
Seminário/Talk

04 de dezembro de 2019 | 14h30min
Sala 6.05 (UBI)

Exponential decay of correlations for Gibbs measures and semiflows over $C^{1+\alpha}$ piecewise expanding maps

Diego Daltro

Instituto de Matemática e Estatística, Universidade Federal da Bahia

Resumo/Abstract:

We consider suspension (semi)flows over $C^{1+\alpha}$ full branch Markov piecewise expanding interval maps and piecewise hyperbolic maps, and prove exponential decay of correlations with respect to Gibbs measures associated to piecewise Hölder continuous potentials. As a consequence, codimension one attractors of $C^{1+\alpha}$ Axiom A flows have exponential decay of correlations with respect to any equilibrium state associated to Hölder continuous potentials. In the case of suspension semiflows over piecewise expanding interval maps, the argument uses a construction of certain partitions which are adapted to Gibbs measures, even those for which the Federer property fails.

Joint work with Paulo Varandas (CMUP and Universidade Federal da Bahia)