

Special Issue

Advances in Cosmological Models

Message from the Guest Editor

The cosmological model is called the Λ CDM model, which includes dark energy, dark matter, and baryonic matter. The detection of gravitational waves by the Laser Interferometer Gravitational-Wave Observatory (LIGO) and the Virgo Collaboration confirmed the existence of black holes and neutron stars. Observations of the large-scale structure of the universe provided information about the universe's growth and expansion history, the nature of dark matter and dark energy, and the initial conditions of the universe. New theories of gravity, such as modified gravity and scalar-tensor theories have the potential to provide an alternative explanation for the observed phenomena, such as the acceleration of the universe, without the need for dark energy. We would like to invite both original and review papers to this Special Issue that cover the influence of new measurement methods and detections, as well as the development of alternative theories on gravity and our understanding of the nature of the universe. 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.

Guest Editor

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Deadline for manuscript submissions

closed (31 August 2023)



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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.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio
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