## Safe Control System Technologies of Unmanned Aerial Vehicles

## **Organizers:**

Dr. Lei Guo, School of Automation Science and Electrical Engineering, Beihang University, China, lguo@buaa.edu.cn

Dr. Xiang Yu, School of Automation Science and Electrical Engineering, Beihang University, China, xiangyu\_buaa@buaa.edu.cn

Dr. Youmin Zhang, Department of Mechanical, Industrial, and Aerospace Engineering, Concordia University, ymzhang@encs.concordia.ca

With the growing degree of mission complexity and anti-unmanned aerial vehicle (UAV) technologies, the UAV incident rate is considerably increasing. Therefore, it is highly desirable to improve UAV safety by means of anti-disturbance and resilient control. The purpose of this session is to attract experts, scientists, and engineers throughout the world to present and share their recent research results and innovative ideas related to safe control system technologies of UAVs. The topics include, but not limited to: disturbance estimation and fault diagnosis, anti-disturbance control of UAV, fault-tolerant control of UAV, integrated design of trajectory-attitude control, and trajectory reconfiguration of UAV, respectively.

## 无人机安全控制系统技术

组织者:

郭雷,教授,北京航空航天大学自动化科学与电气工程学院,lguo@buaa.edu.cn 余翔,教授,北京航空航天大学自动化科学与电气工程学院,xiangyu\_buaa@buaa.edu.cn 张友民教授,康考迪亚大学机械、工业与航空工程系,ymzhang@encs.concordia.ca

随着无人机任务复杂程度不断提升、反无人机技术不断发展,无人机事故日益增多,其安全问题凸显,解决无人机安全问题已经刻不容缓。本专题旨在与世界范围内相关专家、学者、工程师一道,共同展示和分享无人机安全控制系统设计的新思路和新成果。本专题论文主题包含但不限于:干扰/故障的检测与估计,无人机抗干扰控制,无人机容错控制,无人机安全姿轨控制一体化设计,无人机航迹重构等方面的新方法、新应用及研究新趋势。