



Estimation of covariance matrices based on hierarchical inverse-Wishart priors

Mathilde Bouriga, Olivier Féron

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This paper focuses on Bayesian shrinkage for covariance matrix estimation. We examine posterior properties and frequentist risks of Bayesian estimators based on new hierarchical inverse-Wishart priors. More precisely, we give the existence conditions of the posterior distributions. Advantages in terms of numerical simulations of posteriors are shown. A simulation study illustrates the performance of the estimation procedures under three loss functions for relevant sample sizes and various covariance structures.

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