Meeting LAPP Hgg. 14/09/15

We discussed the possible directions of the photon-related activities inside the group for the coming months and years, on the analysis side and on the performances side.

<u>Manpower</u>

- Permanent: Nicolas, Marco, Thibault, Iro, Isabelle (Jessica and Rémi : not expected to contribute on a short timescale because of other commitments)

- Postdoc: Alexis Vallier
- Students: Kirill (until 2017), Sergii (until 2018)

<u>Analysis</u>

- Low/high mass resonance search
- → Group strongly involved at least until a paper with (probably) the 2016 dataset
- Higgs mass and couplings

→ It could be useful to clarify the exact interplay between these two measurements for Run II (strategy not identical to Run I). It was agreed that we should try to have the Higgs couplings activity ramping up quickly (new people!) and more important, that this activity is expected to become central inside the group during Run II.

- SM measurements (g+jets, gg+jets)

→ After Zuzana's defense (end of the month), only follow-up by Marco until the publication: a priori, no plan to contribute there for Run II.

Performances

- Calibration:

a) Kirill: complete his work on the MVA (photon case)

b) Discussion on another task for Run II (E1/E2 maybe)

→ Agreed to not start anything new right now, but clearly it makes sense to stay 'formally' involved there beyond Kirill's task.

- Photon id: Sergii will contribute there (more on the trigger side maybe)

Other notes

- Alexis will join the Atlas group on October 19th: expected to do LAr online + analysis.

- Interference paper from 2012 data: Nicolas will join the efforts to bring the analysis to publication (timescale: 4-6 months).

Actions

- The plan is to have such meetings on a bi-weekly basis on Monday at LAPP at 11:15.

→ Next meeting: 11:15 on 28/09/15

→ Meeting announcements to be sent by Thibault

- For Kirill's thesis: clarify if, for the Higgs section of his thesis, it is more relevant to work on the Higgs mass (as initially planned) or on the couplings, given the expected datasets.

- For Iro, technical informations to get started with analysis in Run II (Thibault)

- Join the couplings mailing (<u>atlas-phys-higgs-HGam-couplings@cern.ch</u>) if interested and the couplings kickoff meeting (15/09/15, 13:30)