

- **Kielak, Dawid: Property (T) for  $\mathrm{Aut}(F_n)$  (SR 0)**

I will present a very recent proof of Kazhdan's property (T) for the group of automorphisms of a free group  $F_n$  (with  $n \geq 5$ ) (obtained jointly with Marek Kaluba and Piotr Nowak).

Property (T) is a very strong rigidity property restricting possible affine actions of a group on Hilbert spaces. It has many important applications in group theory and geometry. Property (T) was classically established by Kazhdan for  $\mathrm{SL}_n(\mathbb{Z})$  and other lattices in semi-simple Lie groups of higher rank. The proof I will present gives also an alternative proof of Kazhdan's result for  $\mathrm{SL}_n(\mathbb{Z})$ , and strengthens the analogy between automorphism groups of free and free-abelian groups.