Purchasing from Supplier's Perspective	Jiaxing Shi, Central South University, Changsha	Chair: Yonghong Wu
7	16:20-16:40	An Interactive Optimization Scheme with High Resolution for Indoor Thermal Comfort and Energy Saving	Pan Lei, Jiangsu University, Zhenjiang	
8	16:40-17:00	The Effects of Transportation Cost and Container Capacity Constraints on the Multi-Item Replenishment Problem	Jen-Yen Lin, National Chiayi University, Chiayi City	
9	17:00-17:20	Dynamic Relative Robust Shortest Path Problem	Bo Xu, University of Shanghai for Science and Technology, Shanghai	
10	17:20-17:40	Real-Time Pricing Decision Based on Multi-Leader-Follower Game in Smart Grid	Shaojian Qu, University of Shanghai for Science and Technology, Shanghai	

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Variational Inequalities with Applications				
1	14:00-14:20	A Class of Dynamical Multi-objective Optimization	Xing Wang, Jiangxi University of Finance and Economics, Nanchang	Organizers: Nanjing Huang, Sichuan University Yibin Xiao, University of Electronic Science and Technology of China Chair: Nanjing Huang
2	14:20-14:40	Degree Theory and Solution Existence of Set-Valued Vector Variational Inequalities in Reflexive Banach Spaces	Renyou Zhong, Guangxi Normal University, Guilin	
3	14:40-15:00	A New Extragradient-type Method for Mixed Variational Inequalities	Ming Zhu, Guangxi University for Nationalities, Nanning	
4	15:00-15:20	A Projection Iterative Algorithm for Strong Vector Equilibrium Problem	Sanhua Wang, Nanchang University, Nanchang	
5	15:20-15:40	A System of Time-Dependent Hemivariational Inequalities with Volterra Integral Terms	Yibin Xiao, University of Electronic Science and Technology of China, Chengdu	
	15:40-16:00	Coffee Break		

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Variational Inequalities with Applications				
6	16:00-16:20	Existence and Stability of Solutions for a Class of Generalized Vector Equilibrium Problems	Yu Han, Sichuan University, Chengdu	Organizers: Nanjing Huang, Sichuan University Yibin Xiao, University of Electronic Science and Technology of China Chair: Yibin Xiao
7	16:20-16:40	A Class of Global Fractional-order Projective Dynamical Systems with Delay and Perturbation	Zengbao Wu, Sichuan University, Chengdu	
8	16:40-17:00	Semicontinuity of Approximate Solution Mappings for Parametric Generalized Weak Vector Equilibrium Problems	Qilin Wang, Chongqing Jiaotong University, Chongqing	
9	17:00-17:20	Non-smooth Vector Optimization and Vector Variational Inequalities Using Convexificators	Yadvendra Singh, Banaras Hindu University, Varanasi	
10	17:20-17:40	Semidefinite Quasiconvex Programming	Tamjav Bayartugs, Mongolian University of Science and Technology, Ulaanbaatar	

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 5 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization Models and Practical Algorithms				
1	14:00-14:20	Fuzzy Multi-objective Programming Approach for Production and Transportation Problems in Sustainable Supply Chain Network	Xinbo Zhang, Central South University, Changsha	Organizer and Chair: Zhong Wan, Central South University
2	14:20-14:40	A New Non-monotone Spectral Residual Method for Non-smooth Nonlinear Equations	Shuai Huang, Central South University, Changsha	
3	14:40-15:00	Bi-level Programming Approach to Optimal Decision-making for VMI Problems under Random Demand	Yinxue Li, Central South University, Changsha	
4	15:00-15:20	Determination of Optimal Weights and Parameterized Integer Programming Approach in Multi-criteria Representatives Apportionment Problems	Ming Chen, Central South University, Changsha	
5	15:20-15:40	Multi-objective Programming Approach for Optimizing Regional Urban Mining in China	Hao Wu, Central South University, Changsha	
	15:40-16:00	Coffee Break		

