Intelligent Algorithm and Its Application in Aerospace System

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Intelligent algorithms, such as heuristic algorithm, differential evolutionary algorithm and adaptive dynamic programming, are an exciting research area. With the development of on-board hardware, the possibility of using intelligent algorithm online for aerospace vehicle is arousing the interests of the aerospace community. 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 intelligent algorithm and its application in aerospace system, such as hypersonic vehicle, reusable launch vehicle and so on. The topics of paper include, but are not limited to: theoretical foundation and new method of intelligent optimization algorithm, novel adaptive dynamic programming algorithm, navigation method based on intelligent algorithm, intelligent guidance and control, and the new trends of the application of intelligent algorithm in aerospace system.

智能优化算法及其在空天系统中的应用

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智能优化算法，例如启发式算法、微分进化算法和自适应动态规划等，是智能控制的前沿研究领域。随着硬件的不断发展，在空天飞行器系统中采用智能优化算法已成为可能，得到航空航天领域专家学者的关注。本专题旨在与世界范围内相关专家、学者、工程师一道，共同探讨智能优化算法相关的最新近研究进展，以及其在航空航天领域的应用。本专题论文主题包含但不限于：智能优化算法的理论基础与新思想，新型自适应动态规划算法，基于智能优化算法的导航，智能制导控制以及智能算法在航空航天领域应用研究的新趋势。