

Abstract: Katok has asked the following informal question: In low dimensions are all conservative dynamical systems with zero topological entropy a limit of integrable systems? In this talk I will discuss an approach to this question that uses pseudo-holomorphic curves. In particular the approach seems to answer Katok's question affirmatively for a class of Hamiltonian disk maps which includes even ergodic maps! This seems especially interesting as ergodicity is a property that is as far from integrable as one could imagine (besides of course hyperbolicity).