# Invited Session Proposal for 2020 International Conference on Guidance, Navigation and Control

## "Advance of FDI/FTC and safe control with applications"

### **Organizers:**

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#### **Synopsis:**

Research and development of Fault Detection and Isolation (FDI), Fault Tolerant Control (FTC) and Safe Control are mainly motivated in order to enhance the reliability and fault tolerant capability of dynamic systems. While many results have been obtained and reported in the literature, it still remains a challenging and a very active research area. Application fields include aircraft/spacecraft control systems, formation, flocking and swarm systems, air traffic systems, water and underwater vehicles, etc. This special session aims at demonstrating and presenting new theoretical research results on FDI/FTC and safe control design methods for dynamic systems with their applications.

# 故障诊断与容错安全控制及其应用的研究进展

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## 简介:

Research and development of Fault Detection and Isolation (FDI), Fault Tolerant Control (FTC) and Safe Control are mainly motivated in order to enhance the reliability and fault tolerant capability of dynamic systems. While many results have been obtained and reported in the literature, it still remains a challenging and a very active research area. Application fields include aircraft/spacecraft control systems, formation, flocking and swarm systems, air traffic systems, water and underwater vehicles, etc. This invited session aims at demonstrating and presenting new theoretical research results on FDI/FTC and safe control design methods for dynamic systems with their applications.

故障检测与隔离、容错控制和安全控制是提高动态系统的可靠性和容错能力的关键方法和技术,这个领域虽然已经取得了许多可喜的研究成果,但它仍然是一个极具挑战性的研究领域。应用也非常广泛,包括飞行器/航天器控制系统、编队、蜂拥和群系统、空中交通系统、水下机器人等。该邀请组旨在展示动态系统故障检测与隔离、容错控制和安全控制及其应用的最新研究成果。