Laura Ciobanu

University of Neuchatel

A combinatorial perspective on rapid decay

Friday, December 5th, 2014
CUNY Graduate Center, Room 9205
10:20 am

Abstract:
In this talk I will show how analyzing and counting decompositions of geodesics in various classes of groups can be used to prove that they posses the rapid decay (RD) property. The first result that I will present is that rapid decay is preserved by graph products. The second is that many Artin groups of large type satisfy the rapid decay property, including all of extra-large type. For many of these Artin groups a result of Lafforgue applies to show that the groups satisfy the Baum-Connes conjecture.

This is joint work with Derek Holt and Sarah Rees.