

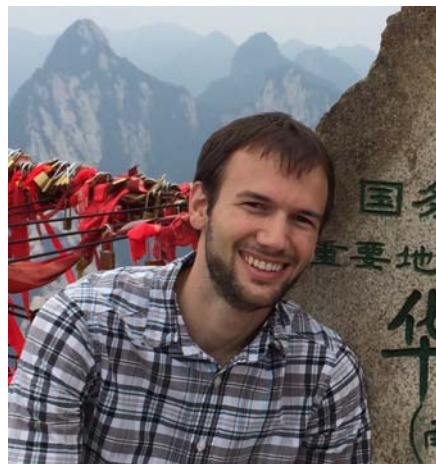
GEOMETRIC ANALYSIS SEMINAR

Speaker: Lee Kennard
University of Oklahoma

Date: Thursday, February 23, 2017

Time: 11:00 AM

Location: 258 Hurley Hall



Lecture Title:

Topological realization and geometric models

Abstract

In 1960, J.F. Adams resolved the Hopf invariant one problem by proving that certain cohomology rings with coefficients in $\mathbb{Z}/2\mathbb{Z}$ cannot be realized by CW complexes. In general, a topological realization problem asks whether a given algebraic object can be realized as some given invariant of a topological space. When the answer is yes, one can then look for geometric models such as smooth manifolds with large symmetry, desirable curvature properties, or other geometric structures. I will discuss recent joint work with Zhixu Su and Jason DeVito on these problems.