

Improving approximation of the beta-distribution for small parameter values

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Abstract

The method of sequential improvement of beta-distribution approximation for small parameter values suggested in [I. N. Volodin, Theory Probab. Appl., 15 (1970), pp. 546-549] is developed. An asymptotic of the approximation error is established in terms of uniform distance between distributions. © 2010 Society for Industrial and Applied Mathematics.

<http://dx.doi.org/10.1137/S0040585X9798436X>

Keywords

Approximation error, Beta-distribution, Distribution approximation, Small parameter values