Special Issue

Fractal Dynamics of Complex Systems in Society and Behavioral Science

Message from the Guest Editors

Fractal patterns emerge ubiquitously in nature—arising from purely physical dynamics, such as lightning strikes, as well as from biologically driven collective behaviors, such as those observed in bacterial colonies. In this Special Issue, we focus on the latter – exploring how fractal collective dynamics emerge across scales, from physical systems of interacting particles and swarms to complex societal and intelligent communities. We aim to showcase the richness and depth of insights from physics, biology, cognitive science, and social theory that shed light on how local interactions among agents give rise to fractal (scale-free and/or fractional) global structures and emergent organization. We welcome theoretical, computational, and experimental/empirical studies that reveal fractalities in behavior, communication, organization, and decision-making. We especially encourage interdisciplinary work linking microscopic rules to macroscopic phenomena in living, synthetic, and hybrid systems.

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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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