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# **New Trends in Stochastic Processes, Probability and Statistics**

Guest Editors:

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Deadline for manuscript submissions: **closed (30 April 2024)** 

## **Message from the Guest Editors**

The primary focus of this Special Issue is modern areas of the theory of stochastic processes and mathematical statistics. Topics of interest but are not limited to:

- 1. Processes enabling the study of the particle systems' evolution where each particle is born, dies and moves through space in different environments as well as their applications in various fields, from statistical physics to population dynamics;
- 2. Prevalent ideas in the field of branching processes, including controlled random processes, branching random walks in inhomogeneous and random environments, and Markov and non-Markov processes with discrete or continuous time:
- 3. Study of stochastic processes, combining the martingale technique and spectral approach for analysis of the spectrum of high-dimensional random matrices:
- 4. Statistical approaches that might be employed to recognize the effect of intermittency on empirical data, and to show that external randomization can enable test statistics to be better approximated due to their limiting distributions;
- 5. Identification of the parameters of random processes and the development of nonparametric statistical methods











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### **Editor-in-Chief**

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## Message from the Editor-in-Chief

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