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BAHADUR EFFICIENCIES OF SPACINGS TESTS FOR GOODNESS OF FIT

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Abstract. This paper is concerned with the exact Bahadur efficiencies of spacings statistics. For a general class of statistics based on a fixed number of spacings, the explicit forms of the exact slopes are derived, and it is shown that the sum of the logarithms of spacings is optimal in this class. Some results are extended to the case where the number of spacings increase with the sample size to infinity.

Key words and phrases: Bahadur efficiency, exact slope, large deviation, spacings, goodness of fit.