

# Special Issue

## Partial Differential Equations in Applied Mathematics

### Message from the Guest Editor

Partial differential equations are employed in mathematical formulations to help solve various physical and other issues, such as electrostatic propagation, elasticity, fluid flow, electrodynamics, heat, and sound. This Special Issue titled “Partial Differential Equations in Applied Mathematics” therefore facilitates the quick dissemination of original research in applied mathematics and the sciences through the use of partial differential equations and associated methods. Both analytical and numerical techniques are welcome for contributions. The topics discussed range from the Lie group method, inverse scattering transforms, Darboux and Bäcklund transformations, the Hirota bilinear method, and initial and boundary value problems to various other techniques such as the unified transform (Fokas method), Riemann–Hilbert problems, long-time asymptotes, Hamiltonian theory, and applied fluid mechanic problems. We also equally welcome papers that focus on the mathematical modeling and analysis of travelling waves, solitons, lumps, optical solitons and non-smooth solitons, rogue waves, and breathers.

### Guest Editor

Dr. Oke Davies Davies Adeyemo

Department of Mathematical Sciences, North-West University,  
Mafikeng Campus, Mmabatho 2735, South Africa

### Deadline for manuscript submissions

30 November 2026



## Mathematics

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 4.6



[mdpi.com/si/215786](https://mdpi.com/si/215786)

*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).