Geometry, Groups and Dynamics/GEAR Seminar (held at the Illinois hub of GEAR)

1:00 pm, Thursday, October 29, 2015, 243 Altgeld Hall

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Energy growth in discontinuous Hamiltonian systems

Abstract: We consider a family of discontinuous area-preserving twist maps arising naturally in the study of non-smooth switched Hamiltonian systems. An unbounded solution for the special case of the so-called Pinball transformation is constructed. For the generic values of the parameters, in the large energy limit, the Pinball map is shown to behave similarly to another one introduced earlier by Erdös and Szüsz. This is a joint work with Maxim Arnold (UT Dallas). Video