



Fractal Functions and Applications

Guest Editors:

Prof. Dr. María A. Navascués

Departamento de Matemática
Aplicada, Universidad de
Zaragoza, 50018 Zaragoza, Spain

**Prof. Dr. María Victoria
Sebastián**

Centro Universitario de la
Defensa-Academia General
Militar, 50090 Zaragoza, Spain

Deadline for manuscript
submissions:

closed (20 November 2021)

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.

