Department of Mathematics University of Notre Dame

TOPOLOGY SEMINAR

Guest Speaker: Jean Pierre Mutanguha

Princeton University

Date: Tuesday, December 5, 2023

Time: 2:30 PM

Location: 258 Hurley Bldg

Zoom Link: NA



Lecture Title:

Canonical hierarchical decompositions of free-by-cyclic groups

Abstract

Free-by-cyclic groups can be defined as mapping tori of free group automorphisms. I will discuss various dynamical properties of automorphisms that turn out to be group invariants of the corresponding free-by-cyclic groups (e.g. growth type). In particular, certain dynamical hierarchical decompositions of an automorphism determine canonical hierarchical decompositions of its mapping torus.