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**On the Fourier Multipliers of the Space  $L^p$**

We prove that the function  $m(\xi) = \psi(\xi)e^{i\phi(\xi)}$  is not the Fourier multiplier of the space  $L^p$ , where the real phase  $\phi$  has the property  $\phi'' \geq c > 0$ , the amplitude  $\psi$  vanishes near the origin,  $\psi(\xi) = O(|\xi|^{-2})$  as  $\xi \rightarrow \infty$ , and  $\psi' \in L^1$ .

**Keywords:** Fourier multiplier, oscillatory integral.

**MSC:** 42A15, 35S30