Afternoon, December 12, 2015 (Saturday), 2 nd Floor, No. 5 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization Models and Practical Algorithms				
6	16:00-16:20	A Two-stage Optimization Approach for Vehicle Routing Problem with Time Windows	Xiao Hu, Central South University, Changsha	Organizer and Chair: Zhong Wan, Central South University
7	16:20-16:40	Optimal Decision-making for Online and Offline Retailers Under BOPS Mode	Xingran Chen, Central South University, Changsha	
8	16:40-17:00	A Generalized Partly Augmented Lagrange Method for Solving Mathematical Programs with Equilibrium Constraints	Yu Chen, Guangxi Normal University, Guilin	
9	17:00-17:20	Optimal Strategy of Airline and HSR in Multi-modal Hub Network	Jing Zhang, Guangzhou Civil Aviation College, Guangzhou	
10	17:20-17:40	Splitting Method for the p-Elastic Net	Souhail Chebbi, King Saud University, Riyadh	

Afternoon, December 12, 2015 (Saturday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Heuristic Algorithms and Applications				
1	14:00-14:20	A Linear Optimal Feedback Control for Producing 1,3-propanediol via Microbial Fermentation	Lei Wang, Dalian University of Technology, Dalian	Chair: Cedric Yiu
2	14:20-14:40	Improved Cuckoo Search Algorithm for Numerical Function Optimization	Jianjun Liu, China University of Petroleum, Beijing	
3	14:40-15:00	Improved Artificial Bee Colony Algorithm with Two New Search Equations	Ming Zhao, Shenyang Jianzhu University, Shenyang	
4	15:00-15:20	Binary Artificial Algae Algorithm for Multidimensional Knapsack Problems	Xuedong Zhang, Anhui University of Finance and Economics, Bengbu	
5	15:20-15:40	Alternating Direction Method of Multipliers For Separable Convex Optimization of Real Functions in Complex Variables	Lu Li, Shanghai University of Engineering Science, Shanghai	
	15:40-16:00	Coffee Break		
Afternoon, December 12, 2015 (Saturday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Heuristic Algorithms and Applications				
6	16:00-16:20	A Hybrid Tabu Search and ILP Heuristic for the Maximum Total Flow with Flexible Arc Outages	Qipeng Xu, Wuhan University of Technology, Wuhan	Chair: Cedric Yiu
7	16:20-16:40	Decomposition-Based Multi-Objective Firefly Algorithm for RFID Network Planning with Uncertainty	Chuanxin Zhao, Anhui Normal University, Wuhu	
8	16:40-17:00	Multi-objective Structural Optimization of an Aerospace Assembly Based on Orthogonal Experimental Design	Lei Liu, China Astronaut Research and Training Center, Beijing	
9	17:00-17:20	Preventive Replacement Policies for Aging Failure and Third-part Damage	Xufeng Zhao, Qatar University, Doha	
10	17:20-17:40	Global and Parametric Optimization Approaches to the Solow Growth Model	Darkhijav Bayanjargal, National University of Mongolia, Ulaanbaatar	
	18:00-19:30	Banquet		1 st Floor, Yuning Hall of International Academic Exchange Center

Morning, December 13, 2015 (Sunday)			
Plenary Speeches, 2nd Floor, Main Meeting Room of International Academic Exchange Center			
9:00-10:00	Plenary Speech	Prof. Franco Giannessi	Chair: Kok Lay Teo
10:00-11:00	Plenary Speech	Prof. Panos Pardalos	Chair: Adil Bagirov
11:00-11:20	Coffee Break		
11:20-12:20	Plenary Speech	Prof. Sree Hari Rao	Chair: Ryan Loxton
12:20-14:00	Lunch	1 st Floor, Yunying Hall of International Academic Exchange Center	

