

## **abstract**

COMPUTER SCIENCE/DISCRETE MATH II

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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We prove that Cayley graphs of  $SL_2(\mathbb{Z}/q\mathbb{Z})$  are expanders with respect to the projection of any fixed elements in  $SL_2(\mathbb{Z})$  generating a non-elementary subgroup. This expansion property plays crucial role in establishing almost prime version of " $SL_2(\mathbb{Z})$  Dirichlet Theorem". Joint work with Jean Bourgain and Peter Sarnak.