Review of: "Quantum mechanics and symplectic topology"

Dr William Sulis[1]

1 McMaster University

Potential competing interests: No potential competing interests to declare.

I rather enjoyed reading this paper. It suffers, however, from a large number of typographic and minor grammatical errors and deserves a thorough editing.

That aside, this is an interesting approach. The mathematician in me enjoyed the linkage between symplectic geometry and the Scrodinger formulation. It motivates an origin for that equation, which otherwise appears rather ad hoc. I was not sure how the overlaps were actually calculated. Are they going to be based on the wave functions of the Schrodinger formulation, or on bra-ket calculations. Eigenstates are often defined over the entire of the space, as may be momentum distributions, so if the overlap were simply domain based, most everything would have significant overlap. If these are based on bra-ket integrals then this would not be at issue because one would be viewing them within the Hilbert space and measuring degrees of orthogonality. The later definitions seem to suggest the latter while the pictures suggest the former.

Perhaps the author could clarify this.