Special Issue

Hypergroup Theory and Algebrization of Incidence Structures

Message from the Guest Editors

Hyperstructure theory has experienced a surge of interest since the 1970s, when its research area was greatly expanded by the introduction of other useful concepts: canonical hypergroups, hyperrings, hyperfields, hypervector spaces, semihypergroups, and so on. Later, a number of mostly Italian mathematicians established remarkable relationships between algebraic hyperstructures, finite geometries and, more generally, incidence structures. Nowadays, hypercompositional algebra has a variety of relationships with other fields of mathematics, such as fuzzy set theory, combinatorics, and probability, established by various research groups around the world. In addition, algebraic hyperstructures are also encountered in computer science, artificial intelligence, and physics. This Special Issue invites submissions in hyperstructure theory, in a broad sense. Manuscripts may address theoretical aspects, applications, and related computational issues. We welcome contributions dealing with equivalence relations, semi-orderings, graphs and hypergraphs, combinatorial geometry, fuzzy sets, etc., as well as their appearance in the social, natural, and applied sciences.

Guest Editors

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closed (1 December 2022)

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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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