

# Special Issue

## Quantum Gravity Phenomenology: Insights and Advances

### Message from the Guest Editor

The quantization of gravity remains one of physics' great challenges, with competing models predicting subtle deviations from classical relativity at the Planck scale. These effects may be detectable through various astrophysical observations—time delays in gamma-ray bursts, spectral anomalies in high-energy photons and cosmic rays, deviations in neutrino oscillations, and modifications to gravitational wave propagation—all potential signatures of quantum spacetime. This Special Issue welcomes original research and review articles on quantum gravity phenomenology across all scales, from astrophysical tests using cosmic messengers to laboratory and accelerator-based searches.

### Guest Editor

Dr. Iarley P. Lobo

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### Deadline for manuscript submissions

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## 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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