Review of: "Electron Spin Topology in Excited States and Fractional Spin Effect"

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Potential competing interests: No potential competing interests to declare.

Although the work is consistent, the manuscript requires certain refinements and clarifications. They can be summarized as follows:

1)In the equation " $\hbar\partial/\partial$ Ψ=EΨ", the E factor is the Hamiltonian operator, while the authors consider it to be an eigenenergy .?

2) Equation (3) jA=**rho.phi+j.A** can be confusing as both members jA look alike

3) To study wave spin in excited states of a confined electron, the authors consider a two-dimensional quantum well. Can they justify this choice and whether there is a more realistic potential?

5)To solve Eq 6, the authors set Pz=0 Can they justify this constraint? Is it related to Landau levels?

6)After Eq 7:where σx and , σy are the Pauli **matrices**.

7)After Eq 11 : the Compton wavelength should be 2hbar/mc

8) "The Schroedinger electron" should be the**Schrödinger** electron.

9) In equation 14, the authors should recall that is already defined by equation11

10) after Eq 15: As an example, we choose an excited state (should be**As an example)**

11) Fig 1: axes should be indexed with legends

12)Fig2 :the color scale must be indicated

13)Before eq 16, ehbar/2m should be replaced by Bohr magneton : $\hbar$/2m**Σ▪**

14) Eq 20 the vector potential A tilde has the same shape as A whereas it is an intrinsic potential due to the electron. Is there a more convincing explanation?

16) The discussion section should be separated from the conclusion for better visibility..

In conclusion, the paper could be approved as long as the authors respond satisfactorily to the above suggestions.