A GLOBAL APPROACH TO FIRST PASSAGE TIMES

Lars Larsson-Cohn

Abstract: First passage times for discrete-time stochastic processes are studied from a global point of view, in terms of a mapping that takes a numerical sequence to its first passage time function. The continuity properties of this mapping with respect to Skorohod's J_1 and M_1 topologies are examined. One typically has continuity in M_1, but in J_1 only under extra assumptions. The results are applied to random walks and renewal theory.

1991 AMS Mathematics Subject Classification: Primary: -; Secondary: -;

Key words and phrases: -

THE FULL TEXT IS AVAILABLE HERE