

Special Issue

The Applications of Fractional Calculus in Control Engineering, Dynamical Systems and Signal Processing

Message from the Guest Editor

I invite you to submit your recent and novel work in this Special Issue of *Mathematics*. Fractional-order calculus deals with derivatives and integrals in which the order is non-integer. There is an increasing interest in the study of fractional-order systems because fractional-order dynamics can model complex phenomena, which is not possible with integer-order dynamics. An important characteristic of fractional-order systems is the memory associated with the kernel of the derivative, which in most cases can be non-local, non-singular or both. Memory plays an important role in fractional-order systems because it allows us to model non-local behavior, and, in most cases, to predict future events in the systems. All these properties, among others, are allowing the development of new investigations in areas such as control engineering, dynamical systems, signal processing, and so on. I encourage the submission of novel investigations on the use of fractional-order dynamics, fractional-order control systems, signal processes, and any novel work related to fractional-order calculus. I am sure your important contributions will expand the state of the art in fractional-order systems.

Guest Editor

Dr. Antonio Coronel-Escamilla

División Académica de Mecánica Industrial, Universidad Tecnológica Emiliano Zapata, Emiliano Zapata, Morelos 62765, Mexico

Deadline for manuscript submissions

closed (31 December 2025)



Mathematics

an Open Access Journal
by MDPI

Impact Factor 2.2
CiteScore 4.6



mdpi.com/si/189658

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 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).