Large deviation principle with generated pseudo measures

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Abstract

Contemporary large deviation theory uses various approaches. One of possible recent approaches is based on the idempotent sup-measure and related integrals based on operations sup and the usual product (see [17]). In this paper, the large deviation convergence of a sequence of generated pseudo-measures to sup-decomposable measure is introduced. The main result of the paper gives a necessary condition for introduced convergence.

Keywords: Large deviation principle, Idempotent probability, Semiring, Decomposable measure, g-integral

AMS Mathematics Subject Classification (2000): 60F10, 28E05