

SciPost Physics Core,

Dear Editor,

We thank you for the opportunity to resubmit our manuscript entitled "Superconducting diode effect in a meso-wedge geometry with Abrikosov vortices" (manuscript ID: BV14591) for consideration in SciPost Physics Core.

In preparing this revised version, we have not only incorporated new content to strengthen the scientific scope of the work but also carefully revised the entire manuscript to enhance its clarity, coherence, and overall readability. All comments and suggestions provided by the referee have been addressed in detail, and we have made substantial efforts to clarify the motivation, methodology, and significance of our results.

We believe that these improvements, together with the additional material included, have considerably strengthened the manuscript. We are therefore confident that the revised version now meets the high standards of SciPost Physics Core, and we are pleased to resubmit it for your kind consideration.

Thank you for your consideration and we look forward to hearing from you.

Sincerely,

J. Faundez, on behalf of the authors.

SUMMARY OF CHANGES

- (1) A new text has been added to the page. 1, paragraph 3, of the new version of the MS.
- (2) New text in page 2, paragraph 2 was added to explain the results obtained.
- (3) Text was added in page 2, paragraph 3 in the new version of the MS.
- (4) Additional text was inserted on page 2, following Eq. (3), in the revised version of the MS.
- (5) Additional text was added on page 2, last paragraph, in the revised version of the MS.
- (6) Figs. (2) and (5) were improved.
- (7) Text was re-written in subsection "vortex configuration", page 6, of the new version of the MS.
- (8) The quality of Figures 7 and 8 has been enhanced.
- (9) 16 additional references have been incorporated and appropriately cited in the MS.
- (10) The English language has been thoroughly reviewed throughout the revised version of the manuscript

All changes are highlighted in red color in the revised version of the manuscript provided at the end of this report, after the point-by-point replay to the referees.