

Lyapunov Exponents and Asymptotic Dynamics in Random Kolmogorov Models

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Abstract. The current paper is devoted to the investigation of asymptotic dynamics in random Kolmogorov models. Applying the theory of principal Lyapunov exponents and the principal spectrum developed in the authors' previous papers together with the concept of part metric it provides conditions for the existence of a globally attracting positive random equilibrium, the existence of a globally attracting uniformly positive random equilibrium, and the extinction in random Kolmogorov models. These results are an important complement to the existing ones.

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