Maximum likelihood estimation of the structured covariance matrix under the multivariate T-distribution

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Abstract

In this talk we present the maximum likelihood estimators of the positive definite structured covariance matrix under the multivariate T-distribution. Compound symmetry and autoregression of order one structures are considered. For various sample sizes and degrees of freedom, the results will be compared with the corresponding estimators under the matrix normal distribution.

Keywords

Covariance matrix, Compound symmetry structure, Block compound symmetry, Autoregression of order one, Maximum likelihood estimation, Multivariate T-distribution.