Afternoon, December 13, 2015 (Sunday), 1 st Floor, No. 1 Meeting Room of International Academic Exchange Center				
Parallel Session: Non-smooth Optimization and Nonlinear Optimization				
1	14:00-14:20	Semi-smooth Newton's Methods: 25 Years in Progress	Jie Sun, Curtin University, Perth	Chair: Donghui Li
2	14:20-14:40	Non-smooth DC Programming Approach to Clusterwise Linear Regression	Adil Bagirov, Federation University Australia, Ballarat	
3	14:40-15:00	A System of Non-smooth Equations Solver Based upon Subgradient Method	Qiang Long, Southwest University of Science and Technology, Mianyang	
4	15:00-15:20	A CG-PC Algorithm for Solving Ill-conditioned Trust Region Problem	Su Zhang, Nankai University, Tianjin	
5	15:20-15:40	A Hybrid Grey Wolf Optimizer and Genetic Algorithm for Minimizing Potential Energy Function	Mohamed Tawhid, Thompson Rivers University, Kamloops	
	15:40-16:00	Coffee Break		
Afternoon, December 13, 2015 (Sunday), 1 st Floor, No. 1 Meeting Room of International Academic Exchange Center				
Parallel Session: Non-smooth Optimization and Nonlinear Optimization				
6	16:00-16:20	Algorithms for Infinite Quadratic Programming in L_p Spaces	Soon-Yi Wu, National Cheng Kung University, Tainan, Taiwan	Chair: Xiaojiao Tong
7	16:20-16:40	Existence of Non-linear Bi-level Programming Problem with Varying Parameters	Mrimal Jana, Indian Institute of Technology Kharagpur, Kharagpur	
8	16:40-17:00	An Interior-point Primal-dual Method with Rapid Infeasibility Detection for Nonlinear Program	Xin Liu, Hebei University of Technology, Tianjin	
9	17:00-17:20	A New Technique to Choose the Penalty Parameter and the Lagrangian Multipliers in the Augmented Lagrangian Method	Jie Tao, University of Shanghai for Science and Technology, Shanghai	
10	17:20-17:40	Socially Optimization of Spectrum Reservation Strategy with Random Retrial Feedback in CRNs	Shunfu Jin, Yanshan University, Qinhuangdao, China	

Afternoon, December 13, 2015 (Sunday), 1 st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Computational Techniques in Financial Engineering				
1	14:00-14:20	Smoothing Power Penalty Method for Nonlinear Complementarity Problems	Boshi Tian, Hunan University, Changsha	Organizers: Song Wang, Curtin University Shuhua Zhang, Tianjin University of Finance and Economics Kai Zhang, Shenzhen University Chair: Song Wang
2	14:20-14:40	Convergence Rates of Trinomial Tree Methods for Option Pricing with Regime-switching Models	Jingtang Ma, Southwestern University Of Finance and Economics, Chengdu	
3	14:40-15:00	Numerical Algorithms for Convex Composite Optimization with Applications	Yaohua Hu, College of Mathematics and Statistics, Shenzhen	
4	15:00-15:20	On Power Penalty Methods for Linear Complementarity Problems Arising from American Option Pricing	Zhe Sun, Jiangxi Normal University, Nanchang	
5	15:20-15:40	Numerical Valuation of Options on Zero-coupon Bonds with a Fitted Finite Volume Method	Kai Zhang, Shenzhen International Business School, Shenzhen	
	15:40-16:00	Coffee Break		

Afternoon, December 13, 2015 (Sunday), 1 st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization Applications				
6	16:00-16:20	Operational Planning of Electric Vehicles under Mode of Charging-Discharging-Storage Integrated Station	Mingyong Lai, Changsha University of Science and Technology, Changsha	Organizer and Chair: Hongming Yang
7	16:20-16:40	Distributed Portfolio Pricing Strategy Research of Charging Stations Based on Demand Response	Duo Qiu, Hunan University, Changsha	
8	16:40-17:00	Estimation of Extreme Value Vehicle Loads Based on MGPD Model	Deru Li, Changsha University of Science and Technology, Changsha	
9	17:00-17:20	Global Behaviors Analysis for Tryptophan Operon System with Bounded Random Noise	Xi Zhu, Tianjin University of Technology, Tianjin	
10	17:20-17:40	Optimal Allocation Method of Power Battery for Battery Swapping Station	Liang Liang, Changsha University of Science and Technology, Changsha	

