Ergodicity in infinite dimensions and the spread of randomness

Abstract. I will talk about some recent results in the ergodic theory of stochastic partial differential equations. However, I will begin with a very general discussion of ergodic theorems for Markov process whose state space is infinite dimensional. I will give a version of Haris’s ergodic result in the wasserstein metric (*not* total variation). I will then discuss some tools from Malliavin calculus used in proving the results.