

Geometry, Topology and Dynamics Seminar

Coarse entropy and transverse dimension

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Abstract: The notion of "coarse entropy" for complete metric spaces was introduced in the paper "Manifolds which cannot be leaves of foliations", Topology, 1996, by O. Attie and S. Hurder, where this invariant was used to construct examples of complete Riemannian manifolds of bounded geometry which are not quasi-isometric to a leaf of any C^1 -foliation of a closed Riemannian manifold. In this talk, we relate the coarse entropy to the "complexity entropy" of trees of finite type. We also show how the coarse entropy is related to the Hausdorff dimension of graph matchbox manifolds formed from such trees, as studied by Lukina. This work is joint with Olga Lukina.

Monday, October 13 at 3:00 PM in SEO 636