Instituto de Matemática e Estatística
Universidade Federal Fluminense

Seminário de Sistemas Dinâmicos da UFF

Open sets of partially hyperbolic skew products having an unique SRB measure

Davi Obata

Université Paris-Sud (Orsay)

Data: **12 de julho** - Sexta-feira
Hora: 15h30
Local: Sala de seminários, 4º Andar, Bloco H, Campus do Gragoatá.

Resumo

In this seminar we will study the existence (and uniqueness) of SRB measures for certain partially hyperbolic systems. In particular, we obtain C^2-open sets of dissipative, partially hyperbolic skew products having an unique hyperbolic SRB measure. These partially hyperbolic systems have a two dimensional center which presents both expansion and contraction, and no domination between expanding/contracting directionsr. These systems are dissipative perturbations of an example introduced by Berger-Carrasco. The proof uses a combination of recent results: a measure rigidity result by Brown-Rodriguez Hertz, the invariance principle by Tahzibi-Yang, and some techniques developed by the author to prove the stable ergodicity of the same example in the conservative setting. In particular, in a neighborhood of the example we obtain a rigidity result for u-Gibbs measures, that is, we can classify all the possible u-Gibbs measures that may appear.