

Special Issue

Stochastic and Fractional Differential Equations: Attractor, Invariant Measure and Their Relationship

Message from the Guest Editors

Mathematical models that study the evolution of many natural phenomena such as astrophysics, fluid mechanics, plasma physics, and weather change are often nonlinear evolution equations and resulting infinite dimensional dynamic systems. However, in real life, the development of something is sometimes influenced by accidental random factors. Many studies have shown that due to the interaction between noise and nonlinearity, the system structure may be completely destroyed, making the system change from ordered to disordered, or vice versa. Therefore, it is necessary to study infinite dimensional random dynamic systems. The study of infinite dimensional random dynamical systems requires the combination of knowledge of dynamical systems, partial differential equations, fractional differential equations, functional analysis, stochastic analysis, and the complexity of their own problems. Currently, this is still in the initial and innovative stage. The focus of this Special Issue is to continue to advance research on topics relating to the theory and application of infinite dimensional random dynamical systems.

Guest Editors

Prof. Dr. Dingshi Li

Department of Mathematics, Southwest Jiaotong University, Chengdu, China

Dr. Chunmei Zhang

Department of Mathematics, Southwest Jiaotong University, Chengdu, China

Deadline for manuscript submissions

closed (30 November 2024)



Fractal and Fractional

an Open Access Journal
by MDPI

Impact Factor 3.3
CiteScore 6.0



mdpi.com/si/169763

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](https://mdpi.com/journal/fractalfract)



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).