



an Open Access Journal by MDPI

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: closed (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.





mdpi.com/si/153386





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 iournal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering sociology. particularly those that and 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