
*** PROGRAMA DE VERÃO 2012 ***

SISTEMAS DINÂMICOS

Thermodynamic formalism for the Hénon map at the first bifurcation

Samuel Senti (UFRJ)

We study the dynamics of strongly dissipative Hénon maps, at the first bifurcation parameter where the uniform hyperbolicity is destroyed by the formation of tangencies inside the limit set. We prove the existence of an equilibrium measure which minimizes the free energy associated with the non continuous potential $-t \log J^u$, where t is in a certain interval of the form $(-\infty, t_0)$, $t_0 > 0$ and J^u denotes the Jacobian in the unstable direction. We also prove the occurrence of a phase transition at which multiple equilibrium measures coexist and the pressure function is not differentiable. Given time we will discuss how to approach the question of uniqueness of the equilibrium measure. This is a joint work with Hiroki Takahasi (University of Tokyo)

Data: 10 de Fevereiro, às 14:00
Local: Auditório Antônio Gilioli (247/262 A)