

Lemma 7. *The series (10) converges unconditionally for any $f \in H$.*

Proof. By integrating with the function $f(\xi) \in H$, we can eliminate the term (8) in the representation (7). It remains to apply Lemma 7 proved in [3]. The proof of the lemma is complete. \square

Note that the series (10) coincides with the series

$$\sum_{l=1}^{\infty} \left(\sum_{\rho_k \in G_l} (f, Z_k) Y_k \right). \quad (11)$$

According to Lemma 7 above, this series converges to some function $g \in H$. It follows from (11) that $(g, Z_k) = (f, Z_k)$. Lemma 6 implies that $\{Z_k\}$ is dense in H . Hence we have $g(x) = f(x)$. The proof of the theorem is complete.

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Erratum

To the article “Concerning the Multipliers of Fourier Series in the Trigonometric System,” by E. D. Nursultanov [*Mathematical Notes*, **63**, No. 2, 205–214 (1998)].

In the statements of Lemma 3, Corollary 1, and Theorem 1, the restriction on the parameter p must be of the form; $1 < p < 2$. In fact, this condition must be used for proving Theorem 2 on the basis of the above assertions.

In Lemma 5 the space ℓ_r must be replaced by the Lorentz space $\ell_{r\infty}$, and the chain of inequalities in the proof should read as follows:

$$\left\| \sum_{k=-N}^N \lambda_k a_k e^{ikx} \right\|_{L_p} \leq c \|\lambda a\|_{\ell_{p',p}} \leq c \|a\|_{\ell_2} \|\lambda\|_{L_{r\infty}} \leq c_1 \|f\|_{L_p} \|\lambda\|_{\ell_{p\infty}}.$$

In the statement and the proof of Theorem 4 (in three places) the expression $|\lambda_k - \mu_k|$ must be replaced by $(\lambda - \mu)_k^*$ (the k th element of the nonincreasing permutation of the sequence $\lambda - \mu$).

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