Dear Editors,

We would like to thank both referees for their careful examinations of the manuscript, their positive assessment of our article, and their suggestions which we could use to improve our manuscript. We have implemented all comments and suggested changes in the updated manuscript. Below we provide additional information explaining details of the changes made.

Response to Referee 2

We thank the Referee for their assessment of our manuscript and the useful comments. Below we provide our answers to the points raised by the Referee.

1. **Referee:** It is better to explain physically why eq. (10) is obtained.

   Our response: In the revised manuscript we expanded the discussion around Eq.(10), and added a new reference, Ref. [55] to clarify the issue of the chiral symmetry. It is known that the simultaneously present time-reversal and charge conjugation symmetries (both antiunitary) implies the presence of a unitary, the so-called chiral symmetry see, e. g. the newly added Ref.[55]. Technically, in the present case, the chiral symmetry, Eq.(10), appears as the combination of operations Eqs. (6) and (7). In somewhat more physical terms, it reflects a generic way of constructing Nambu spinors in time reversal symmetric systems, which implies that the time-reversed partner of Ψ equals $i\tau_2\Psi$, while the time-reversed partner of $\bar{\Psi}$ is $-i\bar{\Psi}\tau_2$.

2. **Referee:** Please check eq. (15) again.

   Our response: There was indeed a typo in Eq. (15), an additional bracket was inserted. We thank the Referee for pointing this out.

3. **Referee:** I would like to ask about the magnitude of magnetic order. To be consistent with quasiclassical theory, it is much smaller and should be the same order of the pair potential of superconductors. Is it true?

   Our response: Like the Referee points out, the magnetic order needs to be small compared to the Fermi level. This means the magnitudes of the coefficients of the added terms can not be large, a feature also required by our expansion in $\tau_3\sigma$. We have emphasized this point in the latest version below Eq. (21).

4. **Referee:** The authors have discussed the spin-triplet pairing in various places in superconductor / magnet junctions. Since magnets are diffusive, I think the resulting spin-triplet pairing should be odd-frequency. Is it really true? Since odd-frequency pairing has been studied up to now in superconducting junctions (Refs. Rev. Mod. Phys. 77, 1321, 2005, J. Phys. Soc. Jpn. 81, 011013, 2012). The discussion about the odd-frequency pairing is appreciated.

   Our response: We agree with the Referee that the triplets correlations should be odd-frequency in diffusive materials. We confirm that our equations reflect this feature, it is in fact required by charge conjugation symmetry. This is most clearly seen from the notation on the contour, Eq. (12), which requires that upon exchange of the time-coordinates any $\tau_{1,2}$ components do not change sign, while any $\tau_{1,2}\sigma_{(x,y,z)}$ do change sign. We have added a comment about this after we first introduce the equation for the pair amplitudes in Eq. 50 and added the mentioned references.

5. **Referee:** Below eq. (82), it is written that "there is an intermediate angle for which the anomalous current vanishes." Can you predict the intermediate angle?

   Our response: We can indeed predict the angle at which this appears, by symmetry this angle is exactly between 0 and $\pi/2$, so at $\pi/4$. We have added this specification below Eq. (82)

6. **Referee:** How about the condition of anomalous current appears? Is it the case both the time reversal symmetry and spatial inversion symmetry are broken?

Our response: The appearance of an anomalous current indeed requires the breaking of both inversion symmetry and time-reversal symmetry. Within usual quasiclassical theories of ferromagnets there is an additional symmetry, inherent to the formalism, that forbids anomalous currents even if inversion and time-reversal symmetry are both broken. This is Eq. (55) in our manuscript. This symmetry is broken by one of the new terms in our equations.

7. **Referee:** Below eq. (86), there is a discussion about the p-wave magnet with homogeneous superconductor. There is a relevant work in arXiv:2501.08646.

   Our response: Since submission of our manuscript, a couple of articles have indeed appeared on arXiv. We thank the Referee for pointing this out and have added citations to them in a note at the end of the article.