Geometry, Topology and Dynamics Seminar

Horseshoe-like maps of plane and symbolic dynamics Sonja Stimac (University of Zagreb and IUPUI)

Abstract: I will present a possible approach to coding of attractors of horseshoe-like maps of plane (such as the H\'enon and Lozi maps). I will also discuss some techniques which can be used if an attractor is characterized by an appropriate countable collection of sequences of 0s and 1s (which play role of "kneading sequences" of "critical points"). I will show necessary and sufficient conditions for a sequence of 0s and 1s to be an itinerary of a point which belongs to the unstable manifold of a fixed point.

Monday, October 27 at 3:00 PM in SEO 636