

# Special Issue

## Symmetry and Biomathematics: Recent Developments and Challenges

### Message from the Guest Editors

Symmetry and asymmetry have always been ubiquitous in nature, especially in the origin of life, biological evolution and the process of disease, which has attracted extensive attention of many researchers. The law of motion of matter can be studied from the angle of symmetry transformation and symmetry operation. Therefore, it is of great significance to search for the symmetries that occur in the laws of biology, to study the symmetries that occur in biological systems at the molecular and macro level. The aim of the present Special Issue is to emphasize the recent developments and challenges in symmetry and biomathematics. For example, we focus on the latest research on symmetry and travelling wave analysis, on transformations for models in biomathematics, on symmetry for disease models (especially related to the COVID-19 pandemic), on symmetry in neuroscience, and on pulse propagation in biological systems. Symmetry analysis of stochastic real-world models and models based on nonlinear reaction-diffusion equations are also what we are interested in.

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### Guest Editors

Prof. Dr. Wenjun Liu

Prof. Dr. Mariano Torrisi

Prof. Dr. Roman M. Cherniha

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### Deadline for manuscript submissions

closed (17 February 2023)



# Symmetry

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## About the Journal

### 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.

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### Editor-in-Chief

Prof. Dr. Sergei Odintsov  
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