



symmetry



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Cosmoparticle Physics - dedicated to A.D.Sakharov's 100 Anniversary

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Message from the Guest Editor

Dear Colleagues,

The trend of modern development of particle physics leads beyond the standard model (BSM). BSM physics is needed for a physical basis for the now-standard cosmological model of an inflationary Universe with baryosynthesis, dark matter, and dark energy. BSM models involve the extension of particle symmetry that leads to numerous physical and cosmological consequences. The mutual relationship of the basis of modern particle physics and cosmology, as well as the nontrivial features of its indirect physical, cosmological, and astrophysical effects, is the subject of the present Special Issue. Such features involve but are not reduced to models of the very early Universe and their observational signatures, physics of dark matter and its direct and indirect probes, as well as a wide range of BSM models and their effects.

Prof. Maxim Khlopov
Guest Editor



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Special Issue



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Message from the Editor-in-Chief

Symmetry is ultimately the most important concept in natural sciences. It is not surprising then that very basic and fundamental research achievements are related to symmetry. For instance, the Nobel Prize in Physics 1979 (Glashow, Salam, Weinberg) was received for a unified symmetry description of electromagnetic and weak interactions, while the Nobel Prize in Physics 2008 (Nambu, Kobayashi, Maskawa) was received for the discovery of the mechanism of spontaneous breaking of symmetry, including CP symmetry. Our journal is named *Symmetry* and it manifests its fundamental role in nature.

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