

Second Order Asymptotic Distribution of the R_ϕ -divergence Goodness-of-fit Statistics.

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Abstract: The distribution of each member of the family of statistics based on the R_ϕ -divergence for testing goodness-of-fit is a chi-squared to $o(1)$ (M.C. Pardo: On Burbea–Rao divergences based goodness-of-fit tests for multinomial models. J. Multivariate Anal. 69 (1999), 65–87.). In this paper a closer approximation to the exact distribution is obtained by extracting the ϕ -dependent second order component from the $o(1)$ term.

Keywords:

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