



Beijing Institute of Technology

## **2014 Workshop on Distributed Coordinated Control of Dynamic Multi-Agent Systems**

### **Sponsored by**

National Natural Science Foundation of China

IEEE CSS Beijing Chapter

Beijing Institute of Technology

### **Organized by**

State Key Laboratory of Intelligent Control and Decision of Complex Systems

School of Automation, Beijing Institute of Technology

Beijing Key Laboratory of Automatic Control Systems

**Chair:** Jie Chen, Wei Ren

**Date:** July 23-25, 2014

**Location:** Room 101, Postgraduate Building, Beijing Institute of Technology

2014 Workshop on Distributed Coordinated Control of Dynamic Multi-Agent Systems will be held on July 23-25 2014, at Beijing Institute of Technology, Beijing, China. The workshop will provide a forum for exchanging ideas, discussing frontiers and emerging advances related to Distributed Coordinated Control of Dynamic Multi-Agent Systems. The goal of this workshop is to bring together leading researchers and students who are working on or are interested in exploring novel approaches and innovative applications of multi-agent systems, facilitating personal interactions and discussions on various aspects of multi-agent systems. Flocking, formation, swarming, consensus, and communication of MAS are all within the scope of the workshop.

The workshop has been held for two years and attracts more and more researchers' attention. The workshop is free of charge and open for everyone interested. You and your colleagues are all warmly welcome. Free lunch and dinner are provided for all participants. We are looking forward to your attendance and will appreciate it if you could circulate this message to your members.

## AGENDA (Tentative)

Registration	
15:00-18:00 July 23	Location: Room 101, Postgraduate Building, Beijing Institute of Technology
08:00-11:00 July 24	Location: Room 101, Postgraduate Building, Beijing Institute of Technology
Opening Ceremony	
8:30-8:45, July 24	Jie Chen (Beijing Institute of Technology)
Session 1 Chair Jie Chen Co-Chair: Zhong-Ping Jiang	
8:45-9:45	Zhong-Ping Jiang (Polytechnic Institute of NYU) Cooperative Output-Feedback Control of Nonlinear Multi-agent Systems
9:45-10:45	Daizhan Cheng (Institute of Systems Science, AMSS) Potential Game of Multi-Agent Systems and its Applications
10:45-11:00	Tea Break
11:00-12:00	Jifeng Zhang (Institute of Systems Science, AMSS ) Quantized Data-Based Distributed Consensus of Multi-Agent Systems
12:00-13:00	Lunch
Session 2 Chair Lihua Xie Co-Chair: Ben M Chen	
13:30-14:30	Ben M Chen National University of Singapore Navigation and Control of Unmanned Aerial Vehicles in GPS-Denied Environments
14:30-15:30	Gary Feng (City University of Hong Kong) Output Consensus of Heterogeneous Linear Multi-agent Systems by Event-Triggered control
15:30-15:45	Tea Break
15:45-16:45	Lihua Xie (Nanyang Technological University) Distributed Constrained Optimal Control of Multi-agent Systems with Application
16:45-17:45	Yiguang Hong (Institute of Systems Science, AMSS) Distributed control and optimization based on internal model
Session3 Chair Wei Ren Co-Chair: Jie Huang	
8:30-9:30 July 25	Zongli Lin (Univ. of Virginia) Semi-Global Leader-Following Consensus of Multiple Linear Systems with Position and Rate Limited Actuators
9:30-10:30	Jie Huang Chinese University of Hong Kong Distributed Adaptive Attitude Control of Multiple Spacecraft Systems
10:30-10:45	Tea Break

10:45-11:45	Wei Ren (University of California, Riverside) Distributed Coordination of Networked Euler-Lagrange Systems
11:45-12:00	Jie Chen (Beijing Institute of Technology) Closing and evaluation
12:00-13:00	Lunch
<b>Free Discussion Seminar</b>	
13:30-16:30	Free discussion seminar

**Contact: Workshop Secretariat**

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