Special Issue

Research on Physics beyond the Standard Model

Message from the Guest Editor

In order to explain the universe, scientists rely on the Standard Model—a theory describing all known fundamental particles and how they interact. The Standard Model has predicted the outcomes of countless experiments in particle physics with remarkable accuracy since it was developed in the early 1970s. A key component of the model, the Higgs boson, was added in 2012 and shed light on how subatomic particles gain their mass.

There are several theories that go beyond the Standard Model, including extensions of the model through supersymmetry, such as the Minimal Supersymmetric Standard Model (MSSM) and Next-to-Minimally Supersymmetric Standard Model (NMSSM), as well as completely novel explanations such as string theory and M-theory. Considering that these theories tend to reproduce the entirety of current phenomena, determining which theory is the best, or one of the most important steps towards a Theory of Everything, can only be done via experiments, and this is one of the most active fields of research in both theoretical and experimental physics.

Guest Editor

Dr. Smita Darmora

High Energy Physics Division, Argonne National Laboratory, Lemont, IL 60439, USA

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

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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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