Review of: "Spin-statistics Theorem from the Stuart-Landau Equation"

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Potential competing interests: No potential competing interests to declare.

The opening paragraph seems to indicate that the author confuses be- tween spin projection with spin. This is already a red flag, at least for me, for such an important subject as spin and statistics. The author questions if spin, and also lepton number, preserve their original meaning at energies far above a few hundred GeV.

As long as Poincare symmetries are not altered, the notion of spin – as second Casimir invariant of the associated algebra – remains unaltered.

The mass dimensionality as well as statistics of the fields as given by equations (2a) and (2b), while true for the SM fields, gets altered for some of the bosonic and fermionic quantum fields with well-defined transformation properties under the Poincare group. The references are: D. V. Ahluwalia et al. Nuclear Physics B 987 (2023) 116092, and 2022 EPL 140 24001.

The works cited by the author are mostly his own. An incremental presentation distracts from the merit. I would recommend the author to present their ideas and conclusions in a comprehensive document.