

1038-53-301

Keith Burns* (burns@math.northwestern.edu), Department of Mathematics, Northwestern University, Evanston, IL 60208, and **Eugene Gutkin**, UMK, Chopina 12/18, Torun 87-100, Poland. *Insecurity and the growth of the number of geodesics between two points.*

This talk will describes interactions between two approaches to two approaches to the study of the geodesics joining two points in a Riemannian manifold. One of them relates the growth of number of these geodesics as their length increases to the entropy of the geodesic flow. The other studies whether or not these geodesics can be blocked by finitely many points. The main result is that in most manifolds with no conjugate points it is impossible to block the geodesics joining a pair of points with finitely many points. This is joint work with Eugene Gutkin. (Received February 12, 2008)