

**Likelihood ratio test for testing covariance
structures from commutative quadratic
subspace
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Abstract

In this article, we address the problem of testing hypotheses about covariance structures from commutative quadratic subspace. The null distributions are established for the corresponding likelihood ratio test statistics. The application of the results is illustrated by both a simulation study and a real-life data example.

Keywords

Block compound symmetry, Beta random variables, Doubly multivariate model, Likelihood ratio test.