UNIVERSITY AT ALBANY
State University of New York

College of Arts and Sciences
Department of Mathematics and Statistics

Algebra/Topology Seminar

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Regular Finite Decomposition Complexity

Thursday, May 4, 2017
1:15 p.m. in ES-143

Abstract. We introduce the notion of "regular finite decomposition complexity" of a metric family. This generalizes Gromov's finite asymptotic dimension and is motivated by the concept of finite decomposition complexity (FDC) due to Guentner, Tessera, and Yu. Regular finite decomposition complexity implies FDC and has all the permanence properties that are known for FDC, as well as a new one. We show that for a collection containing all metric families with finite asymptotic dimension all other permanence properties follow from Fibering Permanence. This is joint work with Daniel Kasprowski and Andrew Nicas.