



Colloquium

October 12, 4:05 p.m. (9th Period)
(in the Atrium)

Speaker: Endrit Fejzullahu

Title: The Probabilistic Method in Combinatorics

Abstract

We provide an elementary introduction to the probabilistic method in combinatorics. We will focus mainly on examples from Ramsey theory and set systems; in particular, we present one of the earliest results in the subject, due to Erdos (1947), that was first to obtain a lower bound on the Ramsey numbers. Some of the things to be discussed include the method of alterations, the Lovasz Local Lemma, Sperner's Lemma and the Erdos-Ko-Rado theorem.