Special Session on

"Distributed Intelligent Control of Complex Cyber-Physical Networks and Its Applications"
Organized by

- **Guanghui Wen**,
  Southeast University, China
  email: wenguanghui@gmail.com

- **Hong-Xiang Hu**,
  Hangzhou Dianzi University, China
  email: kukunan911@hotmail.com

- **Yuezu Lv,**
  Southeast University, China
  email: yzlv@seu.edu.cn

Call for Papers

Outline of the Session: Complex cyber-physical network refers to a new generation of complex networks whose normal functioning significantly relies on tight interactions between its physical and cyber components. Many modern critical infrastructures can be appropriately modelled as complex cyber-physical networks. Typical examples of such infrastructures are state power grids, public transportation systems, state financial networks, and the Internet. The study of distributed intelligent control problems (e.g., consensus, distributed containment, distributed coverage, distributed optimization) in complex cyber-physical networks have received significant attention by the scientific community involving several diverse fields and many application domains. The main focus of this SS will be on new and existing intelligent approaches for complex cyber-physical networks. The SS will become an international forum for researchers in all branches of control engineering to present and summarize the most recent progresses and ideas on complex cyber-physical networks and relevant domains.

Topics of the Session:
This special issue aims to investigate applications of advanced management technologies for electrified transportations and smart grids, in terms of modeling, state estimation and prediction, operation, analysis, planning, as well as thermal management and health management.
- Neural network-based control for complex cyber-physical networks
- Controllability and observability of complex cyber-physical networks
- Distributed consensus of multiple intelligent systems
- Block chain technology and its applications in Smart Grids
- Distributed energy management for Smart Grids
- Containment control for complex networking systems
- Distributed average tracking for multiple signals
- Distributed security control of complex cyber-physical networks