

Review of: "Slow diffusion around pulsar γ -ray halos and its impact on cosmic rays propagation"

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Potential competing interests: No potential competing interests to declare.

Dear Dr. Xiaojun Bi, This article is interesting and present new idea that worth to be more investigated. In general the paper is persuasive of the presence and importance of study in more details the slow diffusion around pulsar halos. Nevertheless the text it self present several critical issues. Most of them are just referred to how the paper is presented.

a) I see that other review pointed out to improve the clarity of the text, I would not repeat them, but I agree with other reviewer on the majority of their comments.

b) in addition I see that there are often confusion between HAWC and LHAASO observations, sometime in the text is not clear to whom you are referring. Similar confusion is also about diffusive and BD scenario, that in plot are labeled differently, making hard to directly read the images along with the text. Some labels in the text are not explained (e.g. D in $3D/c^2$ formula), and label change colors and text among near plots (e.g.figure 3)

c) I do not full understand the aim of the paper, if it is intended to be a review of other work or aim to present a complete discussion. In any case I found that many details on the followed procedure (like e.g. the used formulas , parameter choice, etc.) are missing so that cannot be replicated and tested.

I would suggest to enrich your article with a more precise and accurate description of the presented models, to facilitate the cross check of this idea.