

Poisson approximation to the binomial distribution: extensions to the convergence of positive operators

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The idea behind Poisson approximation to the binomial distribution was used in [1] and subsequent papers in order to establish the convergence of suitable sequences of positive linear operators. The proofs in these papers are given using probabilistic methods. We use similar methods, but in analytic terms. In this way we recover some known results and establish several new ones. In particular, we enlarge the list of the limit operators and give characterizations of them.

References

- [1] J. de la Cal, F. Luquin, Approximation Szász and Gamma operators by Baskakov operators, J. Math. Anal. Appl., 184 (1994), 585-593.