

# Special Issue

## Modified Gravity Theories and Applications to Astrophysics and Cosmology

### Message from the Guest Editors

The purpose of this Special Issue is to publish conventional and unconventional, but well-founded, approaches to the solution of these or any other new phenomena related to gravity. In particular, we are seeking papers in which new and original perspectives to these issues are provided as a way to stimulate the discussion in the astronomy and physics communities, in order to search for the solution of the riddle posed by many of these anomalies. Topics of interest include (not exhaustively) the following: Flyby anomalies The secular increase of the eccentricity of the orbit of the moon The faint young Sun paradox Application of geopotential models for the Earth and other planets Lunar laser ranging and radar ranging in the solar system Conventional radiation effects in spacecraft navigation Wide binaries as tests of classical gravity Modified gravity models Dark energy and cosmological accelerated expansion Applications of gravity models to the anomalous rotation curves of galaxies Bullet cluster and gravitational lensing Modified Newtonian dynamics and applications in the solar system Gravitational waves and tests of general relativity in strong gravity

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### Guest Editors

Dr. Luis Acedo

Prof. Dr. Michael M. Tung

Dr. Golden Gadzirayi Nyambuya

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### Deadline for manuscript submissions

closed (30 September 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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