

Response letter to the editor and reviewer

Dear Editor,

We thank the reviewer for pointing out errors in my proceedings which titled as “Search for a resonance in the diphoton plus b -jet final states in the ttH and bbH production” for the SAIP2019 conference. We corrected the grammatical errors and amended the manuscript as outlined below.

- Capitalise Higgs and specify the range of H more carefully, such as “H is a Higgs-like spin zero particle with a mass range [160 GeV, 1 TeV] decaying to a diphoton final state in this study”.
 - Corrected.
- Figure 1 is not clearly labelled. There are better ways to produce Feynman diagrams for inclusion in a paper, such as with feynmf etc.
 - Improved!
- The MC acronym should be defined at first appearance in the main text, and spelling should be consistently UK (not US, that is, normalize should be normalise etc.)
 - Corrected.
- What are the lepton veto’s precisely?
 - Replaced by “zero lepton”.
- Figure 2’s caption should be made clearer, similarly for figure 3.
 - Improved.
- Table 2, and figure 4’s caption, don’t use “&” in your labels/captions, and the text in table 2’s headers are too small to be read properly.
 - Improved.
- The first sentence of section 5 isn’t clear, please improve it.
 - The old sentence “A simple analysis to search for a resonance produced in association with top or bottom quarks pair in diphoton with at least one b -tagged jet final states was proposed”.
 - The new one “A simple analysis is proposed to search for a new heavy resonance decaying into two photons in association with at least one b -tagged jet”.
- In the acknowledgements it is “the Schlumberger Foundation, Faculty for the Future”.
 - Corrected!

Respectfully,
Esra.