

## Special Issue

# Algorithms, Computational Complexity Theory, Computational Geometry, and Categorical Methods Theory with Applications

### Message from the Guest Editors

Algorithms, computational complexity theory, computational geometry, and categorical methods form a core toolkit for understanding efficiency, structure, and compositionality in modern computation. In an era of unprecedented computational power and data proliferation—where software permeates science and industry—the efficiency, correctness, and scalability of systems are more critical than ever. We face the following pressing questions: Which problems admit efficient algorithms? What lower bounds delineate intrinsic hardness? How can geometric structure be exploited in data analysis and optimization? And how can categorical abstractions unify models, proofs, and implementations across domains? This Special Issue will bring together these synergistic pillars of theoretical computer science to explore the interplay between classical foundations and contemporary applications. Our aim is to illuminate new research directions and foster a deeper, structural understanding of computation, from rigorous theory to real-world impact.

### Guest Editors

Dr. Yiyang Jia

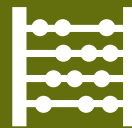
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### Deadline for manuscript submissions

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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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### Editor-in-Chief

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