

Lyapunov exponents of preserving dynamics

Gently forcing generic cocycles over volume

C¹-diffeomorphisms to embed in a flow

EXPOSITOR: Nicolas Gourmelon

• IMPA

DATA: 29/agosto/2008 (sexta-feira)

HORA: 16:00 h

LOCAL: Sala de Seminário - 7º andar Instituto de Matemática - UFF DATA: 29/agosto/2008 (sexta-feira)

EXPOSITOR: Gioia Vago

• Université de Bourgogne

HORA: 17:20 h

LOCAL: Sala de Seminário - 7º andar Instituto de Matemática - UFF

RESUMO:

Let T be a volume preserving transformation of a manifold X, and $A: X \to GL_d(\mathbb{R})$ be a continuous map. Bochi and Viana proved that, given any ergodic homeomorphism T and any A in a C^0 residual, the finest dominated splitting and the Oseledets splitting of the linear cocycle (T, A) coincide almost everywhere. We propose some generalization of these results to finer topologies.

This is a joint work with J. Bochi.

RESUMO:

In the space of C^1 -diffeomorphisms of surfaces, endowed with the C^1 topology, there is an open region where, up to a small perturbation, every diffeomorphism can be embedded in a flow. We show how to choose such a small perturbation with the help of a simple worked out example.

We discuss how this construction is related to a much more general unsolved problem: understanding the topology of the set of C^1 -diffeomorphisms with trivial centralizer, that is, those which commute only with their own iterates.

This is a joint work with Christian Bonatti, Sylvain Crovisier and Amie Wilkinson.

Café EDAÍ 17:00 - 17:20

Confraternização EDAÍ 18:40 - Chope na Praça da Cantareira

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