

# Continuity of the Lyapunov exponents of linear cocycles

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## Resumo/Abstract:

The aim of this course is to provide an introduction to the study of continuity properties of the Lyapunov exponents of linear cocycles.

Most of the lectures will be based on our research monograph, where we introduced a general method of proving such continuity properties. This method uses an inductive procedure built on a general, geometric version of the Avalanche Principle. The main assumption is the availability of appropriate large deviation type estimates for quantities related to the iterates of the cocycle.

We apply this method to random and to quasi-periodic cocycles, by deriving the relevant large deviations. We also discuss other approaches to the continuity problem for these models.

**Pré-requisitos:** Basic notions in ergodic theory, probabilities, Fourier analysis and functional analysis.