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Approximation of absolutely continuous invariant measures for random dynamical systems

A random map is a discrete-time dynamical system in which one of a number of transformations is randomly selected and applied at each iteration of the process. The asymptotic properties of a random map are described by its invariant densities. I will talk about Ulam's method for approximation of absolutely continuous invariant measures for Markov switching position dependent random maps. Piecewise linear approximation of absolutely continuous invariant measures for random maps will also be discussed.