

Abstract Submitted  
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**Wave-function approach for a rotating fermionic superfluid** VICTOR VAKARYUK, UIUC — Rotation of a neutral fermionic superfluid in annular geometry is considered using Gross-Pitaevskii ansatz for the wave function of the system. It is shown that, in the thermodynamic equilibrium, the rotation frequency at which transition between different total angular momentum states occurs is independent on interparticle interactions assuming they are central. The question of whether or not the equilibrium state of a superconductor in a magnetic field corresponds to rotation is also addressed.

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