

# Special Issue

## Nonlinear Vibration Theory and Mechanical Dynamics

### Message from the Guest Editor

The present Special Issue of *Mathematics* is focused on the mathematical consideration of dynamic problems in nonlinear mechanical systems (oscillators, machines, mechanisms, etc.). New trends and development results in modeling and solving such complex systems are expected to provide deeper insights into nonlinear dynamical phenomena. Submissions of research papers detailing the treatment of nonlinear dynamical systems in various fields of research, such as physics, applied mathematics, mechanics, engineering, and life sciences, and those with interdisciplinary approaches emphasizing directions for future research, are welcome.

### Guest Editor

Prof. Dr. Ljiljana Cveticanin

Doctoral School of Safety and Security Sciences, Obuda University,  
1081 Budapest, Hungary

### Deadline for manuscript submissions

closed (30 November 2024)



## Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/133959](https://mdpi.com/si/133959)

*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).