

Physics 416 Quiz Sheet

Quiz 20

Name: _____

There are many problems with the paragraph below. Please find and correct at least 12 of them. Consult quizzes 1-7 for a review. (N.B. It should be obvious that the physics described below is pure jibberish!)

In seeking the principle cause of the affect discovered in our experiment, we stumbled upon a little-known aspect of Bose Einstein condensates. When our beam width is twice the diameter of an atom, the interaction time is 100s of seconds. Jones et al [1] determined from discreet spectral scans that this means the atom is getting ready to explode. (i.e. fig. 2 from there paper) Such an explosion would send Bosons scattering but not Fermions which would collapse together to form a mini black hole.