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# Manifest and Hidden Symmetries in Field and String Theories

Guest Editor:

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### Message from the Guest Editor

Dear colleagues,

The idea of symmetry is a polar star in theoretical physics model building. Symmetries may be local or global, and there are symmetries which are manifest in a certain range of energy and other symmetries which are not evident, but rather hidden (approximate or spontaneously broken). A gauge symmetry is at the basis of the Standard Model, and symmetry under diffeomorphisms is a fundamental requirement in general relativity. Based on these cornerstones, any attempt to construct a theory that describes all the fundamental interactions is bound to come across the problem of what is the most basic, or at least a more basic (hidden or manifest) symmetry of nature. Other specific symmetries constitute the backbone of extremely active research fields, such as the conformal symmetry or asymptotic symmetries in gravitational problems.....









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### **Editor-in-Chief**

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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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