

From: Jorge E. Hirsch jhirsch@physics.ucsd.edu
Subject: Re: Your_manuscript WJ10056 Hirsch
Date: January 4, 2020 at 11:17
To: prresearch@aps.org
Bcc: jhirsch@physics.ucsd.edu

JH

Dear Dr. Melikyan,

Thank you for sending me the referees' comments. The referees' comments are in complete contradiction with each other. That alone should be enough to call them into question, rather than accept them at face value. In addition, they are both wrong.

Interestingly, the third referee talks about "*The normal component flows from the bulk towards the cold walls, dragging the vortices and thus purging the system from the magnetic field. The superfluid component flows from the walls into the bulk.*" In fact, radial flow and counterflow of charge is essential to my picture, it is precisely the novel aspect of it. Please note that what the third referee says and what I say, radial flow, is completely absent from the conventional model that the second referee advocates. But, what the third referee says about radial flow is not correct. It is also completely absent from the scientific literature. He does not provide any reference to support his unorthodox viewpoint, because there isn't any. Furthermore, he talks about "*tangle of vortices, each vortex carrying quantized magnetic flux*", but there are no vortices in type I superconductors, the subject of my paper. Clearly the third referee is not knowledgeable in superconductivity.

I have absolutely no doubt that if you sent the report of the third referee to the second referee, the second referee would say that the third referee's report is completely wrong. Are you willing to do that?

The fact, is, your second referee knows about BCS theory but knows nothing about plasma dynamics. Your third referee seems to know something about plasma dynamics but knows nothing about BCS theory. And neither of them is willing to acknowledge what they don't know.

Would you be willing to send responses from me to the referee's reports to the referees?
Would you be willing to try to find other referees with sufficient expertise to referee my paper?

Thank you for considering these comments. I look forward to your response.

Jorge E. Hirsch