

# Special Issue

## Computational Methods and Applications for Numerical Analysis

### Message from the Guest Editors

Numerical analysis is an increasingly important link between pure mathematics and its application in science and technology. With the rapid development of science technology and computer technology, numerical simulation has gradually become a powerful tool for scientific research and solving engineering problems. This Special Issue invites both original researches and review papers that bring together new computational methods and applications for numerical analysis. The articles can involve theory, algorithm, programming, coding, numerical simulation and/or novel application of computational techniques to problems in engineering, science, and other disciplines related to computations. It covers any type of computational method in applied mathematics and mechanics. Some possible topics of interest include finite element methods, finite difference methods, finite volume methods, meshless and particle methods, peridynamics, molecular dynamics, interpolation, approximation, optimization, quadrature methods, numerical linear algebra, numerical methods for ordinary/partial differential equations, etc. and their applications for solving real problems in sciences and engineering.

---

### Guest Editors

Prof. Dr. Fajie Wang

College of Mechanical and Electrical Engineering, Qingdao University, Qingdao 266071, China

Prof. Dr. Ji Lin

College of Mechanics and Engineering Science, Hohai University, Nanjing 211100, China

---

### 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/107376](https://mdpi.com/si/107376)

*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 17.3 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).