

# Meeting Jan 22, 2014

## Agenda

- Drell-Yan Analysis
  - 1D cross section muons/electrons
  - 2D cross section muons/electrons
  - Double ratio 1D, 2D
- Z' analysis
  - Standard Z': draft of QCD talk (not final)
  - SUSY Z': draft of Eg id talk (not final)
- H Analysis
- Muon HLT

## Action items

- Alexey: DY analysis
  - Perform closure test for muons and electrons with and without regularization
  - Look up the dielectron mass resolution results (e.g. as recently discussed on HN or H->ZZ analysis)
  - Learn from other analyses (at least 3) how the ECAL eta gap is taken into account and compare to your result and approach
  - Cross check effect of ECAL gap on efficiency: How many events we loose with the gap at 8 TeV
  - Show energy scale correction plots to EGamma POG (cc Norbert)
  - Why do we have a constant 1.1 correction above the Z peak in the ratio of pre-unfolded to unfolded yields?
  - Last bin at high mass absolute cross section: check background
  - Integrate 2D pre-unfolded to unfolded ratio plot and compare to 1D
  - Fix remaining problems of double ratio in the muon channel
  - Distribute close-to-final AN
- Hwidong: Z' analysis
  - Send deadline and my contribution for Z' AN note
  - Send first draft of Z' SUSY AN note ASAP
  - Check natural width of the Z' MC samples (get reference from standard Z' about the mass resolution and natural mass width)
  - Run Madgraph/Herwig and make a progress on the model 2 mc generation
- Benjamin: H analysis
  - Understand the CMS and ATLAS analyses
  - Make sure ntuples are working correctly
  - Continue to apply selection cuts to the samples and train classifiers
  - Create ratio plots with errors: Use DY plots along with uncertainties to see if analysis is viable
- Benjamin, Hwidong: Muon HLT
  - Make sure the stepping helix propagator is not used inside tracker
  - Create a plot showing the efficiency performance of the 3 seeding algorithms vs PU (with fixed OIState)
  - Implement the new muon specific tracking parameters in the menu (use same configuration as the improved tracking group uses for our L3 trajectory building): Show differences to current L3
  - Find out why the code (to first propagate to the vertex) was implemented in the first place
  - Understand tracking region, regional tracking, track matching

## Information