
* UCLA Combinatorics Seminar *

Date: Thursday, March 12, 1.50-2.50 in MS 7608

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On Sparse Sets Hitting Linear Forms

Abstract

Let $a_1 < a_2 < \dots < a_s$ be fixed integers and let $[n]$ denote the set $\{1, 2, \dots, n\}$. In this talk, we will be concerned with the size of the smallest subsets of $[n]$ which intersect every subset in $[n]$ of the form $\{a_1x, a_2x, \dots, a_sx\}$ for some positive integer x . For the most part, we can only estimate this minimum size although there are interesting classes of a_i 's for which we can find the exact answer.