

Special Issue

Set-Based Methods for Differential Equations and Applications

Message from the Guest Editor

This Special Issue of *Mathematics* aims to serve as a platform for the publication of new set-based methods and approaches in the field of differential equations. Theoretical and computer science aspects are welcome, such as set abstraction, interval analysis, ellipsoid techniques, and so on. Moreover, applications using set-based methods with differential equations are also strongly encouraged. Possible topics of interest include the following:

- Set abstraction: intervals, zonotopes, polytopes, ellipsoids, etc.
- Differential equations: ordinary, algebraic, partial, etc.
- Applications: parameter identification, control synthesis, safety verification, etc.

Guest Editor

Prof. Dr. Julien Alexandre dit Sandretto
Computer Science and System Engineering Department, ENSTA, Paris, France

Deadline for manuscript submissions

closed (30 June 2023)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/72402

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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).