Sklyarov, V. P.

On the best sinc-approximation on a finite interval. (English) Zbl 1219.41022


Summary: We study the rate of convergence of the best uniform approximation of a fixed element $f \in C[0, \pi]$ by the finite-dimensional space $X_n \subset C[0, \pi]$ with a basis consisting of the functions $l_k(x) = \text{sinc} \left( \frac{n}{\pi} (x - \frac{\pi k}{n}) \right)$, $k = 0, 1, \ldots, n$. An analogue of the Jackson theorem is established.

MSC:

41A50 Best approximation, Chebyshev systems
41A25 Rate of convergence, degree of approximation

Keywords:

approximation; interpolation; sinc methods