

# Special Issue

## Advances in Control Theory and Optimizations

### Message from the Guest Editors

This Special Issue showcases cutting-edge advancements in both theoretical frameworks and practical applications, highlighting the ever-evolving nature of control systems and optimization techniques. As modern systems grow increasingly complex, new methodologies—including artificial intelligence (AI) and machine learning—have emerged as powerful tools to enhance control strategies, optimize performance, and enable adaptive decision-making. The articles within this issue delve into a diverse array of topics, including robust control strategies, optimization algorithms, and AI-driven approaches applied to fields such as robotics, aerospace, and smart grid technology. Furthermore, this issue emphasizes the interdisciplinary nature of control theory and optimization, fostering collaboration across different domains to tackle complex challenges in engineering and applied sciences.

### Guest Editors

Prof. Dr. Francisco Miranda

1. Polytechnic Institute of Viana do Castelo, Viana do Castelo, Portugal
2. Applied Digital Transformation Laboratory (ADiT-Lab), Polytechnic Institute of Viana do Castelo, Viana do Castelo, Portugal
3. Center for Research & Development in Mathematics and Applications (CIDMA), Department of Mathematics, University of Aveiro, Aveiro, Portugal

Dr. Helena Sofia Rodrigues

1. Applied Digital Transformation Laboratory (ADiT-Lab), Polytechnic Institute of Viana do Castelo, Viana do Castelo, Portugal
2. Center for Research & Development in Mathematics and Applications (CIDMA), Department of Mathematics, University of Aveiro, Aveiro, Portugal

### Deadline for manuscript submissions

30 December 2025



## Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/234042](https://mdpi.com/si/234042)

*Mathematics*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[mathematics@mdpi.com](mailto:mathematics@mdpi.com)

[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)





# Mathematics

---

an Open Access Journal  
by MDPI

---

**Impact Factor 2.2**  
**CiteScore 4.6**



[mdpi.com/journal/  
mathematics](https://mdpi.com/journal/mathematics)



## 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

---

### Author Benefits

#### High Visibility:

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

#### Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

#### Rapid Publication:

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).