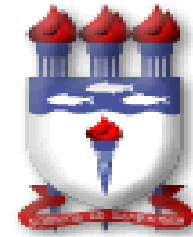




Instituto de Matemática

UNIVERSIDADE FEDERAL DE ALAGOAS
PROGRAMA PÓS-GRADUAÇÃO EM MATEMÁTICA



Seminários de Sistemas Dinâmicos

Título: Ration vectors for minimal two torus diffeomorphisms.

Palestrante: Xiaochuan

Resumo: In two torus, the concept of rotation number has a counterpoart called rotation set. It is a compact and convex subset of \mathbb{R}^2 , and there are still many questions relating to its shape as well as the relationship between rotation set and the dynamical properties of a torus homeomorphism. In this talk, we will look at the pointwise rotation vector for a smooth two torus diffeomorphism. We show there exist examples where for Lebesuge almost every point of T^2 , the pointwise rotation vector is not well defined. That is, when we try to use the usual way to define this number, the limit does not exsit. We will discuss also many recent progresses in this field, as well as mention some interesting open problems. Finally, we will briefly talk about the proofs. The method we use is a variant of Artur Avila's method to obtain a counter-example of Franks-Misiurewicz conjecture. Its origin is from the Anosov-Katok fast approximation method.

Data: Sexta - Feira, 01/09/2017

Horário: 09:00

Local: Sala A, IM novo.