1035-60-1196   **Noah Dean*** (`ndean@math.purdue.edu`). *Recurrence and Transience of Some Vertex Reinforced Random Walks.* Preliminary report.

The Vertex Reinforced Jump Process (VRJP) is a version of a continuous time random walk that includes a vertex reinforcement mechanism in its definition. It exhibits many of the same recurrence/transience behaviors of the basic edge reinforced random walk first proposed by Diaconis.

In this talk, results will be given concerning the behavior of VRJP on the 1-dimensional integer lattice, with non-uniform initial weights. In particular it will be shown that, on a graph with a transient bias, the reinforcement does not change the transience of the process. (Received September 19, 2007)