2022 第十届中国指挥控制大会 特邀专题论坛简介

特邀专题名称

电磁空间态势感知与指挥控制

召集人的姓名、职称、单位和邮箱

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特邀专题简介(背景、目的、意见和内容)

电磁空间已经成为大国竞争、常态博弈的重要作战空间,对各作战空间具有很强的渗透力和影响力,在电磁空间取得优势,是在所有作战空间获胜的先决条件。由于电磁环境日益复杂、斗争日趋激烈、需求不断增加,电磁空间态势感知和指挥控制面临新的挑战。现阶段,通过电磁信号和数据智能处理、电子目标智能识别、云计算、人机交互、电磁频谱可视化、博弈对抗等方面的创新,提高电磁空间态势感知、筹划决策、任务规划、行动控制能力,从而推动电磁空间态势感知和指挥控制的新兴应用。

本特邀专题以"电磁空间态势感知与指挥控制"为主题,定位于电磁空间 领域与指挥控制技术的融合发展,聚焦电磁空间智能化指挥控制相关课题和技术前沿,着重讨论电磁空间态势感知、指挥控制领域的新思想、概念、理论、 技术和应用方面的突破。邀请但不限于以下主题的原创论文:

- 电磁空间指挥控制新概念、新理论、新技术
- 电磁空间建模与仿真
- 电磁空间态势智能感知
- 电磁频谱安全与控制
- 电磁数据智能处理
- 电磁战斗管理与攻防
- 电磁智能决策与博弈对抗
- 认知电子战

C2-China 2022

Invited Session Summary

Title of Session

Situational Awareness and C2 in Electromagnetic Space

Name, Salutation, Affiliation and Email of Organizers

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Details of Session (background, purpose, significance and scope)

The electromagnetic space has played a role of vital significance for the rivalry and competition among great powers, so much as that it has had a strong permeability to and influence on each and every operational space; therefore, the superiority in electromagnetic space is a prerequisite to achieving the dominance of all operational spaces. However, due to the fact that the electromagnetic environment has become increasingly more complex, the battle more intense and the demand more diverse, the situational awareness and C2 have been faced with new challenges. At present stage, innovations can be made in such realms as intelligent processing of electromagnetic signals and data, intelligent identification of electronic targets, cloud computation, man-machine interaction, visualization of electromagnetic spectrum and countermeasures, to enhance the capabilities in the situational awareness of electromagnetic space, planning and decision-making, task planning and control of actions, thus promoting new applications of the situational awareness and C2 in electromagnetic space.

With "situational awareness and C2 in electromagnetic space" as the main theme, we welcome submissions that explore the fusion development of electromagnetic space and C2 technology and stress the relevant projects and technical frontier of intelligent C2 in electromagnetic space, with the focus on the breakthrough of new ideas, concepts, doctrines, technologies and applications in the domain of the situational awareness and C2 in electromagnetic space. Focal areas of interest include, but are not limited to:

- New concepts, doctrines and technologies of C2 in electromagnetic space;
- Modeling and simulation of electromagnetic space;
- Intelligent situational awareness of electromagnetic space;
- Security and control of electromagnetic spectrum;
- Intelligent processing of electromagnetic data;
- Management, offense and defense of electromagnetic combat;
- Electromagnetic intelligent decision and countermeasures;
- Cognitive electronic warfare.