

## CONFERENCE PROGRAMME

1st August 2018 (Wednesday)

**Ground Floor @ DoubleTree by Hilton Hotel Malacca**

19:00 – 21:00 Pre-registration

2nd August 2018 (Thursday)

**Ballroom A @ DoubleTree by Hilton Hotel Malacca**

08:00 – 08:45 Registration

08:45 – 09:00 Opening Addresses

09:00 – 09:50 **PLENARY I**  
CPS Driven Control System  
**Tianyou Chai (Northeastern University, P. R. CHINA)**  
(Chair by Kok Lay Teo)

10:00 – 10:50 **PLENARY II**  
Deterministic Lipschitz Global Optimization Algorithms and Their Comparison with Metaheuristics  
**Yaroslav D. Sergeyev (Università della Calabria, ITALY)**  
(Chair by Jie Sun)

10:50 – 11:30 Refreshments and Photography Session

**CONTRIBUTED SESSION I-A**  
(Chair by Chongyang Liu)

11:30 – 11:50 Robust Parameter Estimation for Multistage Time-delay Systems with Noisy Measurement Data  
**Chongyang Liu (Shandong Technology and Business University, P. R. CHINA)**

11:50 – 12:10 Optimal Switching Signal Design with a Cost on Switching Action  
**Wei Xu (Shanghai University, P. R. CHINA)**

12:10 – 12:30 A Time-Scaling Technique for Time-Delay Switched Systems  
**Linna Li (Shanghai University, P. R. CHINA)**

12:30 – 14:30 LUNCH

14:30 – 15:20 **PLENARY III**  
Analysis and Optimization of Integrative Models – Control Towers and Their Role within a Multilayered Comprehensive Approach  
**Stefan Pickl (Universität der Bundeswehr München, GERMANY)**  
(Chair by Lai Soon Lee)

**CONTRIBUTED SESSION II-A**  
(Chair by Tao Ren)

15:20 – 15:40 Calibration of a Laser Rangefinder and a Camera based on Optimization Solution  
**Yi An (Dalian University of Technology, P. R. CHINA)**

15:40 – 16:00 A New Pipe Routing Method for Aero-engines based on Genetic Algorithm  
**Tao Ren (Northeastern University, P. R. CHINA)**

16:00 – 16:20 Refreshments

**CONTRIBUTED SESSION III-A**  
(Chair by Bin Li)

16:20 – 16:40 Joint Transceiver Optimization for Wireless Information and Energy Transfer in Non-Regenerative MIMO Relay Systems  
**Bin Li (Sichuan University, P. R. CHINA)**

16:40 – 17:00 On the Optimization of Beamformer Systems and Configurations  
**Ka-fai Cedric Yiu (The Hong Kong Polytechnic University, P. R. CHINA)**

17:00 – 17:20 A Hyper-Parameterization Approach to Sparse Reconstruction for Speech Applications  
**Siow Yong Low (University of Southampton Malaysia Campus, MALAYSIA)**

3rd August 2018 (Friday)

