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On the almost everywhere divergence of Lagrange interpolatory polynomials for arbitrary system of nodes. (In English)

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In this paper we give a detailed proof of the conjecture of *P.Erdős* [*ibid.* 9, 381-388(1938; Zbl 083.29001)]: If $X = \{x_{k_n}\}$, $1 \leq k \leq n, n = 1, 2, \dots$, is an interpolatory matrix in $[-1, 1]$ then there exists a continuous function on $[-1, 1]$, $F(x)$, for which $\limsup_{n \rightarrow \infty} |L_n(F, X, x)| = \infty$ almost everywhere in $[-1, 1]$. here $L_n(F, X, x)$ is the Lagrange interpolatory polynomial of $F(x)$ based on $x_{1n}, x_{2n}, \dots, x_{nn}$.

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