

# Special Issue

## Mathematical Modeling with Differential Equations in Physics, Chemistry, Biology, and Economics

### Message from the Guest Editor

It is a pleasure for us to introduce a Special Issue of *Mathematics* that is wholly devoted to the wide and deep topic of differential equations and their applications in diverse fields. It is well-known that an incredibly large number of physical, chemical, biological, and economic phenomena are commonly and accurately described by various kinds of differential equations (ODEs, PDEs, SDEs, dynamical systems, and so on). Our aim is to collect a large number of contributions written by several mathematicians and related researchers and scholars to exhibit some of the current trends and the newest findings in this special field. We anticipate that many types of application and theoretical insight shall be covered, and we are hopeful that the manuscripts submitted will have a high mathematical level. For any inquiry, feel free to contact us.

### Guest Editor

Dr. Arsen Palestini

MEMOTEF, Sapienza University of Rome, Piazzale Aldo Moro 5, 00185 Rome, Italy

### Deadline for manuscript submissions

closed (31 March 2022)



# Mathematics

an Open Access Journal  
by MDPI

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/77980](https://mdpi.com/si/77980)

*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).