

Empirical Likelihood in the framework of Parametric Likelihood

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Abstract: We use a method of parameterized sub-family of probability distributions to connect empirical likelihood (EL) with parametric likelihoods and discuss the EL inference in the framework of parametric likelihood inference. The EL inference benefits from theoretical developments in the parametric case. We illustrate the method with general estimating equations and consider M-type linear regression as an example of practical applications where the proposed method promotes conditional EL inference with parameter orthogonality in place of profile EL inference.