

Meeting LAPP Hgg, 28/09/15

1) Couplings

We discussed more where/when/how we could contribute. Two topics discussed in particular, following an initial email exchange with Marc/Nick.

a) Background models

- Key aspect of the analysis and topic transverse to all analyses
- Needed in the short-term, and large room for various improvements in the longer term: new smearing functions, efficiency maps, fakes, more generic tool, etc.
- Not too much covered by other people a priori, and strong Run I contribution from the group
- ➔ Agreed to take responsibilities in this area for the Hgg group

b) Truth studies for the simplified cross section approach

- Important to understand the plans here as we will move away from the mu-measurements during Run II (towards EFT)
- LHCXSWG recommendations under preparation, feedback needed to define the best strategy (interplay between reco categories and truth categories/bins, interesting studies related to this)
- ➔ Priority clearly smaller than a)

N.B: category optimization for the mass analysis interesting, but longer term topic

2) Low/high mass analysis

- Selection cuts to be frozen this week (isolation)
- Signal parameterization: ~done (Kirill)
- Background shape studies with Diphox ongoing (pdfs, scales) (Marco)
- Kirill: reproduce p0 Run I results for training, to be ready for Run II results
- Supporting note: editors needed (Kirill+help)

Actions:

- Draft a mail to be sent to Hgg conveners to express group interest about background models (Thibault)
- Organize the work for the background model: code, status of the samples, etc.
- Next meeting: October 12 (Isabelle wants to see plots!)