Fractal Functions and Applications

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Message from the Guest Editors

Mandelbrot proposed that some natural curves (as for instance the coastlines) can be modelled by means of a fractal methodology. This author studied the concept of self-similarity in depth, linking it with that of dimension, and finding hidden rules of many phenomena. He realized that some apparently erratic behaviors own an inherent organization that deserves to be discovered.

In this Special Issue, we wish to review different ways of defining self-similar curves, and study some of their properties. We want to revisit fundamental milestones of the origin and evolution of the fractal curves that, in some cases, agree with nowhere differentiable mappings but are not exhausted by them. Our main hypothesis is that many apparently random phenomena (climatic records, electrocardiograms, spread disease, etc.) can be successfully modelled by means of fractal functions. A vast bibliography confirms this assumption.

Special Issue

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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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