LOWER BOUNDS FOR DISCRETE APPROXIMATIONS TO SUMS OF m-DEPENDENT RANDOM VARIABLES

BY

VYDAS ČEKANAVIČIUS (VILNIUS) AND PALANIAPPAN VELLAISAMY (MUMBAI)

Abstract. Lower bounds for the second order Poisson, compound Poisson, negative binomial and binomial approximations to the sum of 1-dependent random variables are obtained for the Kolmogorov and local metrics. The results are then applied to sums of independent indicators and runs statistics.

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