

Welcome to International Group Theory Web Seminar

Lewis Bowen,
"Free Groups in Lattices"
May 20, 12:00pm (New York Time).

Abstract:

Let G be any locally compact, unimodular, metrizable group. The main result of the talk, roughly stated, is that if $F < G$ is any finitely generated free group and $\Gamma < G$ any lattice, then up to a small perturbation and passing to a finite index subgroup, F is a subgroup of Γ . This result is a key ingredient in two recent works. First, Lackenby, Long and Reid showed that, for cocompact Kleinian groups, LERF implies the Lubotzky-Sarnak conjecture. Second, Lackenby showed that every Kleinian group that contains a finite noncyclic subgroup is either finite, virtually free, or contains a surface subgroup. It is an open question whether the main theorem can be extended to surface groups.

Next presentation: **TBA**

