## Weekly report

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IHEP

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Weekly meeting

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May 22, 2017 1 / 1

- if you take MC xsections what is the relative amount of bkg you would expect from WWyy and from continuum yy+jets?

• No, we normalize the MC to data sideband.

- L169-170: you use h015 now (with the Moriond 2017 recommendations), please update the text since its misleading

• Already updated.

- L175-177: add that photon ID also uses leakage in hadronic calorimeter L182: neutral -i neural
  - To do

- L182-186: you have a lepton and 2 jets from the hard-scattering vertex so in principle you dont need to use the photon pointing to find the primary vertex with good accuracy. Could you check the efficiency of selecting the good PV within +-0.3 mm using the diphoton neural network vs using the hardest sum(pT2) vertex and quote the numbers here? You can ask Jared and Khilesh for help

• I will take care of this.

- Table 6: please specify in the caption to which integrated luminosity do the yield correspond to. Also, what do you mean with The backgrounds in this table were estimated with the luminosity from 2015 data??

• This is misleading and also asked by Weiming.

- sec 7.3: can you overlay to the 1l data distribution the fit from the 0l control region and provide the chi2 between the data and the fit?

• I suppose we have this kind of plots somewhere and need to update.

- sec 7.3.4, L354-355: it is not clear how the Zy component is added to the search of mH=260 GeV and mH=300 GeV. Do you mean you add this MC component to the control sample used to choose the final bkg model and spurious signal? Also, where is the plot that shows that there is no Z peak in m\_ey after the pTyy¿100 GeV cut?

• This is my work.