

MULTIVARIATE LARGE DEVIATIONS FOR SUMS OF I.I.D. RANDOM  
VECTORS WITH COMPACTLY SUPPORTED DISTRIBUTION

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*Abstract:* The sums of i.i.d. random vectors with compactly supported and absolutely continuous distribution are considered. Under some conditions the strong form of the local limit theorem for large deviations is proved. In passing the asymptotic behaviour of the moment generating function as well as possible non-degenerate limit laws for the natural exponential family of distributions are established.

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**Key words and phrases:** Abel theorem, Cramér transformation, Fenchel-Legendre transformation, Laplace method, local limit theorem, natural exponential family of distributions.

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