





an Open Access Journal by MDPI

# Stochastic Analysis with Applications and Symmetry

Guest Editor:

### Prof. Dr. Jewgeni H. Dshalalow

Department of Mathematical Sciences, Florida Institute of Technology, College of Engineering and Science, Melbourne, FL 32940, USA

Deadline for manuscript submissions:

closed (31 October 2023)

# Message from the Guest Editor

Dear Colleagues,

The purpose of this Special Issue is to present the recent advances in broad areas of stochastic analysis ranging from the theoretical to the more applied, covering topics in stochastic differential equations, Itô calculus, martingales, Lévy processes, stochastic finance, random measures, random walks, fluctuation theory, stochastic geometry, statistical inference of stochastic processes, special processes, queueing theory, matrix-geometric methods, and applications of stochastics to cell-molecular biology and physical sciences. This will give the reader an idea of what stochastic analysis is about rather than focusing on specialized topics that are widely available in the literature. This Special Issue will gather experts from these areas to present their latest research. There are elements and principles of symmetry and related concepts of invariance and equivalence present in many mathematical, physical, and biological sciences that are readily identified, and they will also be included in the contributed articles.

The submitted manuscripts must fall within the scope of *Symmetry*.







IMPACT FACTOR 2.2



an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Sergei Odintsov

1. ICREA, 08010 Barcelona, Spain 2. Institute of Space Sciences (IEEC-CSIC), C. Can Magrans s/n, 08193 Barcelona, Spain

# Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

### **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within SCIE (Web of Science), Scopus, CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Multidisciplinary Sciences) / CiteScore - Q1 (General Mathematics )

#### **Contact Us**