# **Special Issue**

# Fractal Dynamics and Machine Learning in Financial Markets

# Message from the Guest Editor

This Special Issue aims to explore the interplay between complex, fractal, and fractional dynamics in financial markets and speculation, and how these techniques can provide valuable insights into asset pricing, market behavior, risk management and corporate finance. Authors are encouraged to delve into various aspects, including (but not limited to): Memory models and their applications in financial markets, both univariate and multivariate.

The use of complex and fractional modeling techniques to analyze and predict asset prices and market dynamics.

The application of complex and fractional approaches in econophysics, with a focus on speculative behaviors. The utilization of complex and fractional methods to model and understand the intricacies of financial markets.

Leveraging big data for complex and fractional analysis to enhance trading strategies and corporate financial decision making.

The integration of fractional order advanced control systems, including machine learning in high-frequency trading, speculation, and corporate finance.

## Guest Editor

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## Deadline for manuscript submissions

closed (30 September 2024)



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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 peerreviewed, 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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### 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).