mathematics

an Open Access Journal by MDPI

IMPACT FACTOR 2.2

CITESCORE 4.6

Generalized Fractional Dynamics in Graphs and Complex Systems

Guest Editors:

Prof. Dr. Federico Polito
Department of Mathematics "Giuseppe Peano", University of Torino, 10123 Torino, Italy

Dr. Thomas Michelitsch
Institut Jean le Rond d'Alembert, Sorbonne Université, CNRS UMR 7190 4 Place Jussieu, CEDEX 05, 75252 Paris, France

Dr. Alejandro P. Riascos
Instituto de Física, Universidad Nacional Autónoma de México, Apartado Postal 20-364, Ciudad de México 01000, Mexico

Deadline for manuscript submissions:
closed (30 November 2023)

Message from the Guest Editors

Random walks are among the most fundamental stochastic processes that occur ubiquitously in various interdisciplinary contexts, such as in biological networks, the foraging of animals, epidemic spreading, financial markets, human mobility patterns, friendship networks, communication in online networks, aging of living systems, anomalous transport and diffusion, and generally in the dynamics of "complex systems".

It has become apparent that there are deep connections of several aspects of the "complexity" of a system and fractional dynamic behavior exhibiting long-range correlations and self-similarity (scaling laws) with non-Markovian long memory features.

This Special Issue aims to gather research articles or reviews with recent advances in wider interdisciplinary areas such as continuous-time random walks, stochastic motions in networks with long-range jumps, turbulent diffusion and motions, random search, anomalous transport phenomena, Lévy flights, stochastic motions in directed graphs, epidemic spreading, quantitative models of aging phenomena in living systems, models on fractal aspects of stochastic motions and related topics.

mathematics

IMPACT FACTOR 2.2

CITESCORE 4.6

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Francisco Chiclana
School of Computer Science and Informatics, De Montfort University, The Gateway, Leicester LE1 9BH, UK

Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.
Journal Rank: JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Contact Us

Mathematics Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/mathematics
mathematics@mdpi.com
𝕏@MathematicsMDPI