

# Special Issue

## Fractional Calculus in Natural and Social Sciences

### Message from the Guest Editor

Fractional calculus is a theory of differential and integral operators of arbitrary (integer and non-integer) orders that form a calculus. Fractional derivatives and integrals of non-integer order are powerful tools to describe various processes with spatial nonlocality, long memory, distributed lag, depreciation and aging, fractional spatial, and frequency dispersion. Fractional calculus can be used to describe complex processes and systems in physics and mechanics, biology and chemistry, economics, and sociology. This Special Issue of the journal *Mathematics* (MDPI) invites works on the use of rigorous and proven mathematical results of fractional calculus to describe different types of processes in the natural and social sciences. In this Special Issue of *Mathematics*, works focused on mathematical problems and methods of applications of fractional calculus are solicited.

### Guest Editor

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### Deadline for manuscript submissions

closed (30 April 2024)



## Mathematics

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## 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.

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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).