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Filiz Tumel* (ftumel@northamerican.edu), North American University, 3203 N Sam Houston Pkwy W, Houston, TX 77038. *Statistical Properties of Extended Systems with Random Jumps.*

In this talk, we discuss statistical properties of dynamical systems on a lattice with randomly occurring jumps. We use Perturbation Theory to derive the drift rate and the averaged Central Limit Theorem where the jumps happen on a union of countably many intervals. We obtain an upper bound for the speed of convergence in the Central Limit Theorem and prove that the convergence is with tight maxima. We prove Large Deviation results and the quenched Central Limit Theorem. Finally, we expand the drift rate results and the averaged Central Limit Theorem to certain non-uniformly expanding systems. (Received August 30, 2013)