Afternoon, December 13, 2015 (Sunday), 2 nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Novel Control and Optimization Techniques				
1	14:00-14:20	Optimizing the Intermodal Transportation of Emergency Medical Supplies Using Balanced Fuzzy Clustering	Junhu Ruan, Northwest A&F University, Yangling	Organizers: Peng Shi, University of Adelaide Cheng-Chew Lim, University of Adelaide Xiaojun Zhou, Central South University Chair: Cheng-Chew Lim
2	14:20-14:40	Predictive Sliding Mode Control for Discrete-Time Systems with Input Rate Constraint	Rong Li, Nanjing University of Aeronautics and Astronautics, Nanjing	
3	14:40-15:00	New Delay-dependent Robust H-infinity Control for Uncertain Stochastic Time-delay Systems	Xuhuan Xie, Harbin University of Science and Technology, Harbin	
4	15:00-15:20	A Kind of New Consensus Protocol for Two-Dimension Multi-Agent Systems	Yibo Zhang, Zhejiang Sci-Tech University, Hangzhou	
5	15:20-15:40	The Asymptotical Stability for Neutral Stochastic Partial Differential Equations with Unbounded Distributed Delays and Poisson Jump	Huabin Chen, Nanchang University, Nanchang	
	15:40-16:00	Coffee Break		
Afternoon, December 13, 2015 (Sunday), 2 nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Novel Control and Optimization Techniques				
6	16:00-16:20	Dynamic Optimization Approach: A Novel Algorithm Framework for Global Optimization	Xiaojun Zhou, Central South University, Changsha	Organizers: Peng Shi, University of Adelaide Cheng-Chew Lim, University of Adelaide Xiaojun Zhou, Central South University Chair: Xiaojun Zhou
7	16:20-16:40	The Optimal Experiment Design of a Class of Industrial Nonlinear Dynamic System with State Delay	Yiting Liang, Central South University, Changsha	
8	16:40-17:00	Real-Time Prediction of Operation Resistance in Submerged Arc Furnace Based on Just-in-Time Approach	Pei Li, Central South University, Changsha	
9	17:00-17:20	Tracking Control for Quad-Rotor Unmanned Aerial Vehicles with Wind Disturbances	Jing Xu, Nanjing University of Science and Technology, Nanjing	
10	17:20-17:40	Multi-agent Formation Control System of Limited Sensing Range and Communication Capability	Hongjun Yu, The University of Adelaide, Adelaide	

Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Control Theory with Applications				
1	14:00-14:20	An Iterative Algorithm Based on Positive Operator for Solving Continuous-time Stochastic Lyapunov Equations	Xiaomei Wang, Shenzhen Graduate School, Harbin Institute of Technology, Shenzhen	Organizer and Chair: Qingling Zhang, Northeastern University
2	14:20-14:40	Robust Utility Maximization Problem	Jamsranjav Enkhbayar, National University of Mongolia, Ulaanbaatar	
3	14:40-15:00	Data-based Linear Quadratic Optimal Control for Singular Discrete-time Systems	Fengjun Wang, Northeastern University, Shenyang	
4	15:00-15:20	Lyapunov Method for Stability of Descriptor Second-order and High-order Systems	Guoshan Zhang, Tianjin University, Tianjin	
5	15:20-15:40	Observer Design for Singularly Perturbed Systems and its Application to Fault Estimation	Dan Liu, Peking University, Beijing	
	15:40-16:00	Coffee Break		
Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Control Systems				
6	16:00-16:20	Mean Square Exponential Stability of Nonlinear Impulsive Switched Stochastic Systems with Stable and Unstable Subsystems	Mengyi Shi, China University of Petroleum, Beijing	Chair: Honglei Xu
7	16:20-16:40	Discussing on the Relationship Between the Stabilities of two Different Stochastic Differential Equations via the Theory of Weak Solution	Yuyun Zhao, China University of Petroleum, Beijing	
8	16:40-17:00	Derivative Feedback Guaranteed Cost Control for a Class of Descriptor Biological Systems	Yi Zhang, University of Technology, Shenyang; Nanjing University of Science and Technology, Nanjing	
9	17:00-17:20	The Asymptotic Properties of Differential Systems with Impulsive Effects Suffered by Logic Choice	Xin Liu, China University of Petroleum, Beijing	
10	17:20-17:40	Exponential Stability and L2-gain Analysis for Discrete-Time Switched Systems With Time-Varying Delays	Honglei Xu, Curtin University, Perth	

Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 5 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization and Pattern Recognition				
1	14:00-14:20	Knowledge of Multi-source Heterogeneous Information Resources Based on Ontology Construction Method	Jianhou Gan, Yunnan Normal University, Kunming	Organizer and Chair: Wanquan Liu, Curtin University
2	14:20-14:40	Approximation Algorithms for Nonnegative Polynomial Optimization Problems Over Unit Spheres	Mohammed Aeyed M Alqahtani, Curtin University, Perth	
3	14:40-15:00	A Framework for Ranking and KNN Queries in a Probabilistic Skyline Model	Jianhou Gan, Yunnan Normal University, Kunming	
4	15:00-15:20	Output Feedback Stabilization for Networked Control Systems with Partly Unknown Transition Probabilities	Yuan Li, University of Technology, Shenyang; and Tianjin University, Tianjin	
5	15:20-15:40	Determination of Meniscus Shape in the Continuous Steel Caster	Nathnarong Khajohnsaksumeth, Mahidol University, Bangkok	
	15:40-16:00	Coffee Break		
Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 5 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization in Image and Signal Processing				
6	16:00-16:20	Homogeneous Multilinear Function on Hypergraph Cliques	Qingsong Tang, College of Sciences, Shenyang	Chair: Bin Li
7	16:20-16:40	3-D Filter Bank Wavelet Video Coding Using Face Center Cubic Sampling Geometry	Wing-Kuen Ling, Guangdong University of Technology, Guangzhou	
8	16:40-17:00	Necessary and Sufficient Condition for Having Incompatible Set of Maximally Decimated Matrices with Applications to Image and Video Non-uniform Decomposition	Wing-Kuen Ling, Guangdong University of Technology, Guangzhou	
9	17:00-17:20	The Analysis for Video Data Based on Ant Colony Algorithms	Shuangyun Xing, Shenyang Jianzhu University, Shenyang	
10	17:20-17:40	Rapid Control for the Transmission of Ebola Virus Disease	Shuangyun Xing, Shenyang Jianzhu University, Shenyang	

Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Stochastic Control Systems and Applications				
1	14:00-14:20	Least Squares Solution for Discrete Time Nonlinear Stochastic Optimal Control Problem	Sie Long Kek, Universiti Tun Hussein Onn Malaysia, Batu Pahat	Chair: Gerhard-Wilhelm Weber
2	14:20-14:40	Constrained Model Predictive Control for Markov Jump System with Disturbances	Yanyan Yin, Jiangnan University, Wuxi	
3	14:40-15:00	Probabilistic Controller Design for Stochastic Systems by Scenario Optimization	Yanyan Yin, Jiangnan University, Wuxi	
4	15:00-15:20	Adaptive Scheduling H-infinity Control for Nonlinear Stochastic Systems with Nonhomogeneous Process	Yanqing Liu, Jiangnan University, Wuxi	
5	15:20-15:40	Fault Detection of Stochastic Systems	Liqiang Jin, Jiangnan University, Wuxi	
	15:40-16:00	Coffee Break		
Afternoon, December 13, 2015 (Sunday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Stochastic Control Systems and Applications				
6	16:00-16:20	Finite Time Filtering of Markov Jumping Systems	Lijie Zhu, Jiangnan University, Wuxi	Chair: Yanyan Yin
7	16:20-16:40	Poles Assignment for Periodic Second-order Systems	Lingling Lv, North China University of Water Resources and Electric Power, Zhengzhou	
8	16:40-17:00	Reference Tag Supported RFID Tracking Using Robust Support Vector Regression and Kalman Filter	Changzhi Wu, Curtin University, Perth	
9	17:00-17:20	Optimal Control of Stochastic Dynamics Under Regime Switches, Paradigm Shifts and Delayed - Applications in Economics	Gerhard-Wilhelm Weber, Middle East Technical University, Ankara	
10	17:20-17:40	Stabilization of Descriptor Markovian Jump System with Two Markov Chains	Qingling Zhang, Northeastern University, Shenyang	
	18:00-19:30	Dinner		1st Floor, Yunying Hall of International Academic Exchange Center

