

Rotational properties of trapped superfluid gases of atoms

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Trapped atomic gases of atoms provide an ideal system for the study of the collection of phenomena that are associated with the more general effect of superfluidity. In particular, the tunability of these systems, and the presence of a trapping potential both introduce novel effects. In my talk I will give a brief description of some of these effects, both within the mean-field approximation, as well as beyond that, where correlations play an important role.

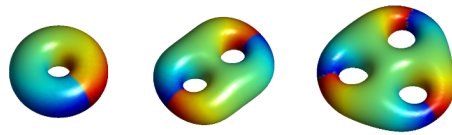


Figure 1: Vortex states in a rotating, harmonically-trapped Bose-Einstein condensed cloud of atoms.

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