Algebra/Topology Seminar — Colloquium

Genevieve Walsh
Tufts University

Hyperbolic Groups, Relatively Hyperbolic Groups, and the Cannon Conjecture

Thursday, November 30, 2023
3:00 p.m. in BB-B012

Abstract. We describe several very interesting and rich classes of groups: hyperbolic groups and relatively hyperbolic groups. The fundamental group of a closed hyperbolic 3-manifold is a good example of a hyperbolic group, and the fundamental group of a hyperbolic knot complement is a good example of a relatively hyperbolic group. We will explain some tools one can use with these groups, particularly their boundaries. We will explain a conjecture predicting when a hyperbolic group is a 3-manifold group. If time permits, we will discuss how filling and drilling is related to this conjecture.