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MULTIPLIERS OF SEQUENCE SPACES

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0. Introduction. Let $A = (a_{nk})$ be a triangular nonnegative regular summation matrix, that is, the elements a_{nk} of A satisfy the conditions

(1) $$a_{nk} = 0, \qquad k > n,$$

(2) $$a_{nk} \geq 0, \qquad k = 0, 1, \dots, n; \; n = 0, 1, \dots,$$

(3) $$\lim_{n\to\infty} a_{nk} = 0, \qquad k = 0, 1, \dots,$$

(4) $$\lim_{n\to\infty} \sum_{k=0}^{n} a_{nk} = 1,$$

of [**4**, p. 43]. We denote by $\tilde{m}_A$ the linear space of sequences $s = \{s_n\}$ such that the A-transform

$$As = \{As\}_n = \left\{ \sum_{h=0}^{n} a_{nk} s_k \right\}$$

is bounded. We assume also:

(5) each column of A has at least one nonzero element.

Under the semi-norms p_n, q:

$$p_n = |s_n|, \qquad q = ||As||_\infty = \text{LUB}_n \left| \sum_{k=0}^{n} a_{nk} s_k \right|,$$

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