Special Issue

Fractal Functions and Applications

Message from the Guest Editors

Mandelbrot proposed that some natural curves (as for instance the coastlines) can be modelled by means of a fractal methodology. This author studied the concept of self-similarity in depth, linking it with that of dimension, and finding hidden rules of many phenomena. He realized that some apparently erratic behaviors own an inherent organization that deserves to be discovered. In this Special Issue, we wish to review different ways of defining self-similar curves, and study some of their properties. We want to revisit fundamental milestones of the origin and evolution of the fractal curves that, in some cases, agree with nowhere differentiable mappings but are not exhausted by them. Our main hypothesis is that many apparently random phenomena (climatic records, electrocardiograms, spread disease, etc.) can be successfully modelled by means of fractal functions. A vast bibliography confirms this assumption.

Guest Editors

Prof. Dr. María A. Navascués
Department of Applied Mathematics, Universidad de Zaragoza, 50018 Zaragoza, Spain

Prof. Dr. María Victoria Sebastián
Centro Universitario de la Defensa-Academia General Militar, 50090 Zaragoza, Spain

Deadline for manuscript submissions

closed (20 November 2021)

Fractal and Fractional

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 6.0

mdpi.com/si/64769

Fractal and Fractional
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
fractalfract@mdpi.com

mdpi.com/journal/fractalfract

Fractal and Fractional

an Open Access Journal by MDPI

Impact Factor 3.3
CiteScore 6.0

mdpi.com/journal/fractalfract

MDPI

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

Prof. Dr. Carlo Cattani
Engineering School (DEIM), University of Tuscia, Largo dell'Università, 01100 Viterbo, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, and other databases.

Journal Rank:

JCR - Q1 (Mathematics, Interdisciplinary Applications) / CiteScore - Q1 (Analysis)

Rapid Publication:

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).