Special Issue

Non-associative Structures and Their Applications in Physics and Geometry

Message from the Guest Editors

The modern development of geometry, mathematical physics, biology and so on brings new non-associative algebraic structures, such as Poisson algebras, n-ary algebras, bialgebras, dialgebras, quandles, racks, and so on. These needs fall into two broad groups: purely technological needs, and theoretical needs associated with developments in both applied algebra and other branches of mathematics. There are many branches of algebra whose contributions solve problems posed by the scientific challenges arising from the advancement of technology. Two of them also stand out for their popularity in society: cryptography and coding theory. Additionally, axial algebras have been given a big push with the emergence of the connections with Moonshine theory. And the emergence of Hopf Algebras has made a huge impact on many branches of mathematics and physics. Additionally, of course, one cannot forget very active branches with immense applications at all times: module theory and quivers representation theory. Thus, we present this Special Issue of *Mathematics* as a tool to show recent and interesting results on the branches of non-associative algebra and related structures.

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Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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