

On Consistent M-estimators: Tuning Constants, Unimodality and Breakdown

Ivan Mizera

Abstract: The existence and uniqueness of values of location M-functional are explored. For the symmetric population distributions, the role of studentization is revealed - the Freedman-Diaconis conjecture is proved. The asymmetric case is studied with respect to unimodality considerations. The lower bound for the breakdown of studentized estimators is derived.

Keywords:

AMS Subject Classification: