

1070-20-99

Alireza Salehi Golesefidy* (asalehi@math.princeton.edu), Mathematics Dept. (Fine Hall), Washington road, Princeton, NJ 08544-1000, and **Peter Sarnak** and **Peter Varju**. *Affine sieve and expanders*.

I will talk about the fundamental theorem of affine sieve (joint with Sarnak). The main black box in the proof of this result will be also explained. It is a theorem on a necessary and sufficient condition for a finitely generated subgroup of $SL(n, \mathbb{Q})$ under which the Cayley graphs of such a group modulo square free integers form a family of expanders (joint with Varju). (Received February 01, 2011)