

学术报告会

时 间: 7月9日 (周五) 13:30-15:00

地 点: 电院群楼2-406会议室

Consensus of Linear Multi-Agent Systems via Event-Triggered Control

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Abstract:

In this talk, the output consensus problem for heterogeneous linear multi-agent systems via event-triggered control will be presented. First, the event-triggered control approach will be briefly reviewed. Then for the considered systems, a fully distributed event-triggered control strategy with an adaptive event-triggering mechanism is proposed. With this control strategy, output consensus of the system is achieved asymptotically with intermittent communication. The proposed event-triggering mechanism is independent of any global information. Moreover, the continuous monitoring issue can be avoided.

Biography:

Dr. Lu Liu received her Ph.D. degree in 2008 in the Department of Mechanical and Automation Engineering, Chinese University of Hong Kong, Hong Kong. From 2009 to 2012, she was an Assistant Professor in The University of Tokyo, Japan, and then a Lecturer in The University of Nottingham, United Kingdom. After that, she joined City University of Hong Kong, Hong Kong, where she is currently an Associate Professor. Her research interests are primarily in networked dynamical systems, control theory and applications and biomedical devices. She received the Best Paper Award (Guan Zhaozhi Award) of the 27th Chinese Control Conference in 2008, the Shimemura Young Author Award of the 11th Asian Control Conference in 2017, the Zhang Si-Ying Outstanding Youth Paper Award of the 30th Chinese Control and Decision Conference, and the Best Paper Award the 13th World Congress on Intelligent Control and Automation in 2018. She also received the President's Award in City University of Hong Kong in 2018, the Outstanding Supervisor Award in 2017, 2018 and 2019, and CityU Outstanding Research Award for Junior Faculty in 2020.

Dr. Liu is an Associate Editor of IEEE Transactions on Cybernetics, Control Theory and Technology, Transactions of the Institute of Measurement and Control, and Unmanned Systems. She served in organizing committee or operating committee of several international Conferences including the Program Chair of 2017 IEEE International Conference on Control and Automation.