

Special Issue

Stochastic Processes: Theory, Simulation and Applications, 2nd Edition

Message from the Guest Editors

We are pleased to invite you to contribute to this Special Issue of *Mathematics*, which is dedicated to presenting innovative results. Contributions on the theory and simulation of stochastic processes and their applications are especially 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, first-passage-time problems, and applications to biomathematical modeling, reliability theory, risk theory and queueing systems. Attention is also given to problems of both a 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 behaviors of probability densities for Markov and Gauss processes.

Guest Editors

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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.

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