ON THE CONVERGENCE OF WEIGHTED AVERAGES OF RANDOM VARIABLES ARISING FROM A FINITE MARKOV CHAIN

David B. Wolfson

Abstract: Jamison et al. [6] discussed the convergence of weighted sums of independent random variables to a degenerate random variable. In this note one of their results is extended (with the same condition on the weights) to the sequence of holding times of a Markov Renewal process. A similar growth condition on the weights ensures the convergence of these weighted sums (suitably normalized) to the Normal law.

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