



HACETTEPE ÜNİVERSİTESİ MATEMATİK BÖLÜMÜ GENEL SEMİNERİ

(HACETTEPE UNIVERSITY MATHEMATICS GENERAL SEMINAR)

Tarih (Date): 27.04.2016, Çarşamba (Wednesday)

Saat (Time): 15:00

Yer (Place): Yaşar Ataman Seminer Salonu

Konuşmacı (Speaker): Mehmet Akif Erdal (Ph. D. Student, Bilkent University)

Başlık (Title): Manifolds with homotopy type of a (\mathbb{Z}/n) -homology sphere

Özet (Abstract):

In this talk we will discuss a method which allow us to put a lower bound on the number of manifolds in the homotopy type of a (\mathbb{Z}/n) -homology m -sphere, where n is a number which depends on m . Our methods relies on Atiyah-Hirzebruch spectral sequence computations for Thom spectra associated to bundles over a (\mathbb{Z}/n) -homology sphere. This method, for example, can be used in diffeomorphism classification of certain fake lens spaces, or more generally diffeomorphism classification of some manifolds which can be obtained as quotients of free actions on spheres.