On deviations between empirical and quantile processes for mixing random variables.


Deviations between empirical and quantile processes for mixing random variables are estimated with almost sure rates of convergence. These results are analogues of the well-known Bahadur and Kiefer results in the i.i.d. case. The results of the paper of $\varphi$-mixing processes give the sharpest possible orders in view of the corresponding i.i.d. result of Kiefer. In addition to the interesting results themselves, this paper also contains a number of useful inequalities.

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