

# Special Issue

## Quantum Gravity: Latest Advances and Prospects

### Message from the Guest Editors

Quantum mechanics is a formulation conceived to properly describe the emergent features and phenomena at small scales (as atoms and particles). Even though a theory that gives a consistent theory covering this large regime is not found, formulated, or understood yet, it already carries a name: "Quantum gravity". It is well-known that there are circumstances in which classical and quantum effects are forced to coexist (black holes or Neutron stars, to name a few) and such a topic motivated an increasing interest in this field in the last decades. This special issue will be dedicated to collecting recent progress, novel perspectives, and concrete examples where quantum gravity (or its numerous modifications) can introduce significant progress in the field, including black hole solutions, wormholes (and their properties), cosmological models and issues presents in LCDM (as the  $H_0$  problem and cosmological constant problem), particle models and relativistic stars. The study of these and other related topics is the goal of this special issue, [...] For further reading, please follow the [link](#) to the Special Issue Website.

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 March 2024)



# 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  
Ministero dell' Istruzione e del Merito, Viale Unità di Italia 68, 70125 Bari,  
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