

Special Issue

Representations of Lie Algebras and Their Generalizations

Message from the Guest Editor

It is probably not an exaggeration to state that representation theory of Lie algebras and their generalizations constitutes one of the most recurring techniques encountered in mathematical and physical problems dealing with the linearization of nonlinear phenomena. Beyond structure theory, representations play a prominent role in invariant theory, both algebraic and geometric, as well as in many applications like differential equations, integrable systems, quantum groups, gauge theories, or string theory, among many other topics. We invite researchers to contribute original papers and review articles concerning currently open problems within the representation theory of Lie algebras, superalgebras, and generalized algebraic structures, such as ternary or n -ary algebras, Leibniz algebras, etc., also covering applications in other disciplines. Articles describing new methods with strong geometrical and/or computational background are particularly welcome, as well as papers concerning methods of representation theory in chemistry, physics, and engineering sciences.

Guest Editor

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About the Journal

Message from the Editor-in-Chief

Axioms is dedicated to the foundations (structure and axiomatic basis, in particular) of mathematical theories, not only from a crisp or strictly classical sense, but also from a fuzzy and generalized sense. This includes the more innovative current scientific trends, devoted to discover and solve new challenging problems. The prime goal of *Axioms* is to publish first-class, original research articles under an open access policy with minimal fees for the authors. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

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