<b>Ballroom A @ DoubleTree by Hilton Hotel Malacca</b>	
09:00 – 09:50	<b>PLENARY IV</b> Hamilton-Jacobi-Bellman Equations in Financial Engineering and Their Numerical Solution <b>Song Wang (Curtin University, AUSTRALIA)</b> (Chair by Jan-Joachim Rückmann)
10:00 – 10:50	<b>PLENARY V</b> Nonconvex Sparse Optimization by DC Algorithm <b>Akiko Takeda (The University of Tokyo, JAPAN)</b> (Chair by Masao Fukushima)
10:50 – 11:10	<b>Refreshments</b>
<b>CONTRIBUTED SESSION IV-A</b> (Chair by Wenxun Xing)	
11:10 – 11:30	On Solving Multistage Stochastic Variational Inequalities <b>Jie Sun (Curtin University, Australia)</b>
11:30 – 11:50	Fast Algorithms for Large Scale Generalized Distance Weighted Discrimination <b>Xin Yee Lam (National University of Singapore, SINGAPORE)</b>
11:50 – 12:10	Max-type Objective Functions: A Smoothing Procedure and Strongly Stable Stationary Points <b>Jan-J. Rückmann (University of Bergen, NORWAY)</b>
12:10 – 12:30	Robust Sensitive Analysis for Linear Programming <b>Wenxun Xing (Tsinghua University, P. R. CHINA)</b>
12:30 – 14:30	<b>LUNCH</b>
14:30 – 15:20	<b>PLENARY VI</b> Research Progress and Standardization of APC-O Technology <b>Hongye Su (Zhejiang University, P. R. CHINA)</b> (Chair by Siow Yong Low)
<b>CONTRIBUTED SESSION V-A</b> (Chair by Hailiang Yang)	
15:20 – 15:40	A Constraint-free Approach to Optimal Reinsurance <b>Hailiang Yang (The University of Hong Kong, P. R. CHINA)</b>
15:40 – 16:00	Hysteretic Phenomenon in the Stochastic Volatility Process <b>Qingzheng Wang (The Hong Kong Polytechnic University, P. R. CHINA)</b>
16:00 – 16:20	<b>Refreshments</b>
<b>CONTRIBUTED SESSION VI-A</b> (Chair by Isao Takami)	
16:20 – 16:40	Replacement Scheduling of Flood Control Infrastructures from the View of Practical Implementation <b>Isao Takami (Nanzan University, JAPAN)</b>
16:40 – 17:00	Post-disaster Multi-period Road Network Repair: Work Scheduling and Relief Logistics Optimization <b>Shuanglin Li (Hunan Normal University, P. R. CHINA)</b>
17:00 – 17:20	Dynamic Optimization for Robust Path Planning of Horizontal Oil Well <b>Zhaohua Gong (Shandong Technology and Business University, P. R. CHINA)</b>

<b>CONFERENCE BANQUET</b> <b>TOSCA @ DoubleTree by Hilton Hotel Malacca</b>	
19:20 – 19:30	<b>Arrival of Guests</b>
19:30 – 21:30	<b>Buffet Dinner</b>
20:30 – 21:00	<b>Welcome Addresses</b>
<b>Dress Code: Smart Casual</b>	

4th August 2018 (Saturday)

<i>Ballroom A @ DoubleTree by Hilton Hotel Malacca</i>	
<b>SPECIAL SESSION: OPTIMIZATION WITH FINANCIAL APPLICATIONS (Chair by Nan-jing Huang)</b>	
09:00 – 09:20	<b>INVITED SPEECH</b> $\varepsilon$ -fractional Wishart Process and Its Application in Pricing Volatility Swaps <b>Jia Yue (Southwestern University of Finance and Economics, P. R. CHINA)</b>
09:20 – 09:40	Equilibrium Prices for Volatility Derivatives under Multi-factor Volatility with Lévy Jumps <b>Ben-zhang Yang (Sichuan University, P. R. CHINA)</b>
09:40 – 10:00	Robust Optimization Model for Uncertain Multi-objective Linear Programs <b>Lei Wang (Southwestern University of Finance and Economics, P. R. CHINA)</b>
10:00 – 10:20	The Optimal R&D Investment of a Firm in a Regime-switching Environment <b>Ming-Hui Wang (Sichuan University, P. R. CHINA)</b>
10:20 – 10:40	A Class of Bayesian-Nash Social Equilibrium Models for Cybersecurity Investment with Imperfect Information <b>Ying-yu Qi (Nanyang Technological University, SINGAPORE)</b>
10:40 – 11:00	<b>Refreshments</b>
<b>CONTRIBUTED SESSION VII-A (Chair by Wendy Shin Yie Ling)</b>	
11:00 – 11:20	Estimation of Sparse Graphical Time Series Models <b>Dorothy K. H. Chung (The Hong Kong Polytechnic University, P. R. CHINA)</b>
11:20 – 11:40	Historical Return Data for Fundamental Black-Litterman Model <b>Stephanie See Weng Su (Universiti Tun Hussein Onn MALAYISA)</b>
11:40 – 12:00	
12:00 – 14:00	<b>CLOSING REMARK AND LUNCH</b>