

Vortices in Rotating Bose-Einstein Condensates

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Abstract

We review recent results about the mean-field Gross-Pitaevskii (GP) description of rotating Bose-Einstein (BE) condensates. More precisely we investigate the minimization of the GP functional describing rotating BE condensates confined by different external potentials. The most intriguing feature of such systems is the occurrence of isolated vortices and we discuss in details the mechanism behind their enucleation.

References

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