

Near-consistent robust estimations of moments for unimodal distributions

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A. Robust Estimations of the Central Moments. In 1979, Bickel and Lehmann (1), in their final paper of the landmark series *Descriptive Statistics for Nonparametric Models*, generalized a class of estimators called measures of spread, which "do not require the assumption of symmetry."

Theorem A.1.

Proof. □

1. PJ Bickel, EL Lehmann, Descriptive statistics for nonparametric models iv. spread in *Selected Works of EL Lehmann*. (Springer), pp. 519–526 (2012).

DRAFT