Maximum likelihood with restrictions in $\mathbb{R}^n$

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Abstract

Maximum likelihood is a widespread statistical technique in statistics, for point estimation and hypothesis testing, using asymptotic results. One of the main limitations is that, when there are restrictions on the parameters, estimation becomes more complex and the asymptotic distribution for hypothesis testing on the boundary do not hold. It is the aim of this paper to present a general methodology to obtain estimators and the distribution for hypothesis tests on the boundary of the parameter set for an arbitrary number of restricted parameters.