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# COMPARISON OF LOCATION ESTIMATORS USING BANKS' CRITERION

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*Abstract.* In this paper, we analyze further Banks' (1997) closeness criterion for estimators, which is an alternative to Pitman's (1937) closeness criterion. We mainly concentrate our analysis on location estimation, and justify a conjecture by Banks (1997) that for heavy tail distributions the sample median is better than the sample mean when estimating a location parameter. The conlusion is reversed for distributions with lighter tails. To achieve this, we use asymptotics and exact probability calculations.

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