N8 D3PD

user08.MassimilianoBellomo.ganga.PythiaZmumu_1Lepton.e347_s462_r635_ewpa328 from mc08.106051.PythiaZmumu_1Lepton.recon.AOD.e347_s462_r635_tid046177
user08.MassimilianoBellomo.ganga.210.20090423 from mc08.109236.PythiaZtautaull_2Leptons.recon.AOD.e379_s462_r635_tid046754
user08.MassimilianoBellomo.ganga.213.20090504 from mc08.105013.J4_pythia_jetjet.recon.AOD.e344_s479_r635/
user08.MassimilianoBellomo.ganga.217.20090507 from mc08.105200.T1_McAtNlo_Jimmy.recon.AOD.e357_s462_r635/
user08.MassimilianoBellomo.ganga.218.20090507 from mc08.106021.PythiaWmunu_1Lepton.recon.AOD.e352_s462_r635/
user08.MassimilianoBellomo.ganga.219.20090507 from mc08.106022.PythiaWtaunu_1Lepton.recon.AOD.e352_s462_r635/
user09.FabrizioPetrucci.PythiaB_bbmu15X.e388_atlfast_14_5_1_ewpa328 from user09.FabrizioPetrucci.mc08.108405.PythiaB_bbmu15X.AOD.recon.e388_tid042962
user09.FabrizioPetrucci.PythiaDrellYanLowM_mu2p5mu2p5.e359_s462_r635_ewpa328 from mc08.106005.PythiaDrellYanLowM_mu2p5mu2p5.recon.AOD.e359_s462_r635/
user08.MassimilianoBellomo.ganga.PythiaZtautau.e347_s462_r635_ewpa328.1 from mc08.106052.PythiaZtautau.recon.AOD.e347_s462_r635/
/castor/cern.ch/user/m/mbellomo/EWPA/SMWZ/Wmunu_500mu from user08.mariannatesta.ganga.datafiles.misal.106021.PythiaWmunu_1Lepton.recon.AOD
/castor/cern.ch/user/m/mbellomo/EWPA/SMWZ/Zmumu_500mu from user09.FulvioGaleazzi.PythiaZmumu_1Lepton.mc08.106051_misal.recon.AOD.e347_s462_r541_tid028727_misal_500u

TPEffiMaker

- Tool to make Tag&Probe efficiency 2D maps (EWRootAnalysis/TPEffiMaker)
  - ★ uses the TPTool information
  - ★ configurable for different steps
    - ✳ MSID, CBMS, CBISO, TRIGCBISO from DATA
    - ✳ MSMC, CBMC, CBISOMC, TRIGCBSIOMC from MC

```
TPEffiMaker_CBISO.StepName          = "CBISO"
TPEffiMaker_CBISO.TestLabel         = "StacoMuon"
TPEffiMaker_CBISO.TagLabel          = "StacoMuon"
TPEffiMaker_CBISO.ProbeLabel        = "MuonBoySAMuon"
TPEffiMaker_CBISO.ProbePtCut        = 15.0*GeV
TPEffiMaker_CBISO.ProbeEtaCut       = 2.5
TPEffiMaker_CBISO.doIsolation       = True
TPEffiMaker_CBISO.ConeSumNIDCut     = 6
TPEffiMaker_CBISO.ConeSumPtIDCut    = 5.0*GeV
TPEffiMaker_CBISO.ConeSumEtEMCut = 6.0*GeV
TPEffiMaker_CBISO.ConeEtJetCut      = 15.0*GeV
TPEffiMaker_CBISO.doTrigger         = False
TPEffiMaker_CBISO.doTriggerPt       = False
TPEffiMaker_CBISO.doMCEffi          = False
TPEffiMaker_CBISO.useCalo           = False
TPEffiMaker_CBISO.CaloLabel         = "CaloMuon"
TPEffiMaker_CBISO.RootFileName      = "EfficiencyMaps.root"
```

EWBosonAnalysis macros

- Set of ROOT macros to make final plots
  - ★ Structure of directory in EWBosonAnalysis/share
    - ✳ SinglePart/ : for single particle performances
    - ✳ Wmunu/ : for Wmunu analysis
    - ✳ Zmumu/ : for Zmumu analysis

- SinglePart/EffiPlotter.C
  - ★ to make 1D and 2D plots for efficiency for TPEffiMaker maps
    - ✳ merging macros from Claudio

My TODO list

- Updates macros of EWBosonAnaalysis
  - ★ EffiPlotter in dev
- Adding WeightCalc to WmunuAnalyzer
- Developments for WeightCalc
  - ★ Adding configuration of steps, ...
- Developments for EWBosonAnalysis
  - ★ Now using ZmunuAnalyzer tool also in SM muon validation
  - ★ Need to reorganize output of tools to get a more modular schema
    - ✳ MuonValidator -> plots for single muon performances (eff, resol, scale, fake)
    - ✳ ZmunuAnalyzer -> plots for Zmumu analysis performances (cut-flow, invariant mass)
    - ✳ (TriggerValidator -> plots for trigger rates)
    - ✳ (KineAnalyzer -> plots for general kinematic distribution)
- Adding GeneratorInserter for ASCII event files (standalone generator as HORACE)
  - ★ done, to be tested
- **EWPA-00-03-29 ...**

Action items

W,Z signal selections	Max, Claudio, Daniela, Tommaso
W,Z signal re-weighting with single particle efficiencies	Max, Claudio, Daniela
QCD background to W	Marianna, Matthias (?)
QCD background to Z	Max, Tommaso, Matthias (?)
EW background to W	Gabriella
EW background to Z	Tommaso
MET performance	Max U
trigger performance	Max + ?
muon performance	Max, Claudio
acceptances from MC generators (ISR, FSR, PDF, NLO corr.)	Silvia + ext from Rome2
momentum scale corrections	Fabrizio, Ada, Toni
single particle efficiencies determination from data	Max, Claudio
effect on mis-alignment, mis-calibration, mis-etc on W selection	Claudio, Fabrizio
effect on mis-alignment, mis-calibration, mis-etc on Z selection	Claudio, Fabrizio
effect of pile-up and cavern background on W selection	?
effect of pile-up and cavern background on Z selection	?
ATLFAST-II studies	?
D3PD productions	all
AOD production with mis-effects	Marianna, Fabrizio, Ada
ATLFAST-II productions	Ada
tools and checks for D3PD productions	Max, Gabriella
EWPA developments	Max, Claudio + ?
SM Muon validation	Max, Gabriella
Note editor	?

Next meetings

- For each item a brief report for status/plans
- Next week (27/05) concentrate on **background studies on W,Z**
  - ★ Data available, main observables, first selection
  - ★ QCD Z (Max)
  - ★ QCD W (Marianna)
  - ★ EW Z (Tommaso)
  - ★ EW W (Gabriella)
- Next-to-next^2 week (10/05) [skipping 03/05]
  - ★ still on **background studies on W,Z**
  - ★ first draft of the note index (who ?)
- Goal is to prepare a summary note BEFORE start of data taking
  - ★ to be finalized in coming months across summer