

Geometry, Topology and Dynamics Seminar

Morse geodesics in torsion groups

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Abstract: A geodesic in a metric space is Morse, if quasi-geodesics connecting points on it stay uniformly close. In many cases, such geodesics come from an embedded cyclic subgroup, in other words from a so-called Morse element which generates this cyclic subgroup. By studying asymptotic cones, we will exhibit Morse geodesics in infinite torsion groups which are direct limits of hyperbolic groups. On the contrary, it will be shown that there exist many non-Morse geodesics in the same groups, which do not even contain arbitrarily large powers. I will also discuss related properties and possible consequences.

Monday, April 6 at 3:00 PM in SEO 636
