

Colloquium

March 1, 4:05 p.m. (9th Period) (in the Atrium)

Speaker: Dr. Hubert Wagner

Title: Is topology useful in solving real-world problems?

Abstract: I will try to answer this question by describing a number of practical problems in which topology starts to be used. These problems will range from analyzing astronomical data, detecting attacks on neural networks, to generating images. In particular, I will explain why topological methods (such as persistent homology) mesh particularly well with modern machine learning tools – but also mention some current challenges.

(No previous exposure to topology needed!)