CONVERGENCE RATES FOR TWO-STAGE CONFIDENCE INTERVALS BASED ON U-STATISTICS

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Abstract. We consider a modified two-stage procedure for constructing a fixed-width confidence interval for the mean of a U-statistic. First, we discuss a few asymptotic results with the associated rates of convergence. The main result gives the rate of convergence for the coverage probability of our proposed confidence interval which is seen to be slower than that for the purely sequential procedure.

Key words and phrases: Fixed-width confidence intervals, two-stage procedure, rate of convergence, mean of a U-statistic.