

Lyapunov exponents of linear cocycles over Markov shifts

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In this work, we prove that the Lyapunov exponents of $GL(2)$ -cocycles over Markov shifts depend continuously on the underlying data, that is, on the matrix coefficients and the Markov measure transition probabilities.

The special case of this theorem when the measure is a Bernoulli measure was obtained by Bocker and Viana. Recently, Avila, Eskin and Viana announced that, still in the Bernoulli case, the theorem holds in arbitrary dimension $d \geq 2$ and we used their approach to analyse the Markov case.

This is a joint work with Marcelo Viana.