

Minutes of CEPC HZZ Meeting

Online, 2020-04-29

Meeting indico link: <https://indico.ihep.ac.cn/event/11459>

Memo Update

- Finished six channel's BDT study including fitting (Min)
- Updated memo with unified cut-based values (Yanxi)

Draft Update

- N.A.

Actions

1. Memo v1.1
 - 1.1. Add standalone section with these new set of cuts for the final BRs with stat. uncert. (Yanxi)
 - 1.2. Add section to compare the results of v1.0 and v1.1, check if they agree within 1- sigma (Yanxi)
2. Memo v1.2

Previously, the purpose for v1.2 is to keep only the default cuts. After the discussion today, we decide to keep both. So, we'll move the v1.3 to v1.2

 - 2.1. Add one paragraph to summarize the v1.0 cut results and comparison with the v1.1 table, conclude these two sets are consistent within one-sigma, so we chose the unified version for the baseline cut-based selection. (Yanxi)
 - 2.2. Update BDT results for 6 channels and fitting (Min)
 - 2.3. Add Comparison table between BDT and unified cut based (Min)
 - 2.4. Add BDT info to be used for the draft (Min)
3. Memo v1.3
 - 3.1. Get the numbers from white paper and proceed with Higgs width fitting (Ryuta)
4. Memo v1.4
 - 4.1. Study the signal/background cross-feed issue (all)
 - 4.1.1. Produce the cut flow table without the last two cuts for the first two channels of Table 1 in draft. (Yanxi)
 - 4.1.2. Compare the numbers from Yanxi and decide for the next step (Ryuta, Xin)
 - 4.2. Comparison with white paper, investigate the difference (all)
5. Paper Draft v1.1
 - 5.1. Incorporate comment from v1.0 and memo v1.4 (Ryuta)
 - 5.2. Submission to second round CEPC internal review
6. Paper draft v1.2
 - 6.1. Update with the comment from CEPC internal (Ryuta)
 - 6.2. Final touch and release to journal for review (Ryuta)