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\* PROGRAMA DE VERÃO 2012 \*

# SISTEMAS DINÂMICOS

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Regularity of weak solutions of  
cohomological equations under  
exponential decay of correlations

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Let  $T$  be a  $C^1$  map and  $f$  be a continuous real valued function on a compact manifold. Suppose that the Lebesgue measure is invariant under  $T$  and that correlations of  $C^1$  functions decay exponentially fast. Then the cohomological equation  $U \circ T - U = f$  admits weak solutions which are distributions in the sense of Schwartz. The question addressed in this talk is: what is the regularity of  $U$  in Besov spaces?

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Data: 08 de Fevereiro, às 14:00  
Local: Auditório Antônio Gilioli (247/262 A)