

垂直着陆自主制导与控制

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垂直着陆自主制导与控制是重复使用运载火箭的前沿研究领域, 也是深空探测地外天体着陆控制的关键技术之一。本专题旨在与世界范围内相关专家、学者、工程师一道, 共同展示和分享自主制导与控制在动力下降段定点软着陆的新思路和新成果。本专题论文主题包含但不限于: 垂直着陆自主制导与控制的理论与方法, 感知、制导、控制、学习等方面的新方法, 动态轨迹规划技术, 嵌入式高性能优化求解器, GNC 验证飞行平台, 已经开展的相关创新应用与成果, 以及未来的发展趋势等。

Autonomous Guidance and Control for Vertical Landing

Organizers:

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Autonomous guidance and control for vertical landing is a cutting-edge direction of reusable launch vehicle, and one of the key technologies of landing control for deep space exploration of extraterrestrial objects. The purpose of this session is to bring together experts, scientists and engineers throughout the world to present and share their recent research results and innovative ideas related to autonomous guidance and control for pinpoint soft landing during powered descent phase. The topics of paper include, but are not limited to: theories and methods of autonomous guidance and control for vertical landing, novel sensing, guidance, control, and learning methods, dynamic trajectory planning technology, embedded high performance optimization solver, GNC verification platforms, relevant innovative applications and achievements, and future trends.