

Special Issue

Recent Advances in the Theory, Numerical Analysis, and Applications of Fractional Calculus

Message from the Guest Editor

In recent decades, fractional calculus has emerged as a powerful mathematical tool for modeling various phenomena across multiple scientific disciplines, including physics, economics, biology, and engineering. This Special Issue seeks to present high-quality research contributions that present significant advancements in the mathematical and numerical analysis of fractional integrals and derivatives, fractional differential equations, and stochastic fractional differential equations. Additionally, we welcome fractional-order models and well-founded applications of fractional calculus to real-world problems.

Guest Editor

Dr. Yubin Yan

School of Computer and Engineering Sciences, University of Chester,
Parkgate Road, Chester CH1 4BJ, UK

Deadline for manuscript submissions

31 December 2026



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.4



mdpi.com/si/238724

Mathematics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
mathematics@mdpi.com

[mdpi.com/journal/
mathematics](https://mdpi.com/journal/mathematics)





Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 5.4



[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).