Special Issue

Dark Energy and the Dark Sector in Supergravity, String Theory and Extra-Dimensions

Message from the Guest Editors

The latest cosmological data strongly support the phenomenological standard model of cosmology. In spite of the experimental support, the \(\mathbb{CDM} \) model lacks an explicit physical theory for the origin or physical nature of the dark sector: dark matter and dark energy. The aim of this Special Issue is to collect original research contributions regarding the progress in understanding the cosmological dark sector (dark energy and dark matter) in theories beyond the standard models of cosmology and particle physics in a broad sense. The topics to be discussed include but are not restricted to the following: dark energy and dark matter in supergravity; string theory and other theories BSM, such as extra dimensions and the brane world scenario; coupled models of dark energy and dark matter in these theories; and the dark sector and quantum gravity constraints on cosmological acceleration. The aim is to describe the state-of-the-art and perspectives in these research fields related to the theme of the Special Issue. We welcome submissions of research letters and communications as well as reviews on the subjects above.

Guest Editors

Dr. Ivonne Zavala

Physics Department, Swansea University, Singleton Park, Sketty, Swansea SA2 8PP, UK

Dr. Giuseppe Dibitetto

Dipartimento di Fisica e Astronomia, Universita di Padova, Padua, Italy

Deadline for manuscript submissions

closed (10 April 2022)



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Universe
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
universe@mdpi.com

mdpi.com/journal/ 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.

Editor-in-Chief

Prof. Dr. Lorenzo Iorio

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

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