A CHARACTERISATION OF THE FOURIER TRANSFORM ON THE HEISENBERG GROUP

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ABSTRACT. The aim of this paper is to show that any continuous $*$-homomorphism of $L^1(\mathbb{C}^n)$(with twisted convolution as multiplication) into $\mathcal{B}(L^2(\mathbb{R}^n))$ is essentially a Weyl transform. From this we deduce a similar characterisation for the group Fourier transform on the Heisenberg group, in terms of convolution.

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