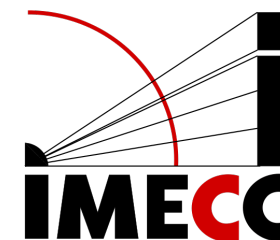




V Workshop in Stochastic Analysis and Applications

IMECC - Unicamp

July 31st to August 2nd, 2024



Lorena Duarte
UNICAMP

Well-posedness and asymptotic behavior of almost periodic solutions to some stochastic nonlinear partial differential equations

Abstract

We prove the well-posedness and long-time behavior of almost periodic solutions to two stochastic partial differential equations. This generalizes some previous results known for periodic solutions to a more general class of oscillatory solutions. More specifically, we treat stochastic conservation laws and degenerate parabolic-hyperbolic equations assuming the Lipschitz continuity of the flux and viscosity functions, and certain non-degeneracy conditions. Moreover, for each equation, we show the existence and uniqueness of an invariant measure in a separable subspace of the space of Besicovitch almost periodic functions.