

A More Constructive Approach to the Control of Lyapunov Exponents

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Abstract

The importance of the existence of distinct Lyapunov exponents of products of random matrices is a well known fact. However it is even more important to have a control over certain operators which are responsible for these exponents. The approach which will be explain allows one to make progress in areas like

- (i) the asymptotic behaviour of non-identically distributed independent random matrices;
- (ii) the asymptotic behaviour of products of independent random matrices with “vanishing” disorder;
- (iii) spectral properties of certain classes of random Schroedinger operators.