



Mathematics Colloquium

Hyperbolic actions and second bounded cohomology for subgroups of $\text{Out}(F_n)$

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Abstract

Starting with work of Brooks, the theory of group actions on Gromov hyperbolic spaces has co-evolved with the theory of the second bounded cohomology of groups. A key theorem which emerged in work of Bestvina and Fujiwara says: if a group G acts on a Gromov hyperbolic space X satisfying a weak form of proper discontinuity, then the action can be used to prove that the second bounded cohomology of G is of uncountable dimension. After recounting the history of this co-evolution, I will talk about recent work regarding subgroups G of the outer automorphism group of a finite rank free group, focussing on the 2010 paper of Bestvina and Feighn, and on more recent work of Handel and myself.

Wednesday, 1 March 2017, 4pm

Smith Hall 204

Tea and refreshments will be served at 3:45pm.