



Workshop on Stochastic Analysis

IMECC - Unicamp

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Thermodynamic formalism for hyperbolic random dynamical systems

Abstract

In this talk we develop thermodynamic formalism for random Anosov maps and uniformly Hölder random potentials. We assume uniform fibre hyperbolicity given by deterministic invariant cone fields, a one-dimensional stable direction, and a fibrewise mixing condition whose mixing time may depend on the base point. Under these assumptions we construct a relative equilibrium state, prove its uniqueness, and establish quenched exponential decay of correlation.