

## Special Issue

# Advances in Hopf Algebras, Tensor Categories and Related Topics

### Message from the Guest Editors

The relationship between Hopf algebras and tensor categories is deep and significant, particularly in the study of algebraic structures and representation theory. They not only provide concrete mathematical examples for tensor categories but also significantly enrich the theory and practice of tensor categories through applications in quantum groups, representation theory, topological quantum field theory, and beyond. This Special Issue covers a broad spectrum of topics, including, but not limited to:

- Hopf algebras and their generalizations, such as weak Hopf algebras, (weak) multiplier Hopf algebras, Hopf group-coalgebras, Hom-Hopf algebras, quasi Hopf algebras, Hopf (co)quasigroups, Hopf (co)braces, Hopf algebroids et al.
- tensor categories, braided monoidal categories, fusion categories, braided crossed categories
- algebras, coalgebras, symmetry, duality, differential calculi, (co)homologies, groupoids, Yang–Baxter equation
- (braided) Lie algebras, Lie coalgebras
- applications of above topics

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### Guest Editors

Dr. Tao Yang

Dr. Florin Felix Nichita

Prof. Dr. Tianshui Ma

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### Deadline for manuscript submissions

31 December 2025



## Axioms

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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.

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