Murphy, Thomas Brendan

Bayesian robustness for multivariate problems. (English) Zbl 1135.62319

Cuadras, Carles M. (ed.) et al., Distributions with given marginals and statistical modelling. Papers presented at the meeting, Barcelona, Spain, July 17–20, 2000. Dordrecht: Kluwer Academic Publishers (ISBN 1-4020-0914-3/hbk). 161-168 (2002).

Summary: The sensitivity of Bayesian multivariate parameter estimation to changes in the prior is investigated. In particular, robustness with respect to the dependence structure of the prior is considered. Methods using maximal association copulas, parametric copulas, and a sampling based method are demonstrated.

For the entire collection see [Zbl 1054.62002].

MSC:

62F15 Bayesian inference
62H12 Estimation in multivariate analysis
62F35 Robustness and adaptive procedures (parametric inference)