

# Special Issue

## Mathematics in Geophysical Research

### Message from the Guest Editors

We invite you to contribute original research articles on the theoretical or practical application of mathematical methods and tools in solving complex problems in geophysics to this Special Issue, "Mathematics in Geophysical Research". The development of modern mathematical research tools has led to their application in the study of complex natural phenomena and processes. This Special Issue will particularly focus on the use of mathematical tools (methods for mathematical modeling (simulation), computational mathematics, processing experimental data, etc.) in the study of dynamic processes in various geospheres. Articles using computer simulation to visualize the results of geophysical process research are also welcome. Topics that may be featured in the Special Issue include (but are not limited to):

- Mathematical modeling in geospheres;
- Mathematical methods for processing geophysical data;
- Simulation and computer modeling in geophysical research;
- Inverse problems in geophysics;
- Applied nuclear physics in geophysics.

### Guest Editors

Prof. Dr. Valentina Yakovleva

School of Nuclear Science and Engineering, Tomsk Polytechnic University, 634050 Tomsk, Russia

Dr. Roman Parovik

Physical Processes Modeling Laboratory, Institute of Cosmophysical Research and Radio Wave Propagation, Far Eastern Branch of the Russian Academy of Sciences, Kamchatskiy Kray, 684034 Paratunka, Russia

### Deadline for manuscript submissions

closed (30 November 2023)



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/130162](https://mdpi.com/si/130162)

*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).