

CCSU  
DEPARTMENT OF MATHEMATICAL SCIENCES  
COLLOQUIUM

Friday, October 7  
4:30 – 5:30 PM  
Maria Sanford, Room 101

**WHAT IS TDA?**

**MARIAN ANTON**

**CENTRAL CONNECTICUT STATE UNIVERSITY**

**Abstract:** The talk is about a mathematical method to analyze data known as “topological data analysis” or TDA. It uses a branch of mathematics called “algebraic topology” to capture the shape of a point-cloud data that “persists” in a dynamical setting. Some of its unexpected applications are to robot motion, sensor networks, and medicine. We present the elementary mathematical background and provide some examples. The talk aims to a general audience of faculty and undergraduate students.

**For further information:**  
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