Morning, December 14, 2015 (Monday), 1st Floor, No. 1 Meeting Room of International Academic Exchange Center

Parallel Session: Optimization Techniques

1	9:00-9:20	Linear Rate Convergence of the Alternating Direction Method of Multipliers for Convex Composite Quadratic and Semi-Definite Programming	Liwei Zhang, Dalian University of Technology, Dalian.	Chair: Lei Wang
2	9:20-9:40	Sensor Optimization Placement for Health Monitoring Based on Fault Detectability and Trackability	Xiaodong Tan, Officers College of PAP, Chengdu	
3	9:40-10:00	STA-based Forecast Combination Model of Inflation	Lilin Zhu, Central South University, Changsha	
4	10:00-10:20	Global Optimization Approach to Nonzero Sum Three-person Game	Batbileg Sukhee, National University of Mongolia, Ulaanbaatar	
	10:20-10:40	Coffee Break		

Morning, December 14, 2015 (Monday), 1st Floor, No. 1 Meeting Room of International Academic Exchange Center

Parallel Session: Dynamic Systems and Optimal Control

5	10:40-11:00	Robust Convergence Analysis of Iterative Learning Control for Impulsive Riemann-Liouville Fractional-Order Systems	Jinrong Wang, Guizhou University, Guiyang	Organizer and Chair: Wei Wei
6	11:00-11:20	On the Fractional Order Iterative Learning Control with Randomly Varying Trial Lengths	Shengda Liu, Guizhou University, Guiyang	
7	11:20-11:40	A Note on Quadratic Integral Equations Involving Erdélyi-Kober Fractional Integrals in Hölder Spaces	Shan Peng, Guizhou University, Guiyang	
8	11:40-12:00	A High Order Schema for the Numerical Solution of the Impulsive Fractional Ordinary Differential Equations	Junying Cao, Guizhou Minzu University, Guiyang	
9	12:00-12:20	Optimal Control Problems Arising from a Sterilization Process for Packaged Foods	Wei Wei, Guizhou Minzu University, Guiyang	

Morning, December 14, 2015 (Monday), 1st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Management Science				
1	9:00-9:20	Distributed Fault-tolerant Consensus Tracking For Networked Non-identical Motors	Han Wu, Hunan University of Technology, Zhuzhou	Chair: Benchawan Wiwatanapataphee
2	9:20-9:40	Financing Mode Innovation of Internet Finance Platform Based on Double Principal Agent	Mei Yang, Central South University, Changsha	
3	9:40-10:00	Bicriteria Portfolio Optimization Problem under the Minimax Rule	Carisa K.W. Yu, Hang Seng Management College, Hong Kong	
4	10:00-10:20	Sparse and Robust Markowitz Mean-Variance Portfolio Selection Problem	Zhifeng Dai, Changsha University of Science and Technology, Changsha	
	10:20-10:40	Coffee Break		
Morning, December 14, 2015 (Monday), 1st Floor, No. 2 Meeting Room of International Academic Exchange Center				
Parallel Session: Management Science				
5	10:40-11:00	Numerical Results of European Call Option with Transaction Costs Under Fractional Brownian Motion and Mixed Fractional Brownian Motion	Francisca Angkola, Curtin University, Perth	Chair: Yanju Zhou
6	11:00-11:20	Applications of Stochastic Differential Equations in Asset Pricing and Management	Yonghong Wu, Curtin University, Perth	
7	11:20-11:40	A Penalty PALM Method for Sparse Portfolio Selection Problems	Li Yang, Dalian University of Technology, Dalian	
8	11:40-12:00	Optimal Ordering Model of Two-product by Loss-averse Retailer with Information Updating	Zhen Shen, Central South University, Changsha	
9	12:00-12:20	A Study on Institutional Investors Selecting Better Stocks: Evidence from SEOs in China	Shaoyong Lai, Southwestern University of Finance and Economics, Chengdu, China	

