

GEOMETRY–TOPOLOGY SEMINAR

Moon Duchin

University of Michigan

will speak on

Measuring the failure of hyperbolicity

ABSTRACT: In a space with large-scale negative curvature (i.e., a Gromov hyperbolic space), rays that diverge past a threshold travel in “opposite” directions. We can formulate an interesting geometric statistic by asking proportionally how often this hyperbolic behavior occurs in a metric space. For groups, this can depend – but apparently in a limited way – on the choice of generators. I’ll discuss this through a variety of examples, with emphasis on the (surprisingly rich) free abelian case. Parts of this work are joint with Samuel Lelièvre, Christopher Mooney, and Ralf Spatzier.

TUESDAY, 16 FEBRUARY 2010

LECTURE AT 3:30 PM

ROOM 617, WACHMAN BUILDING

DEPARTMENT OF MATHEMATICS