Special Issue

Applications of Fractal Interpolation in Mathematical Functions

Message from the Guest Editors

In recent years, fractal interpolation has gained increasing interest in the research community, especially as a powerful tool for approximating complex. irregular, and self-similar phenomena observed across various scientific fields. Unlike classical interpolation techniques, fractal interpolation functions (FIFs) incorporate self-similarity and nonlinearity, making them especially suitable for modeling real world data with intricate or fragmented structures. A defining characteristic of FIFs is that they are continuous but may not be differentiable at every point, allowing them to capture the irregularities seen in natural phenomena more effectively. The spectrum of fractal interpolants ranges from those that are nowhere differentiable to those that are infinitely differentiable, offering a broad range of applications in both theoretical and practical contexts.

Guest Editors

Dr. Cristina Pacurar

Department of Mathematics and Computer Science, Faculty of Mathematics and Computer Science, Transilvania University of Brasov, 500036 Brasov, Romania

Prof. Dr. Peter Massopust

Department of Mathematics, Technical University of Munich, Boltzmannstr. 3, 85747 Munich, Germany

Deadline for manuscript submissions

31 July 2026



an Open Access Journal by MDPI

Impact Factor 3.6 CiteScore 6.0



mdpi.com/si/240970

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 3.6 CiteScore 6.0





Message from the Editor-in-Chief

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 23.7 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the second half of 2024).

