





an Open Access Journal by MDPI

# **Mathematical Fluid Dynamics and Symmetry**

Guest Editors:

### Prof. Dr. Evgenii S. Baranovskii

Department of Applied Mathematics, Informatics and Mechanics, Voronezh State University, 394018 Voronezh, Russia

#### Prof. Dr. Aleksey P. Zhabko

Department of Applied Mathematics and Control Processes, Saint Petersburg State University, Saint Petersburg 198504, Russia

## Prof. Dr. Vyacheslav Provotorov

Department of Partial Differential Equation and Probability Theory, Voronezh State University, Voronezh 394018, Russia

Deadline for manuscript submissions:

closed (1 December 2022)

## Message from the Guest Editors

Dear Colleagues,

This Special Issue will accept high-quality peer-reviewed papers on the mathematical theory of nonlinear fluid dynamics and heat transfer, with special regard to existence and uniqueness theorems, stability questions, regularity criteria, symmetry principles, periodic solutions, long-term behavior, and attractors, as well as optimal flow control. Moreover, we invite submissions of original works that deal with mathematical modeling and studying novel analytical solutions to Newtonian and non-Newtonian fluid flows by using symmetry and conservation laws.











an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Sergei D. Odintsov

1. Institució Catalana de Recerca i Estudis Avançats (ICREA), Passeig Luis Companys, 23, 08010 Barcelona, Spain 2. Institute of Space Sciences (ICE-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**