

ASYMPTOTIC BEHAVIOUR OF LINEAR RANK STATISTICS FOR THE
TWO-SAMPLE PROBLEM

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Abstract: Applying the strong approximation technique we present a unified approach to asymptotic results for multivariate linear rank statistics for the two-sample problem. We reprove asymptotic normality of these statistics under the null hypothesis and under local alternatives convergent at a moderate rate to the null hypothesis. We also provide a moderate deviation theorem for these statistics under the null hypothesis. Proofs are short and use natural argumentation.

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