

## Special Issue

# Advances in Applications of Probability Theory and Stochastic Processes

### Message from the Guest Editor

Besides applications in the natural sciences and society, probability theory is a mature and flourishing field of mathematics, with many connections to other fields of mathematics. The theory of Markov processes, e.g., is strongly connected with the theory of partial differential equations, semigroups, boundary value problems, and harmonic analysis. Moreover, probability theory has important contributions in combinatorics, number theory, and geometry. We invite our colleagues to submit papers related to any application of Probability Theory and Stochastic Processes. The scope includes (but is not limited to) financial mathematics, risks and insurance, queueing theory and reliability, statistical physics, and mathematical biology. It includes applications of point processes, diffusions, stochastic differential equations, locally interacting Markov processes, stochastic optimal control, etc. Contributions involving novel applications of fractional calculus are also encouraged.

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### Guest Editor

Prof. Dr. Mark Kelbert

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### Deadline for manuscript submissions

closed (31 October 2021)



## Mathematics

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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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### Editor-in-Chief

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manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2024).