

DIFFERENTIAL TRANSFORMS OF CESÀRO AVERAGES IN WEIGHTED SPACES

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Abstract

In this paper we obtain convergence results for the series of differences of Cesàro averages along lacunary sequences in the setting of weighted L^p -spaces. These results give some information about how the Cesàro averages converge. The paper extends results of an earlier work by R. L. Jones and J. Rosenblatt. The operators considered are essentially convolution operators given by kernels more singular than the ones in the article by Jones and Rosenblatt.

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