LARGE DEVIATION PRINCIPLES
FOR SUMS OF RANDOM VECTORS AND
THE CORRESPONDING RENEWAL FUNCTIONS
IN THE INHOMOGENEOUS CASE

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Under the inhomogeneous case we mean the case when one or several (arbitrarily many) inhomogeneous summands are added to the sum of independent identically distributed vectors. We find necessary and sufficient conditions under which the large deviation principles for such sums and the corresponding renewal functions have the same form that in the homogeneous case.

Key words and phrases: large deviation principles, inhomogeneous sum of random vectors, renewal function, deviation rate function, second deviation rate function.

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