# **Topical Collection**

# Cosmology and Particle Physics

# Message from the Collection Editor

The fundamental relationship between cosmology and particle physics, representing new levels of the relationship between microscopic and macroscopic description in natural science, is giving rise to cosmoparticle physics, studying basic laws of nature and their reflection in the structure and evolution of the universe and the proper combination of cosmological, astrophysical, and experimental physical signatures. The physical basis of the now standard cosmological paradigm of the inflationary model with baryosynthesis and dark matter/energy is beyond the now standard particle physics model and inevitably leads to modeldependent predictions of cosmological scenarios with observable deviations from the standard cosmological paradigm. It makes the relationship between BSM physics (including modified gravity) and corresponding BSM cosmological scenarios and astrophysical phenomena an important aspect of the fundamental knowledge of natural science.

## Collection Editor

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# Message from the Editor-in-Chief

Many international journals have proliferated over the last 20 years regarding very specific themes of research. Thus, I am pleased to announce the new open-access MDPI journal *Encyclopedia* to provide a wide audience platform for the presentation of outcomes and methodological approaches of current interest for the scientific community. Social sciences, humanities, physical sciences, engineering, and life sciences are the principal macro-areas of relevance for the journal. On behalf of the Editorial Board, I welcome all to *Encyclopedia* and invite contributions of entry papers to our editorial project.

## Editor-in-Chief

#### Prof. Dr. Raffaele Barretta

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