

Titel: The Fürstenberg-Ishii Criterion for a Positive Lyapunov Exponent and Applications to Anderson Localization

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Abstract:

We discuss a criterion for random products of $SL(2, \mathbb{R})$ matrices to have a positive Lyapunov exponent that is inspired by work of Ishii and that provides a sufficient condition for an application of the well-known Fürstenberg theorem. Applications of this criterion include localization results for the continuum 1D Anderson model, random operators on random radial trees, and Schrödinger operators with general random local point interactions.