# Special Issue

# Qualitative Theory and Symmetries of Ordinary Differential Equations

## Message from the Guest Editor

Qualitative analysis has proved to be an important and useful tool for investigating the properties of solutions of differential equations, because it can analyze differential equations without solving them analytically and numerically. Since the qualitative analysis of differential equations is related to both pure and applied mathematics, its applications to various fields such as science, engineering, and ecology have been extensively developed. The objective of this Special Issue is to report on the latest achievements in the qualitative theory of ordinary differential equations and their relation to the symmetries of differential equations. It will reflect both the state-of-the-art theoretical research and important recent advances in applications. It is important to develop new theories and methods, as well as to modify and refine the well-known techniques for the analysis of new classes of problems using the symmetries of differential equations. We are mainly interested in ordinary differential equations, autonomous or non-autonomous, smooth or non-smooth. We hope to gather together established and young scientists actively working on the subject.

## Guest Editor

Prof. Dr. Jaume Giné
Departament de Matemàtica, Universitat de Lleida, Av. Jaume II, 69. 25001 Lleida, Catalonia, Spain

## Deadline for manuscript submissions

closed (31 January 2022)

**Symmetry**

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/si/79630

*Symmetry*
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
symmetry@mdpi.com

mdpi.com/journal/symmetry

# Symmetry

an Open Access Journal by MDPI

Impact Factor 2.2
CiteScore 5.3

mdpi.com/journal/symmetry

# 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.

### 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

### 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 )

MDPI