Special Issue

Fractals in the Neurosciences: From Self-Similar Structures to Scale-Free Dynamics

Message from the Guest Editors

The aim of this Special Issue is to provide a forum for the most recent advances in the fractal analysis of neural phenomena. The following topics for which manuscripts are welcomed include, but are not limited to:

- Self-similar molecular networks in the brain;
- Fractal analysis of neural and glial genetic sequences;
- Fractal geometry of the brain;
- Fractal and multifractal analysis of brain dynamics;
- Fractal functional connectivity;
- Criticality in the nervous system;
- Applications of fractal methods in neuropathological conditions;
- Novel methods in fractal analysis of neural data.

Guest Editors

Dr. Frigyes Samuel Racz

Dr. Peter Mukli

Dr. Alexander J Bies

Deadline for manuscript submissions

closed (7 May 2023)

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

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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).