



Algebra/Topology Seminar

COURTNEY THATCHER
Bard College at Simon's Rock

APPLIED TOPOLOGY: THE MAPPER ALGORITHM

Thursday, September 6, 2012
1:15 p.m. in ES-143

ABSTRACT. Computational Topology is an active, relatively young field applying ideas from topology to obtain different information in the field of data analysis. In this talk, I'll start by surveying some of the more recent work that has been occurring in the field. Following that, I'll discuss the computational method Mapper, which extracts information from high dimensional data sets using simplicial complexes. Applications for shape recognition, diabetes, and breast cancer data will be presented.