漸近予測期待対数尤度を最大化する推定量族

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A family of the estimators adjusting the maximum likelihood estimator by a higher-order term maximizing the asymptotic predictive expected log-likelihood is introduced under possible model misspecification. The negative predictive expected log-likelihood is seen as the Kullback-Leibler distance plus a constant between the adjusted estimator and the population counterpart. The vector of coefficients in the correction term for the adjusted estimator is given explicitly by maximizing a quadratic form. Examples using typical distributions in statistics are shown.

For the full results corresponding to this abstract, see Ogasawara (2017).

Reference

Ogasawara, H. (2017). A family of the adjusted estimators maximizing the asymptotic predictive expected log-likelihood. *Behaviormetrika*, 44, 57-95.