

Abstract: A celebrated theorem in two-dimensional dynamics due to John Franks asserts that every area preserving homeomorphism of the sphere has either two or infinitely many periodic points. In this talk I will describe a new Floer theoretic proof of this result for the case of area preserving diffeomorphisms of the sphere. This is joint work with B. Collier, B. Reiniger, B. Turmunkh, and A. Zimmer.