

Algebra/Topology Seminar

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TSA WITH TDA

Thursday, April 27, 2017

1:15 p.m. in ES-143

ABSTRACT. Time series analysis is the study of functions of time with an aim towards understanding the hidden dynamical system which produced them. However, the current state of the art in time series analysis relies heavily on heuristics, user-defined inputs which are sensitive to error, and high computational cost. In this talk, we will discuss methods for using Topological Data Analysis, as well as a newly developed machine learning methodology, which provides a new perspective for analyzing time series of dynamical systems. This work is joint with Firas Khasawneh and Jose Perea.