

Special Issue

Recent Advances and Applications of Lie Symmetry Techniques

Message from the Guest Editors

The search for exact solutions of differential equations continues unabated. Perhaps this is because when constructed, exact solutions may be used to benchmark numerical schemes, and in addition, these solutions can give insight into real-world processes or phenomena.

Lie symmetry techniques provide a systematic tool that can be used to construct invariant (exact) solutions. This Special Issue is devoted to the analysis of applied linear and nonlinear differential equations arising in different physical phenomena. Papers in the applications of, but not limited to, point symmetries, nonclassical symmetries, conservation laws, Noether symmetries, and group classification will be considered for publication in this Special Issue.

Guest Editors

Prof. Dr. Raseelo J. Moitsheki

School of Computer Science and Applied Mathematics, University of the Witwatersrand, Private Bag 3, WITS 2050, South Africa

Dr. Bronwyn Hajek

UniSA STEM, University of South Australia, Mawson Lakes, Adelaide, SA 5095, Australia

Deadline for manuscript submissions

closed (31 December 2022)



Symmetry

an Open Access Journal
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Impact Factor 2.2
CiteScore 5.3



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

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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.

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

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