

In the revised version of their paper, 2510.24658v2, the authors have provided an abstract, they have included some clarifications on the treatment of bottom and charm contributions in section 2, and they have reworked the text of section 4.1 to reduce the overlap with their contribution to ref. [79]. While I appreciate these changes, there are still two issues that I would like to comment upon.

- The text of the caption of figure 1 remains confusing: the authors are still mentioning only the top-mass effects, and they still refer to the notation of eq. (2) claiming that  $\Delta E = 0$  in the heavy-top limit (HTL). In other words, it still sounds as if figure 1 illustrates the limit in which only the top quark contributes to the  $H \rightarrow gg$  amplitude. On the other hand, as the authors have clarified in the revised version of section 2, in eqs. (1) and (2) the one-loop amplitude includes top, bottom and charm contributions, while the two-loop amplitude includes top and bottom contributions. Thus, in the HTL, the total  $\Delta E$  entering eq. (2) should not tend to zero, but rather to the bottom-only  $\Delta E$  weighted by the ratio of the bottom contribution to the one-loop amplitude over the total one-loop amplitude.

I still think that it would be helpful if, besides clarifying the caption of figure 1, the authors showed how the top and bottom contributions are combined in the total  $\Delta E$  entering eq. (2). After all, as I wrote in my first report, the extension of the grid to a Higgs mass of 3 TeV is only relevant to the case of a BSM Higgs boson, for which the couplings to quarks, and thus the weights of the top and bottom contributions in  $\Delta E$ , can differ significantly from the case of the SM.

- The authors have declined again to include in figure 3b the curves showing the partial contributions of the loop-induced diagram alone and of the interference between the loop-induced and tree-level (i.e., “Yukawa”) diagrams. I still find this omission troubling, because both of those contributions are after all included in the “full” curve that is

shown in the plot. If the authors are confident that their full result is correct, there should be no problem for them to show also the partial contributions, just as they did in figure 3a. Conversely, if the authors feel that the contributions they refuse to show are still in need of cross checks, it means that they are not confident in their full result either, in which case the plot should not be published at all.

In summary, it seems to me that the two aspects of 2510.24658v2 that I discussed above should still be improved. However, it is up to the editors of SciPost to decide whether they want to accept the authors' argument that *"this is just a working group report"*.