

Special Issue

Interplay between Fractional Differential Equations and Stochastic Processes

Message from the Guest Editor

The link between probability theory and fractional differential equations has been a considerably robust research topic for several years. Time-changed stochastic processes, fractional differential equations, anomalous diffusions, and continuous-time random walks are all interrelated according to well-established theories. Many applications have been developed in statistical physics, economics, and applied sciences. This Special Issue aims to collect recent viewpoints on the above topics. Some examples of possible research themes include, but are not limited to, the following topics:

- Probabilistic interpretation and properties of solutions for (possibly new) fractional differential equations;
- New types of time-changed processes and continuous-time random walks;
- Deepening on anomalous diffusions and related problems in statistical mechanics;
- Applications in various fields, including physics, economics, and engineering.

Guest Editor

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Deadline for manuscript submissions

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About the Journal

Message from the Editor-in-Chief

Fractal and Fractional (*Fractal Fract.*) is a scholarly online journal which provides a forum for discussion on new original models and methods in fractals and fractional calculus both from theory and applications. It is a peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.3 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).