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RELATION OF THE BEST APPROXIMATION AND WEYL DERIVATIVE OF FUNCTIONS IN LORENTZ SPACE WITH QUASI-MONOTONE FOURIER COEFFICIENTS

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Abstract

Initially are given definitions and results relating to Lorentz spaces, quasi-monotone sequences, best approximation, class of 2π-periodic functions which belong to Lorentz space having quasi-monotone Fourier coefficients and Weyl derivative. In the main result is given the relation of the best approximation and the existence of Weyl derivative of functions belonging to Lorentz space according to their quasi-monotone Fourier coefficients.

Key Words : *Lorentz spaces, Quasi-monotone sequences, Best approximation, Weyl derivative.*

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