

THE ESTIMATE OF THE DEGREE OF APPROXIMATION USING AN EXTENDED CHEBYSHEV SYSTEM

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Abstract: If Ψ_1, Ψ_2, Ψ_3 is an extended Chebyshev system on the interval $[a, b]$ and L is a positive linear operator on $C[a, b]$, such that $L(\Psi_i) = \Psi_i, i = 1, 2$, then one obtains an estimate of the difference $L(f, x) - f(x)$, in terms of certain adapted second order moduli for the given extended Chebyshev system.

Key words: positive linear operators, extended Chebyshev systems, second order moduli of continuity.

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