Algebra Seminar

Wednesday, November 20, 2013

HH-3017 at 1 p.m.

Valentin Gruzdev, Memorial University

Relative growth of subgroups of free groups

Abstract:

In this talk we will recount results regarding the base of relative growth function of subgroups of free groups obtained by Rostislav Grigorchuk and discussed in his doctoral thesis titled "Banach invariant means on homogeneous spaces and random walks". We will also employ method designed by Yuri Bahturin and Alexander Olshanskii in their work "Growth of subalgebras and subideals in free Lie algebras" to show that the base of relative growth function of a finitely generated subgroup of a free group is strictly less than the base of growth function of the free group itself, provided there are no cancellations between generators.