Mathematics, Statistics, and Computer Science **@ UIC**

Geometry, Topology and Dynamics Seminar

Homeomorphisms of solenoids

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Abstract: Matchbox manifolds are compact foliated spaces whose transversals are totally disconnected. In the case when the pseudogroup holonomy dynamical system on the transversals is equicontinuous, the matchbox manifold is homeomorphic to a solenoid. This means that the pseudogroup action on the transversal can be obtained as a restriction of a group action.

In the talk, we are interested in geometric and dynamical invariants of homeomorphisms of such matchbox manifolds. Examples of such invariants are the return equivalence class of the transverse dynamical system, homogeneity and almost homogeneity, growth properties of leaves, and others. We will discuss the interrelations between these properties, and their roles as obstructions to the existence of ''pointed'' homeomorphisms between matchbox manifolds. Based on a series of joint works with Clark and Fokkink, Clark and Hurder, Dyer and Hurder.

Monday, February 29 at 3:00 PM in SEO 636