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**A Kernel-function-based Approach to
Sequential Estimation with
 β -protection of Quantiles**

Given a sequence $\{X_n\}$ of independent and identically distributed random variables with F , a sequential procedure for the p -th quantile $\xi_p = F^{-1}(p)$, $0 < p < 1$, is proposed in which two constraints are the conditions of coverage probability and β -protection. Some asymptotic properties for the proposed procedure and of an involved stopping time are proved: asymptotic consistency, asymptotic efficiency and asymptotic normality. From one of the results an effect of smoothing based on kernel functions is discussed. The results are also extended to the contaminated case.
