

Weekly meeting

Qi Li

IHEP

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$w w \gamma \gamma$ optimization

- Scanning on the `h_lep_pt`
- And scanning on the MET
- But do not scan the delta phi between two lepton and the value of eta because the difference are not distinct.
- $S_{max} = 0.98$

Atlas fast simulation

- Madgraph
- lhe
- Python script
- Setup Athena(notice the Athena release)(asetup 17.2.11.13,slc5,here)
- Two commands
- `Generate_trf.py ecmEnergy=8000. runNumber=100300 firstEvent=1 maxEvents=5000 randomSeed=2014`

```
outputEVNTFile=xiaohu-pythia.189646.sm_hh_XXyy_nobbyy_8TeV.000001.EVNT.pool.root  
evgenJobOpts=MC12JobOpts-00-10-62_v0.tar.gz
```

```
inputGeneratorFile=./MyPack/group.phys-  
gener.madgraph5.189646.sm_hh_XXyy_nobbyy_8TeV.TXT.mc12_v1/group.phys-  
gener.madgraph5.189646.sm_hh_XXyy_nobbyy_8TeV.TXT.mc12_v1._00001.tar.gz
```

```
jobConfig=MC12.189646.sm_hh_XXyy_nobbyy_8TeV.py
```

- `Reco_trf.py`

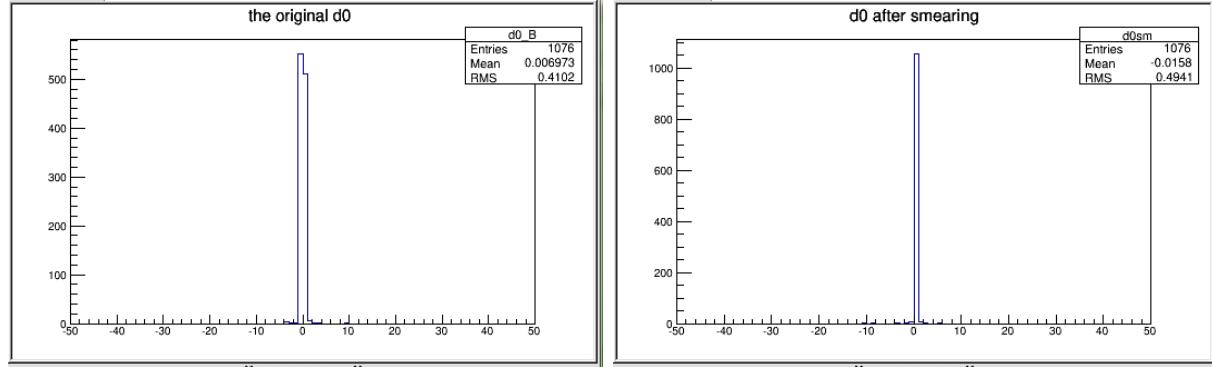
```
preExec="rec.doApplyAODFix.set_Value_and_Lock(False);from D3PDMakerConfig.D3PDMakerFlags  
import D3PDMakerFlags;D3PDMakerFlags.TruthWriteHadrons=True"
```

```
inputEVNTFile=xiaohu-pythia.000001.EVNT.pool.root
```

```
outputNTUP_TRUTHFile=xiaohu-pythia.000001.EVNT.ntuple.root
```

Qualification task

- Got some results
- Event number = 1000(in the job option script, just testing)
- Main cxx file(which would be found in the job option script)
- xAOD EDM(retrieve)



- Next step
- Shared tool(declareProperty)
- To smear the parameters d0 and z0 bby using a function related to pt and eta

