

Dear Referees,

Thank you for reviewing my paper. Below are responses to your comments.

1. References to figures in the text should have 'figures' all lower case except when at the start of a sentence, as stipulated. Similarly, references to tables should take the form 'table n', not 'Table n'

Implemented

2. Table captions should appear at the top of the table, not at the bottom.

Implemented

3. Remove the commas in the list of references. The standard format in the Proceedings is without commas.

Implemented

I have also update the reference:

\bibitem{MAGIC} Aleksic J et al 2014 A\&A in press (arXiv:1401.5646v1)

into:

\bibitem{MAGIC} Aleksic J et al 2014 A\&A 569 A46

And I have corrected:

Here $n_i \simeq 1.66 \times 10^{-11}$...

into:

Here $n_i \simeq 1.66 \times 10^{11}$...

On page 3, "were" -> "where" and "PKS 054-234" -> "PKS 0454-234".

Corrected

It would also be better if the abstract mentioned that the results do not in fact constrain the models very much, beyond perhaps ruling out a very large absorption feature in the gamma-ray spectrum.

We constrain the location of the GeV emission within the BLR.

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As the sensitivity of this analysis does not constrain the model very much, we can only rule out a very large absorption feature in the gamma-ray spectrum, indicating that the gamma ray emission region would not be located deep within the BLR.

Perhaps upper limits to the parameter a would be more interesting than best-fit values at the limit.

I am afraid this part would be time consuming. I would rather consider this for an upcoming updated paper.

Is it not the case that gamma-rays produced before the broad line region would also undergo $gg \rightarrow e^-e^+$ interactions?

We usually don't consider any other UV radiation field than the BLR that would be strong enough to provide target photons along the jet.

Or is the idea that the two choices under consideration are either within the BLR or beyond it?

Yes

I found the terminology "mathematical" vs. "model" very confusing. Both of these fits are fits to a model, and both of the models are mathematical. "BLR opacity fixed = 0" and "BLR opacity free" or some other terminology would be much more clear.

I agree. I have rewritten these part while mentioning LP or LPtau, or "model with absorption", etc.

Once again, upper limits or confidence intervals for a would be useful. Is there a physical value for a below which an origin within the BLR would be implausible? Because otherwise, I don't see how the emission region has been constrained in any meaningful way.

A kind of standard model give a inner and outer radii of the BLR to be 0.1 and 0.4 parsec respectively, but some papers predict a thickness of the BLR to be less than a order of magnitude than the outer radius... So we cannot strongly argue for a precise limit.

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The only comment I have is that the legends in Figures 1 and 2 (especially Figure 2) are almost unreadable and should be enlarged and/or higher-quality figures should be produced.

I am trying to make these corrections, but since I am out of station and I have technical problems with my own laptop, that is too difficult to implement now.