



## Computational Algebraic Topology and Neural Networks in Computer Vision

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### Message from the Guest Editors

Dear Colleagues,

In recent years, the development of methods based on neural networks is ubiquitous in computer vision. Recent research has shown that the integration of TDA into computer vision can improve performance. The integration of TDA into state-of-the-art computer vision approaches building heavily on deep neural networks is however still a challenging topic.

This Special Issue collects papers with the aim to develop novel topology-based approaches for computer vision and/or to apply topology-based approaches to improve the current state-of-the-art in computer vision. Of special interest are papers that deal with the challenge of integrating topology as the main tool into neural networks for computer vision applications.

Prof. Rocio Gonzalez Diaz  
Prof. Matthias Zeppelzauer  
*Guest Editors*





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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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