

Mathematics Colloquium

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Stevens

Asymptotic Subgroups
of Groups

Abstract: Suppose you picked k elements of a group G “at random”, and asked what subgroup they generate. What is the chance it would be free, abelian, or G itself? If G was a free group, then since finitely generated subgroups of free groups are free, the answer isn't so exciting. But what if G were Thompson's group F ? Jennifer Taback (Bowdoin), Sean Cleary (CCNY) and I asked this question and have some interesting answers. First we had to decide how to pick elements at random, and how to compute probabilities of being certain subgroups. We use the notion of “asymptotic density” of Miasnikov et al.

Wednesday, March 28

4:00-5:10 pm
204 Smith Hall