

N. Haydn, "*Exponential Law for Random Maps on Compact Manifolds*"

We consider random dynamical systems on manifolds modeled by a skew product which have certain geometric properties and whose measures satisfy quenched decay of correlations at a sufficient rate. We prove that the limiting distribution for the hitting and return times to geometric balls are both exponential for almost every realisation. We then apply this result to random C^2 maps of the interval and random parabolic maps on the unit interval.

This is joint work with J Rousseau and F Yang.