

Algebra/Topology Seminar

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CANNON–THURSTON MAPS IN NON-POSITIVE CURVATURE

Thursday, October 4, 2018

1:15 p.m. in ES-143

ABSTRACT. Two far-reaching methods for studying the geometry of a finitely generated group with non-positive curvature are (1) to study the structure of the boundaries of the group, and (2) to study the structure of its finitely generated subgroups. Cannon–Thurston maps, named after foundational work of Cannon and Thurston in the setting of fibered hyperbolic 3-manifolds, allow one to combine these approaches. Mitra (Mj) generalized work of Cannon and Thurston to prove the existence of Cannon–Thurston maps for any normal hyperbolic subgroup of a hyperbolic group. I will explain why a similar theorem fails for certain $\text{CAT}(0)$ groups. This is joint work with Beeker–Cordes–Gardham–Gupta.