Weekly

Kaili

2019.11.25

CEPC

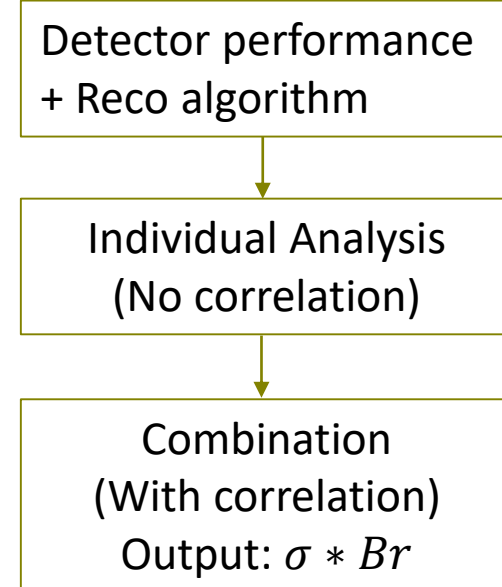- https://indico.ihep.ac.cn/event/9960/session/11/contribution/26/material/slides/0.pdf

- Feedbacks:

  - Bruce: Standard model is also one model -> Kappa framework is not model independent.

  - Zhen:

    - Unnecessary to take HEPFit if we only do Higgs coupling fit

    - Higgs width. Here exotic Br<0 assumption only affect the negative side. Like (-1.2%, 1.4%).

    - Fcc use median 1.3%, Zhen thought to use 1.4%. Actually no difference.

  - Invisible channel;

- Bruce 360GeV SH model   -> wait for signal generation.

Evolving Combination

- Good enough results, still a lot of to do

  - Analysis update slowly. Esp. for some crucial channels.

  - Many progress Manqi showed in the performance session didn't enter the combination yet, like jet separation, tau finding……

  - Critical for the following combination Study.   -> work for TDR.

  -> Limited manpower, Your effort would be appreciated!

  - Still need to understand the correlation

  - More powerful tools: HEPFit? Use workspace in each channel?

  - Far from the CEPC fully/ultimate potential.   -> Matrix Element Method.

    - Not so reliable for current study but worth for the future plan.

Detector performance + Reco algorithm

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Individual Analysis (No correlation)

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Combination (With correlation) Output: $\sigma * Br$

- ATLAS Brem Fit:
  - Stephane do not have so clear following plan. Still discussing

- To Go