Special Issue

Mathematical and Physical Analysis of Fractional Dynamical Systems

Message from the Guest Editors

The fractional dynamic is a field of study in mathematics and physics investigating the behavior of objects and systems by using differentiations of fractional orders. This Special Issue will be destined for the publication of high-quality mathematical papers in the area of theory and applications of fractional systems using fractional calculus. Emphasis is placed on developments in the theory of delay differential, integrodifferential, impulsive differential, and difference equations and their applications. Among possible topics of the papers, we can note, for example, the following: Various boundary value problems, the positivity/negativity of their solutions, Green's functions and their properties, existence, and uniqueness solutions of nonlinear boundary value problems, optimization, and control theory, stability theory, oscillation and non-oscillation, variational problems, the use of functional differential equations in technology, economics, biology, and medicine. In this Special Topics issue select contributions on some recent developments in the theory and applications of fractional dynamical systems.

Guest Editors

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closed (28 February 2025)



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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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