

# Special Issue

## Applications of Algebra, Geometry, and Optimization to Control Theory

### Message from the Guest Editor

We invite researchers to contribute to a Special Issue titled "Applications of Algebra, Geometry, and Optimization to Control Theory", which aims to investigate the overlap between algebra, geometry, analysis and control theory, as well as their applications. Control theory is a powerful tool that can be used to solve complex problems in many different areas, including engineering, robotics, economics, and biology, among others. Algebra, geometry, and optimization provide powerful mathematical tools for advancing control theory and addressing complex control problems. This Special Issue provides a platform for researchers to present their innovative work that applies algebraic, geometric, and optimisation techniques to control theory. We welcome both theoretical and applied contributions that demonstrate the practical significance and potential impact of these mathematical techniques in control systems design, analysis, and optimisation. The Special Issue aims to foster interdisciplinary collaboration and promote advancements in control theory through the synergy of these mathematical disciplines.

### Guest Editor

Prof. Dr. William Holderbaum  
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### Deadline for manuscript submissions

closed (30 October 2024)



## Mathematics

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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.

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### Editor-in-Chief

Prof. Dr. Francisco Chiclana

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indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

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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).