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# TAUBERIAN THEOREMS UNDER STATISTICALLY NÖRLUND–CESÁRO SUMMABILITY METHOD

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*Abstract.* Let $(p_n)$ and $(q_n)$ be any two non-negative real sequences with

$$R_n := \sum_{k=0}^{n} p_k q_{n-k} \neq 0 \ (n \in \mathbb{N}).$$

And $C_n^1-$ Cesáro summability method. Let $(x_n)$ be a sequence of real or complex numbers and set

$$N_{p,q}^n C_n^1 := \frac{1}{R_n} \sum_{k=0}^{n} p_k q_{n-k} \frac{1}{k+1} \sum_{v=0}^{k} x_v$$

for $n \in \mathbb{N}$. In this paper, we present necessary and sufficient conditions under which the existence of the limit $st - \lim_{n\to\infty} x_n = L$ follows from that of $st - \lim_{n\to\infty} N_{p,q}^n C_n^1 = L$. These conditions are one-sided or two-sided if $(x_n)$ is a sequence of real or complex numbers, respectively.

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