

## **Strong stochastic stability for non-uniformly expanding maps**

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Abstract:

We address the strong stochastic stability for general non-uniformly expanding maps. The (weak) stochastic stability for this maps, in the sense of the convergence of the physical stationary probability measure to the SRB probability measure in the weak\* topology, was established by J. F. Alves and V. Araújo (2003). We improve this result in order to obtain the corresponding convergence of densities in the  $L^1$ -norm.

*This is a joint work with J. F. Alves.*