

What is clear from the discussion between the author and the referees is that there is no chance that in its present form the paper will be accepted by the physical community. I personally also feel uncomfortable with the fact that the paper does not actually deal with any specific microscopic theory of superconductivity, such as BCS theory.

There is an analogy with the field which I know much better, that is, magnetism. It was known from the very beginning that Neel picture of antiferromagnetism is not consistent with quantum mechanics (singlet ground state, etc.). It took decades to understand how this visible contradiction may be overcome, which included analysis of specific microscopic models, computer simulations, etc., etc. Actually, when we start to think deeply about almost any issue of contemporary physics (I mean condensed matter which I know better than other fields) we unavoidably find a lot of subtle points that are misunderstood (or simply not taken seriously) in the physics community. I think it is good, and not bad, to raise such questions, and I do not think that such concerns cannot be published any place. Actually, in my view, anything can be published, assuming that the reader has enough of information to make his or her own judgment on the validity of the statement.

However, a publication in high-rating journals such as PRL is something more than just informing the physics community on alternative views on basic physical issues. It is a kind of certificate that the idea is checked by experts and is approved by them. I do not think that this is the case here - keeping in mind the clearly expressed attitude of three referees, each of whom is a high-level expert in the field. I do not mean that only the papers which can lead to a complete consensus are appropriate for the PRL, but to publish something that will be for sure considered by the most of community as an incomplete and unconvincing research does not look like a good idea.

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