FOUR DIMENSIONAL LOGARITHMIC TRANSFORMATION INTO $L_u$

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Abstract. Let $t = (t_m)$ and $\bar{t} = (\bar{t}_n)$ be two null sequences in the interval $(0,1)$ and define the four dimensional logarithmic matrix $L_{t, \bar{t}} = (d_{mnkl}^{t, \bar{t}})$ by

$$d_{mnkl}^{t, \bar{t}} = \frac{1}{\log(1-t_m)\log(1-\bar{t}_n)} \frac{1}{(k+1)(l+1)} t_m^{k+1} \bar{t}_n^{l+1}.$$ 

The matrix $L_{t, \bar{t}}$ determines a sequence-to-sequence variant of classical logarithmic summability method. The aim of this paper is to study these transformations to be $L_u - L_u$ summability methods.

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REFERENCES