

Special Issue

Mathematical Modelling and Control Theory for Aerospace Vehicles

Message from the Guest Editor

Mathematical modelling provides effective theoretical support for aerodynamics, for the guidance and control of aerospace vehicles, and for the development of more advanced and intelligent mathematical modelling and control techniques for aerospace vehicles, which has become a significant research focus in recent years. We welcome the submission of scientific articles on advanced and effective guidance and control methods that solve the problems associated with the following: trajectory optimization for aerospace vehicles, active flow control technology for high-speed vehicles, online planning and intelligent planning with high computational efficiency, advanced intermediate guidance theoretical methods, terminal guidance theoretical methods, intercept guidance and pursuit and escape guidance, nonlinear control, robust control, mathematical modelling of complex dynamics models, and so on. For this Special Issue, we encourage you to publish your most recent research works in the above fields and the results of simulation analyses and practical engineering.

Guest Editor

Dr. Zhongtao Cheng

School of Aerospace Engineering, Huazhong University of Science and Technology, 1037 Luoyu Road, Wuhan, China

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Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

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About the Journal

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Editor-in-Chief

Prof. Dr. Francisco Chiclana

School of Computer Science and Informatics, De Montfort University,
The Gateway, Leicester LE1 9BH, UK

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).