On Gap Conjecture for group growth and related topics

Rostislav Grigorchuk Texas A & M University

Thursday, April 19, 2012 007 Kemeny Hall, 4:00 pm (Tea 3:30 pm 300 Kemeny Hall)

Abstract

I will give a survey of results around Gap Conjecture which was formulated by speaker at 1989 and which states that if growth of a finitely generated group is less than $e^{\sqrt{n}}$, then it is polynomial. If proved, it will be a far reaching improvement of the Gromov's remarkable theorem describing groups of polynomial growth as virtually nilpotent groups. Old and new results around conjecture and its weaker and stronger forms will be formulated and discussed.

This talk should be accessible to graduate students