# Asymptotic Methods in the Mechanics and Nonlinear Dynamics

Guest Editor:

**Prof. Dr. Igor Andrianov**
Chair and Institute of General Mechanics, RWTH Aachen University, Eilfschornsteinstraße 18, D-52062 Aachen, Germany

Deadline for manuscript submissions:
**closed (31 March 2022)**

## Message from the Guest Editor

Dear Colleagues,

This Special Issue of *Symmetry* is dedicated to asymptotic modelling. Galileo's concept of idealization is the cornerstone of contemporary science. Idealization is based on increasing the symmetry of the original system, and its tool in applied mathematics is asymptotic analysis. It is no exaggeration to say that the basic models of applied mathematics, physics, and mechanics are asymptotic. There are many methods for constructing asymptotic models, and their development, generalization, and application are of fundamental importance both for theorists and for engineers. We hope this Special Issue will help theorists to find new tasks and areas of application for their knowledge, and engineers to find new methods for their practice.

This Special Issue invites research and review papers on various fields of theoretical physics and applied mathematics, including classical and quantum mechanics, mechanics of fluids and solids, and asymptotology.

Prof. Igor Andrianov
*Guest Editor*

mdpi.com/si/26531

# Special Issue

## Editor-in-Chief

**Prof. Dr. Sergei D. Odintsov**
ICREA, P. Lluis Companyas 23, 08010 Barcelona and 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 Scopus, SCIE (Web of Science), CAPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
**Journal Rank:** JCR - Q2 (*Multidisciplinary Sciences*) / CiteScore - Q1 (*General Mathematics*); Q1 (*Physics and Astronomy*); Q1 (*Computer Science*)

## Contact Us