



Speaker: Fu-Quan Fang
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Wednesday, September 15, 2010
4:00 PM
117 Hayes-Healy Hall

Title: Are almost flat manifolds zero cobordant?

Abstract:

It is known for decades that every compact flat manifold is zero bordant, by Hamrick-Royster. By Gromov-Ruh, almost flat manifolds are infra-nilmanifolds. It is conjectured by Farrell-Zdravkovska that almost flat manifolds are zero bordant (the same question was also collected in Yau's problem list). In this talk I will explain some recent advances joint with Jim Davis on this problem, asserting that the answer is yes when the holonomy is cyclic. This generalizes earlier works of Farrell-Zdravkovska and Upadhyay.