

# Stationary Measures for Stochastic Lotka-Volterra Systems with Application to Turbulent Convection

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**Abstract:** In this talk I will give some ergodicity and nonergodicity for a class of stochastic Lotka-Volterra systems as the noise intensity vanishes. The nonergodicity case can be illustrated the turbulent characteristics. It is a phenomenon that the turbulence in a fluid layer heated from below and rotating about a vertical axis is robust under stochastic disturbances. This is a joint work with Lifeng Chen, Jifa Jiang, Lei Niu and Jianliang Zhai.