

Comparison of two types of confidence intervals based on Wilcoxon-type R -estimators

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Omelka (2007) proposed an alternative way of constructing a confidence interval based on R -estimators for single parameters in linear models. We will compare this confidence interval with a traditional (Wald type) confidence interval theoretically as well as by the means of a Monte-Carlo experiment. As a by-product we will show the asymptotic normality of the estimator of $\int f^2$ which was proposed in Koul et al. (1987).

References

- Koul, H. L., Sievers, G. L., and McKean, J. (1987). An estimator of the scale parameter for the rank analysis of linear models under general score functions. *Scand. J. Statist.*, 14:131–141.
- Omelka, M. (2007). Second-order linearity of Wilcoxon rank statistics. *Ann. Inst. Statist. Math.*, 59:385–402.
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