

# Special Issue

## Modified Gravity and Dark Energy Theories

### Message from the Guest Editor

In the past two decades, tremendous experimental and theoretical progress has been made, deepening our understanding of cosmic acceleration, but not solving its riddle. In cosmology, a widely used classification among physical models for acceleration distinguishes between dark energy and modified gravity. In this Special Issue, we will publish a thoroughly comprehensive survey of recent works on dark energy studies and modified theories of gravity and their astrophysical, gravitational, and cosmological consequence, as well as their phenomenology and characteristic observable signatures. The papers will cover dark energy models, all kinds of modified gravities, cosmic observational, gravitational, or theoretical constraints, black hole and stellar solutions in modified gravities, and so on.

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### Guest Editor

Dr. Changjun Gao

The National Astronomical Observatories, Chinese Academy of Sciences, Beijing 100012, China

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### Deadline for manuscript submissions

closed (30 November 2025)



## Universe

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## About the Journal

### Message from the Editor-in-Chief

The multidisciplinary journal *Universe* is aiming to follow and, hopefully, to lead to the largest extent as possible the ever-self renovating threads which weave mathematical theories with our understanding of the magnificent natural world. On behalf of all the distinguished members of the Advisory and Editorial Boards, I extend my welcome to this journal and look forward to hearing from the interested contributors and learning about their valuable research.

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### Editor-in-Chief

Prof. Dr. Lorenzo Iorio  
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