Special Issue

Stochastic Processes: Theory, Simulation and Applications

Message from the Guest Editors

We are very pleased to invite you to contribute to this Special Issue of Mathematics, which is dedicated to collecting innovative results. Contributions on the theory and simulation of stochastic processes and their applications are very welcome. The focus is also oriented toward, but not limited to, the design and analysis of probabilistic models, Markov and Gaussian stochastic processes, computational methods, firstpassage-time problems, and applications to biomathematical modeling and queueing systems. Attention is also given to problems of both theoretical and computational nature related to the following themes:

- Probabilistic models for neuronal systems;
- Adaptive service systems;
- Population growth models in random environments;
- Algorithms for the evaluation of first-crossing probability densities through suitable boundaries;
- Asymptotic behavior of probability densities for Markov and Gauss processes.

Guest Editors

Prof. Dr. Antonio Di Crescenzo

Department of Mathematics, University of Salerno, I-84100 Salerno, Italy

Prof. Virginia Giorno

Dipartimento di Informatica/DI, University of Salerno, I-84100 Salerno, Italy

Deadline for manuscript submissions

closed (31 August 2024)



an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mdpi.com/si/122569

Mathematics Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 mathematics@mdpi.com

mdpi.com/journal/ mathematics



Σ

Mathematics

an Open Access Journal by MDPI

Impact Factor 2.2 CiteScore 4.6



mathematics



About the Journal

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.

Editor-in-Chief

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

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), RePEc, and other databases.

Journal Rank:

JCR - Q1 (Mathematics) / CiteScore - Q1 (General Mathematics)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.4 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).