



3^a Rodada

Instituto de Matemática da UFRJ, Bloco C do CT
13 de março (sexta-feira)

Matinée EDAÍ Fenômenos de Newhouse: persistência de tangências e infinidade de poços

EXPOSITOR: Lorenzo J. Díaz (PUC - Rio)

HORA: 14:30 h

RESUMO: Discutiremos os mecanismos de geração de tangências persistentes nas topologias C^1 e C^2 . Veremos alguns dos fenômenos dinâmicos associados à persistência de tangências, como a genericidade local de infinidade de poços/fontes e a não-existência de extensões simbólicas.

Asymptotic likelihood of chaos for families of circle maps

EXPOSITOR: Hiroki Takahashi (Kyoto)

HORA: 16:00 h

RESUMO: Motivated by certain periodically kicked ODEs, Wang and Young considered a smooth two-parameter family of circle maps with a finite number of critical points. Let (a, L) denote the two parameters. The maps wrap the circle more and more times for larger L . For fixed L sufficiently large, we construct a positive measure set of a -values corresponding to absolutely continuous invariant probability measures. The measure of this set tends to full measure in a -space as L tends to infinity.

Café EDAÍ

17:00 - 17:30

Index problem of homoclinic classes under the robust absence of dominated splitting

EXPOSITOR: Katsutoshi Shinohara (Tokyo)

HORA: 17:30 h

RESUMO: In the article of Abdenur, Bonatti, et al., it was proved that, for generic C^1 -diffeomorphisms, the set of indices of periodic points forms an interval (of natural numbers).

In my talk, I will discuss the following inverse problem: For a given interval (say J), can one construct a homoclinic class $H(p)$ such that the set of indices of periodic points in $H(p)$ coincides with J ?

This problem is not so difficult under the assumption of some kind of hyperbolicity. We consider this problem under the robust absence of dominated splitting on $H(p)$.

*Confraternização EDAÍ
19:30 - Planalto do Chopp
no Flamengo*