On Nonparametric Maximum Likelihood Estimations of Multivariate Distribution Function Based on Interval-Censored Data

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This talk considers the nonparametric maximum likelihood estimates (NPMLE) of a joint distribution function when the multivariate failure times of interest are interval-censored. With different types of interval censoring mechanism, the NPMLE's of the multivariate distribution function are studied and the strong consistency for the NPMLEs is obtained in terms of a self-consistency equation. Furthermore, the convergence rate of the estimator is given, which depends on the types of interval censoring mechanism.

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