

Svetlana A. Krat* (krat@math.psu.edu) Department of Mathematics and Statistics, Pennsylvania State University, University Park, State College, PA 16802 *On pairs of metrics invariant under a co-compact action of a group* . Consider two intrinsic metrics invariant under the same cocompact action of an abelian group. Assume that the ratio of the distances tends to one as the distances grow to infinity. Then it is known (due to D. Burago) that the difference between the metric functions is uniformly bounded.

We will prove an analog of this result for hyperbolic groups, as well as a partial generalization of this result for the Heisenberg group: a word metric on the Heisenberg group lies within bounded GH distance from its asymptotic cone.