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## **Special Issue on Topology and its Applications**

## **Call for Papers**

"Topology and its Applications" is focused on the study of topological spaces and their properties. It encompasses both theoretical and applied research related to the structure and properties of sets, both in Euclidean spaces and more general spaces. Topology is concerned with the study of properties that are preserved under continuous deformation, such as bending and stretching, and it is often used to describe the shape of objects or spaces, regardless of other features such as size or orientation. In the realm of pure mathematics, topology studies abstract structures such as manifolds, homotopy groups, and cohomology, and explores fundamental concepts such as continuity, convergence, compactness, and connectedness. In applied mathematics, topology is used in fields such as physics, engineering, and computer science to model complex systems and to solve problems related to optimization, data analysis, and network design. Examples of the applications of topology include the study of the geometric properties of DNA molecules, the design of computer networks, the analysis of stable structures in material science, and the construction of algorithms for data mining and machine learning.

In this special issue, we intend to invite front-line researchers and authors to submit original research and review articles on **Topology and its Applications**. Potential topics include, but are not limited to:

- General topology
- Geometry and topology
- Algebraic topology
- Random topology
- Topology optimization
- Computational topology
- Combinatorial topology
- Low-dimensional topology
- Topological structures and analysis
- Topological data analysis
- Functional analysis
- Differential topology
- Surface topology
- Topological dynamics
- Topological domain theory
- Topological manifold
- Topology and order

## **Advances in Pure Mathematics**



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- Quantum topology
- Topological materials
- Networks, topology and dynamics
- Applications

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 notice that the "**Special Issue**" under your manuscript title is supposed to be specified and the research field "**Special Issue** – *Topology and its Applications*" should be chosen during your submission.

According to the following timetable:

Submission Deadline	September 26th, 2023
Publication Date	November 2023

For publishing inquiries, please feel free to contact the Editorial Assistant at <a href="mailto:submission.entrance1@scirp.org">scirp.org</a>

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