

Review of: "Relation Between Quantum Jump and Wave Function Collapse"

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The authors' article discusses how the concept of wave function collapse needs to be understood differently for single-particle systems and many-particle systems. It also suggests that collapse does not occur in single-particle systems, but may happen in macroscopic systems, such as in the case of photons or Bose-Einstein condensates, where a macroscopic measurement can determine the probability distribution, leading to the wave function collapse.

First, we should check the writing. The way the authors write is fluid and contains few grammatical errors. I have pointed out some corrections that are, in fact, mistakes that need to be addressed.

Abstract: single -> Single

Last paragraph of II.A.: "we did not ask the mechanism" -> "we did not ask about the mechanism"

First paragraph of II.C.: "A photon is absorbed at one pixel and" -> "A photon is absorbed in one pixel and"

First paragraph of II.D.: "seen in the WCC were contradiction to the" -> "seen in the WCC were in contradiction to the"

In III.B.: "form classical electromagnetic wave" -> "form classical electromagnetic waves"

Now the questions:

- 1) How does the author differentiate between the theoretical probability distribution $PT(x, y)$ and the observed probability distribution $PO(x, y)$?
- 2) Can you provide specific examples where the authors' definitions of QJ and WFC could be clarified?
- 3) It is not clear to me the vision of the authors about what implications this has for interpreting wave function collapse in the context of photon events?
- 4) How does the process of photon detection by a CCD differ from photon counting detection in the context of a MIJ?