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HELEN WAY KLINGLER
COLLEGE OF ARTS AND SCIENCES

Department of Mathematics, Statistics and Computer Science

COLLOQUIUM

Measuring the Shape of Data with Topology

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1:00 PM, Friday, March 3, 2017

Cudahy Hall, Room 401

Abstract

Data of various kinds is being collected at an enormous rate, and in many different forms. Often, the data is equipped with a notion of distance that reflects similarity in some sense. Using this distance measure, certain topological features--e.g. the number of connected components, loops, and trapped volumes--can be ascertained and can provide insight into the structure of these complex data sets. In this talk, I will introduce a fundamental tool of topological data analysis, namely persistent homology. Then, we will explore examples of using this tool in applications.

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For further information: see <http://www.marquette.edu/mscs/resources-colloquium.shtml>

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