The World of Mathematics and Statistics

SWARTHMORE COLLEGE • DEPARTMENT OF MATHEMATICS AND STATISTICS • COLLOQUIUM SERIES 2021-2022

Math/Stat Colloquium

The Shape of Data Through Topology



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We live in an exciting time where new data is generated at an exponential rate. Such data explosion necessitates the development of novel methods for studying large, noisy, and complicated data. One interesting aspect of data is its shape and structure. In this talk, we'll discuss what it means to study the shape of data using topological data analysis. We'll discuss various situations in which the shape of data provides valuable insights, including applications in networks science, image analysis, and neuroscience. The talk will be friendly -- no knowledge of topology is required. We will formulate everything using the language of linear algebra.

Tuesday, April 12

Virtual Tea: 3:30-4:00pm ET, Virtual Talk: 4:40-5:40pm ET

Join Zoom: Meeting ID: 827 4187 8614

Passcode: 279924