

**Lloyd, C. J.**

**Pivotal quantities based on the conditional distribution function transform in models with accessory parameters.** (English) [Zbl 0609.62033](#)  
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A general formula for producing pivotal quantities defined free of accessory parameters is investigated. In addition to similarity, resulting tests often have exact or asymptotic optimal properties. In other cases, the sample correlation with statistics sufficient for the accessory parameters produce a simple similar test and a consistent, asymptotically normal estimator. The latter method should perform best when the accessories are highly dispersed.

**MSC:**

- [62F03](#) Parametric hypothesis testing
- [62F05](#) Asymptotic properties of parametric tests
- [62H15](#) Hypothesis testing in multivariate analysis

**Keywords:**

conditional distribution; linear functional relationship model; minimal sufficient statistics; external ancillary statistic; locally most powerful test; Williams' correlation test; linear regression life testing; tests of independence; partial ancillary; endomorphic model; exomorphic model; pivotal quantities; accessory parameters; similar test; consistent, asymptotically normal estimator

**Full Text:** [DOI](#)

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