



Probability and Stochastic Processes with Applications to Communications, Systems and Networks, 2nd Edition

Guest Editors:

Prof. Dr. Gurami Tsitsiashvili

Institute for Applied
Mathematics, Far Eastern Branch
of Russian Academy Sciences,
690041 Vladivostok, Russia

Dr. Alexander Bochkov

Scientific and Technical Complex
Research and Design Institute for
Information Technology,
Signaling and
Telecommunications in Railway
Transportation – NIIAS, JSC,
107078 Moscow, Russia

Deadline for manuscript
submissions:

30 September 2024

Message from the Guest Editors

This Special Issue is devoted to probability, statistics, stochastic processes, and their different applications in systems and networks analysis. The Special Issue will include studies on the analysis and applications of different queuing models; general complex networks and their structures, e.g., topology and graph theory; mathematical methods and models in smart cities; exclusive statistical methods, such as statistical estimates in bio/ecology, medicine, neural networks; and studies that estimate parameters in complex technical systems, etc. General topics include but are not limited to the following:

1. General methods in complex networks and their structure analysis;
2. Mathematical methods and stochastic models in smart cities;
3. Statistical problems in ecological networks;
4. Parameter estimation in complex systems;
5. Analysis and applications of different queuing models;
6. Polling systems and Jackson networks in random environments;
7. Probabilistic and stochastic analysis in telecommunication systems;
8. Risk analysis in complex technical systems.





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, St. Alban-Anlage 66
4052 Basel, Switzerland

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

mdpi.com/journal/mathematics
mathematics@mdpi.com
[X@MathematicsMDPI](https://twitter.com/MathematicsMDPI)