Special Issue

Symmetry and Asymmetry in Nucleon and Quark Matter

Message from the Guest Editors

During the past decades, a golden age of hadronic spectroscopy has been witnessed by high-energy physics. Dozens of exotic hadrons, which are beyond the conventional quark-antiquark and three-quark bound states, are reported by worldwide experimental collaborations. Particularly in recent years, good candidates of charm-strange, doubly and fully charmed tetraquarks and hidden-charm pentaquarks have been observed by experimental detectors in proton-proton collisions. Symmetry is a crucial nature in physics. One consequence of the dynamical breaking of chiral symmetry is that Goldstone boson exchange interactions appear between constituent light quarks. Moreover, the wave function of a hadron at quark level is also constructed by the symmetry analysis. This Special Issue invites contributions reporting on the recent study of exotic hadrons, but without losing sight of conventional quark matters and the symmetry of hadrons.

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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.

Editor-in-Chief

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