

Special Issue on Mathematical Logic and Foundations

Call for Papers

Mathematical Logic and Foundations is the study of the fundamental principles and structures underlying mathematical reasoning. It explores the formalization of concepts like proof, truth, and inference, and provides rigorous frameworks for understanding the foundations of mathematics. This field bridges the gap between philosophy and mathematics, offering insights into the nature of mathematical knowledge and the limits of mathematical reasoning. The goal of this special issue is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in the area of Mathematical Logic and Foundations.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on exploring Mathematical Logic and Foundations. Potential topics include, but are not limited to:

- Propositional logic
- Predicate logic
- Proof theory
- Lambda calculus
- Proof systems
- Logical connectives
- Completeness theorems
- Independence of axioms
- Formalization of mathematics
- Foundations of arithmetic
- Foundations of geometry
- Proof-theoretic semantics
- Modal logic
- Fuzzy logic
- Quantum logic
- Proof complexity
- Logical complexity
- Computational logic
- Logic programming
- Automated reasoning
- Logical frameworks
- Reflection principles
- Logical empiricism
- Mathematical platonism



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- Consistency proofs
- Independence proofs
- Logical formulas
- Logical expressions
- Logical frameworks

Authors should read over the journal's <u>For Authors</u> carefully before submission. Prospective authors should submit an electronic copy of their complete manuscript through the journal's <u>Paper Submission System</u>.

Please kindly specify the "**Special Issue**" under your manuscript title. The research field "**Special Issue -** *Mathematical Logic and Foundations*" should be selected during your submission.

Special Issue Timetable:

Submission Deadline	July 18th, 2024
Publication Date	September 2024

Guest Editor:

For further questions or inquiries, please contact Editorial Assistant at am@scirp.org.