Malachivskyy, P. S.; Melnychok, L. S.; Pizyur, Ya. V.
Chebyshev approximation of multivariable functions by the exponential expression. (English. Ukrainian original) Zbl 07378081

In multivariate functional approximation, Chebyshev methods of approaching this problem are of particular value. In this article, the authors construct approximations by approximating the logarithm of the approximant first, and then taking exponentials. The approximations are carried out by a weighted least-squares (best) approximation and convergence results are offered. There are considerations of particular cases up to three space dimensions.

Reviewer: Martin D. Buhmann (Gießen)

MSC:
41A63 Multidimensional problems
41A10 Approximation by polynomials
65D15 Algorithms for approximation of functions

Keywords:
Chebyshev approximation by exponential expression; multivariable functions; mean-power approximation; least squares method; variable weight function

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References:


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