

## Special Issue

# Physical Phenomena on Fractals and in Fractional Dimension Spaces

### Message from the Guest Editors

Nowadays, fractal geometry and the theory of fractional dimension spaces are powerful tools in physics and engineering. Both tools are associated with the notion of fractional dimension numbers and can be used to account for the interplay between geometry and physics in real-world systems. However, the mathematical and physical contents of the fractal and fractional dimension space frameworks are quite different. This Special Issue is a place to discuss and share new ideas and research findings concerning this matter. The discussion may be also focused on physical phenomena in the fractional dimension spaces and in the fractal media. Potential topics include:

- physics in a fractional dimension space and on fractals;
- characterization and modeling of real-world fractals;
- mathematical models of fractal continuum;
- fractal kinetic models;
- fractal dynamics and time series;
- percolation on fractals;
- mechanics of fractal materials;
- fractal concepts in fracture mechanics;
- wave phenomena in fractal media;
- fractal hydrodynamics;
- electromagnetic phenomena in fractional spaces and in fractal media.

We look forward to receiving your contributions.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 2023)



## Fractal and Fractional

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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.

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### Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 19.9 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).