Morning, December 14, 2015 (Monday), 2nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Modelling and Optimization in Industrial Engineering				
1	9:00-9:20	Dynamic Pricing with Reference Effects Based on a Finite Memory Window	Wenjie Bi, Central South University, Changsha	Chair: Yonggang Li
2	9:20-9:40	Multi-objective Dynamic Optimization of a Nonlinear Switched Time-delay System in Fed-batch Process	Chongyang Liu, Shandong Institute of Business and Technology, Yantai	
3	9:40-10:00	An Empirical Study of the Influence of the Player's Attributes and the Advertising Attributes on the Impact of the In-game-ads Clicks	Zhenlu Zhang, Central South University, Changsha	
4	10:00-10:20	A New Method for Fundamental Matrix Estimation Based on Continuous-Time Optimization	Qiang Fu, Beihang University, Beijing	
	10:20-10:40	Coffee Break		

Morning, December 14, 2015 (Monday), 2nd Floor, No. 3 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimal Control Computation				
5	10:40-11:00	Optimal Control of Time-delay Systems Based on Non-uniform Parameterization	Qinqin Chai, Fuzhou University, Fuzhou	Chair: Changzhi Wu
6	11:00-11:20	H_∞ Control for Networked Control Systems via Free-matrix-based Integral Inequality	Shenping Xiao, Hunan University of Technology, Zhuzhou	
7	11:20-11:40	Sparse Feedback in Linear Control Systems with l_0 -Moreau-Yoshida Regularization	Wah June Leong, University Putra Malaysia, Serdang	
8	11:40-12:00	A Novel Robust Real-time Optimization for Blending Operation of Alumina Production	Lingshuang Kong, Hunan University of Technology, Zhuzhou	
9	12:00-12:20	Radial expansion-contraction control of multi-agent systems relative to target group	Yingjing Shi, University of Electronic Science and Technology of China, Chengdu	

Morning, December 14, 2015 (Monday), 2nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Modelling and System Identification				
1	9:00-9:20	Containment of Second-order Heterogeneous Nonlinear Multi-agent Systems	Chengjie Xu, Hunan University of Technology, Zhuzhou	Chair: Wing-Kuen Ling
2	9:20-9:40	Delayed Model for HIV Infection with Drug Effects	Saroj Kumar Sahani, South Asian University, New Delhi	
3	9:40-10:00	System Identification and Model Predictive Control of Vortex Shedding Behind a Rotating Cylinder	Shengze Cai, Zhejiang University, Hangzhou	
4	10:00-10:20	Nonlinear Separation in the Image Space with Constrained Optimization	Jafar Zafarani, University of Isfahan Sheikhabaee University, Isfahan	
	10:20-10:40	Coffee Break		

Morning, December 14, 2015 (Monday), 2nd Floor, No. 4 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimization Applications				
5	10:40-11:00	Bi-level Multi-objective Optimization Model for Integrated Resort/Urban Logistics	Shaojian Qu, Harbin Institute of Technology, Harbin	Chair: Weijun Zhou
6	11:00-11:20	Distributed Maximum Likelihood Estimation for Dependent Quantized Data with Missing	Hongzeng Wang, Northeastern University, Shenyang	
7	11:20-11:40	Optimal Harvesting of Two Symbiotic Populations in Toxin Environment	Shuanghong Zhang, Northeastern University, Shenyang	
8	11:40-12:00	LS-SLAM: SLAM with Lebesgue Sampling	Tao Han, Zhejiang University, Hangzhou	
9	12:00-12:20	The Impact of Decision Right Allocation on Performance of IoT-based Virtual Enterprise: Evidence from China	Zhiping Zhou, Hefei University of Technology, Hefei	

