On upper estimates of order statistics and spacings from monotone reversed failure rate distributions

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Abstract

We consider the sequence of independent and identically distributed random variables that have the decreasing (increasing) reversed failure rate. For such setting we first present the solution to the problem of determining the upper positive mean-variance bounds on the expectations of the order statistics (in cooperation with Tomasz Rychlik, Institute of Mathematics, Polish Academy of Sciences, Poland) and further we discuss the case of spacings, i.e. the differences of consecutive order statistics. The results are obtained with use of the projection method.

References

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