

Random walks on free solvable groups

Tianyi Zheng
Cornell University

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Abstract

In this talk I will discuss the decay of return probability of random walks on free solvable groups. These groups may be defined as quotient groups of free groups with respect to the derived series. The main tools we use are Magnus embedding of free solvable groups into wreath products, and comparison of Dirichlet forms. If time allows, I will discuss the connection of our result to the L^2 isoperimetry profile of these groups.