Morning, December 14, 2015 (Monday), 2nd Floor, No. 5 Meeting Room of International Academic Exchange Center					
Parallel session: Dynamic Systems and Control					
1	9:00-9:20	A Family of Order 1 to 4 Compact Finite Difference Formulation for Three-space Dimensional Non-linear Poisson Equations in Spherical Polar Coordinate	Navnit Jha, Akbar Bhwan, Chanakyapuri, New Delhi		Chair: Yi Zhang
2	9:20-9:40	Estimation and Consensus Control for Networked Systems	Zhongmei Wang, Shandong University, Jinan		
3	9:40-10:00	Robust Synchronous Control of Multi-motor Integrated with Artificial Potential Field and Sliding Mode Variable Structure	Jing He, Hunan University of Technology, Zhuzhou; National University of Defense Technology, Changsha		
4	10:00-10:20	The Sharp Well-posedness of Quasi-linear Wave Equation	Huali Zhang, Fudan University, Shanghai		
	10:20-10:40	Coffee Break			

Morning, December 14, 2015 (Monday), 2nd Floor, No. 5 Meeting Room of International Academic Exchange Center					
Parallel Session: Optimization in Image and Signal Processing					
5	10:40-11:00	On the Sparse Design of Acoustic Beamformers	Cedric K.F. Yiu, The Hong Kong Polytechnic University, Hong Kong		Chair: Yufei Yang
6	11:00-11:20	A Kernel-Free Proximal Quadratic Surface Support Vector Machine for Semi-supervised Binary Classification	Xin Yan, College of Science, Shanghai		
7	11:20-11:40	A New Method for Denoising Images Based on Weights Optimization	Bo Sun, Changsha University of Science and Technology, Changsha		
8	11:40-12:00	A Reduced Complexity Zero-forcing Beamformer Design for Multiuser MIMO Systems with a Circular Base Station in Rural Australian	Bin Li, Curtin University, Perth		
9	12:00-12:20				

Morning, December 14, 2015 (Monday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimal Control Computation				
1	9:00-9:20	On a New Computational Strategy for Time-delay Optimal Control Problem	Changjun Yu, Shanghai University, Shanghai	Chair: Cheng-Chew Lim
2	9:20-9:40	A Computational Approach to Optimal Control Problems with Almost Smooth Controls	Ying Zhang, Zhejiang Normal University, Jinhua	
3	9:40-10:00	Optimal Homing Trajectory Design for Parafoil Systems Using Sensitivity Analysis Approach	Haiyan Liang, Zhejiang University, Hangzhou	
4	10:00-10:20	Computational Optimal Control of Water Hammer Equations	Tehuan Chen, Zhejiang University, Hangzhou	
	10:20-10:40	Coffee Break		
Morning, December 14, 2015 (Monday), 2nd Floor, No. 6 Meeting Room of International Academic Exchange Center				
Parallel Session: Optimal Control Computation				
5	10:40-11:00	Optimal Control for Zinc Electrowinning Process Depending on Electricity Variation	Shijun Deng, Central South University, Changsha	Chair: Changjun Yu
6	11:00-11:20	Multi-timescale and Multi-Objective Reactive Power Optimization Control of Dispersed Wind Farms Based on Power Forecasting	Bo Zhang, Shenyang University of Technology, Shenyang	
7	11:20-11:40	Financing Decisions for Confirming Warehouse with Core Enterprises Buyback Guarantee	Zhen Ma, Central South University, Changsha	
8	11:40-12:00	Research on Layered Coordinated Optimization Control of Micro-grid Including Energy Storage System and Heat Storage System	Yan Ning, Shenyang University of Technology, Shenyang	
9	12:00-12:20	Implicit Integration and Sensitivity Analysis for Optimal Control Involving Index-1 Differential-algebraic Equations	Canghua Jiang, Hefei University of Technology, Hefei	
	12:20-14:00	Closing Ceremony and Lunch		1st Floor, Yuning Hall of International Academic Exchange Center