

Welcome to International Group Theory Web Seminar

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"Asymptotic densities of solvable equations over groups "

March 18, 12:00pm (New York Time).

Abstract:

The study of asymptotic properties in group theory has a long history. Usually the asymptotic densities involved are either zero or one. We provide new examples of algebraically significant sets of intermediate asymptotic density. We show that the set of all equations in k variables over a free nilpotent group which are satisfiable in that group has intermediate density. For a free abelian groups of rank m the density is e^{k+m}/e^k . For (absolutely) free groups we have a density result similar to the one for free nilpotent groups but with respect to equations of a particular form. By identifying these equations with elements of free groups, we obtain the first natural examples of sets of intermediate density for free groups of rank greater than two.

Next presentation:

March 25. Moon Duchin." TBA"

