

Linear equivariant estimation and prediction based on ordered data

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Abstract

In the talk, optimal linear equivariant estimation of the parameters in a location-scale family based on observations from ordered random variables is treated. Furthermore, related equivariant predictors of future observations are examined. Models in reliability leading to ordered data are, for instance, the ordered failure times of components in a k -out-of- n system or in a progressively censored lifetime experiment. At first, some known general relations to optimal unbiased estimators and predictors are considered. Then, structural similarities between best linear equivariant estimators as well as corresponding predictors and their unbiased counterparts are studied in detail.