



**HACETTEPE ÜNİVERSİTESİ MATEMATİK BÖLÜMÜ  
GENEL SEMİNERİ**

**(HACETTEPE UNIVERSITY MATHEMATICS  
GENERAL SEMINAR)**

**Tarih (Date):** 01.04.2015, Çarşamba (Wednesday)

**Saat (Time):** 15:00

**Yer (Place):** Yaşar ATAMAN Seminer Salonu

**Konuşmacı (Speaker):** Dr. Oktay Ölmez (Ankara University)

**Başlık (Title):** Boolean functions and combinatorial designs

**Özet (Abstract):** Combinatorial design theory has not only a deep respected and advanced mathematical heritage but also has produced genuine new applications that attract many engineers. These applications include problems in signal processing, radar, error-correction codes, optical orthogonal codes, image processing and cryptography.

Difference set method is a central figure in the study of these application problems, especially error-correction codes, sequences and highly nonlinear Boolean functions. In this talk, we will explore the links between Boolean functions and combinatorial designs via difference set methods. We will provide results specifically concerning bent and plateaued boolean functions.

NOT: Konuşma sonunda çay ve pasta ikramı olacaktır.

(P.S.: Tea and cookies will be served after the talk.)