abstract

LIE GROUPS, REPRESENTATIONS AND DISCRETE MATH
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

We will discuss the following very recent result:

Theorem. Let R be any finitely generated associative (not necessarily commutative) ring, with 1. Then for any n > stable range rank of the ring R, the group EL_n(R) has Kazhdan's property (T).

The group EL_n(R) is the group generated by the elementary subgroups of GL_n(R) (when R is not commutative, SL_n(R) doesn't even make sense). Special important cases of the theorem are that SL_n(Z[x]) has (T) for n >3, SL_n(Z[x,y]) has (T) for n >4 etc. The proof is cohomological, and doesn't give any explicit Kazhdan constants. We will discuss it in a very friendly manner, leaving out some "black boxes" and assuming no prior familiarity with property (T).