RUTGERS
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Mathematics Colloquium

Quasigeodesic pseudo-Anosov flows in hyperbolic 3-manifolds

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Abstract

We obtain a simple topological and dynamical systems condition which is necessary and sufficient for an arbitrary pseudo-Anosov flow in a closed, hyperbolic three manifold to be quasigeodesic. Quasigeodesic means that orbits are efficient in measuring length up to a bounded multiplicative distortion when lifted to the universal cover. We prove that such flows are quasigeodesic if and only if there is an upper bound, depending only on the flow, to the number of orbits which are freely homotopic to an arbitrary closed orbit of the flow.

Wednesday, 6 April 2016, 4pm

Smith Hall 204

Tea and refreshments will be served at 3:45pm.