

## 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 astrospace, 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.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 November 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 peer-reviewed, open access journal that publishes high quality original research articles, review papers and short communications.

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### Editor-in-Chief

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