

1032-35-196

Alberto Montero*, Department of Theoretical and Applied Mathematics, The University of Akron, Akron, OH 44325. *Some remarks regarding vortices in Bose-Einstein condensates*. Preliminary report.

In this talk I will present some results concerning an energy functional that arises as a Gamma-limit for the Gross-Pitaevskii energy functional, often used in models for Bose-Einstein condensates. This functional represents the cost of having vortices (whirlpools) in the condensate, and its study provides some light regarding the shape of these vortices. (Received August 21, 2007)