Status Report

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- DiLeptons meeting

Data

- Heavy Ion Event

  - dcache:/pnfs/cmsaf.mit.edu/t2bat/cms/store/user/yilmaz/
    Pyquen_Off_4TeV_VtxFixed_d20090311/
    Pyquen_Off_4TeV_VtxFixed_d20090311/04e88f050c170221cdbc0f5e22
    0ab7f0/*

- Signal Z^0->μμ

  - dcap:///pnfs/cmsaf.mit.edu/hibat/cms/users/yetkin/sim/
   pythia_z2muons_d200800919/*

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Overview

- cms.Path(process.mix* process.trackingParticles* process.doAllDigi *
  process.L1Emulator* process.DigiToRaw* process.RawToDigi*
  process.reconstruction * process.muonAssociatorByHit* process.MixMuons)

  - Mix Events(1 signal + 1 Background)

  - TrackingParticles, doAllDigi,L1Emulator, DigiToRaw, RawToDigi

  - Reconstruction (to be analyzed in more detail).

  - Association, using MABH and a quality cut of 70%

    - cut = associated hits to that track/all possible hits.

  - Analyzer

    - Get CrossingFrameHepMC, find muon, get barcode.

    - Find TrackingParticle with same barcode, use MABH, match with MuonTrackLinks.
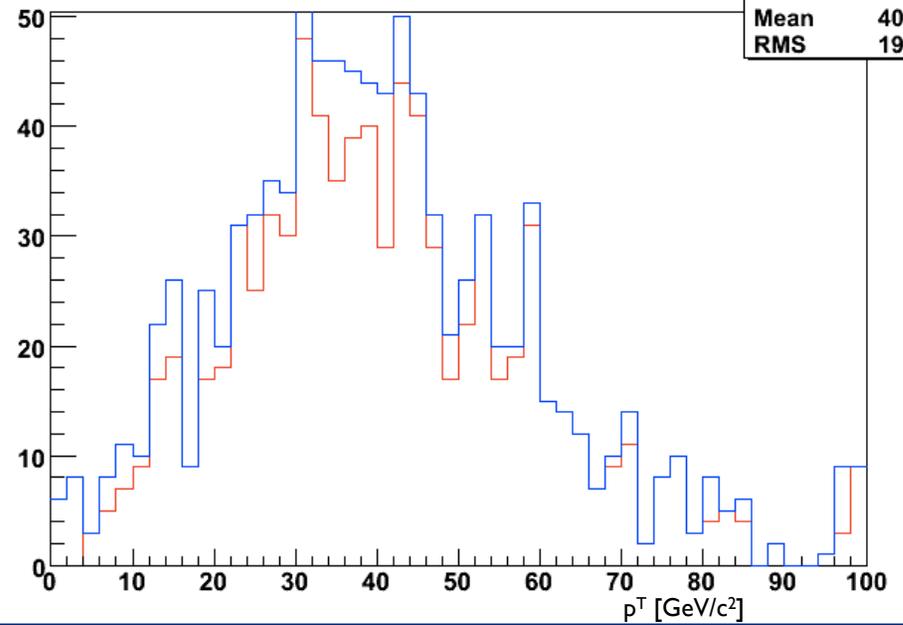
    - If it passes the cut, then it is plotted.
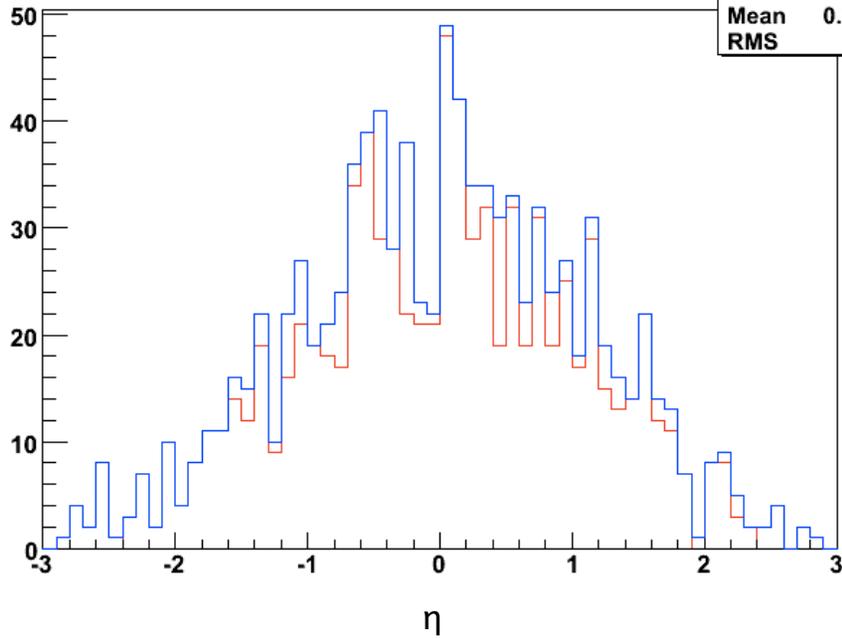
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Muon Kinematics

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Muon Reco Efficiency

- Note: Made a mistake and only took μ⁺'s, forgot to use abs().
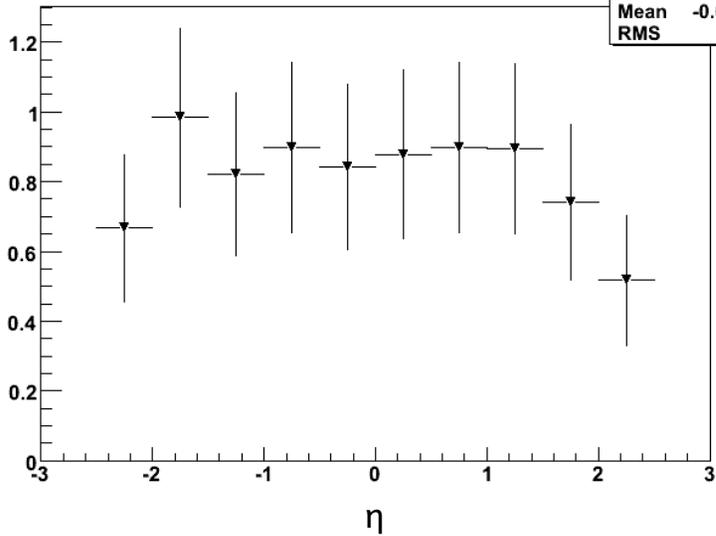
Match Eta

EffMatchEta_h	
Entries	852
Mean	-0.08083
RMS	1.358

η
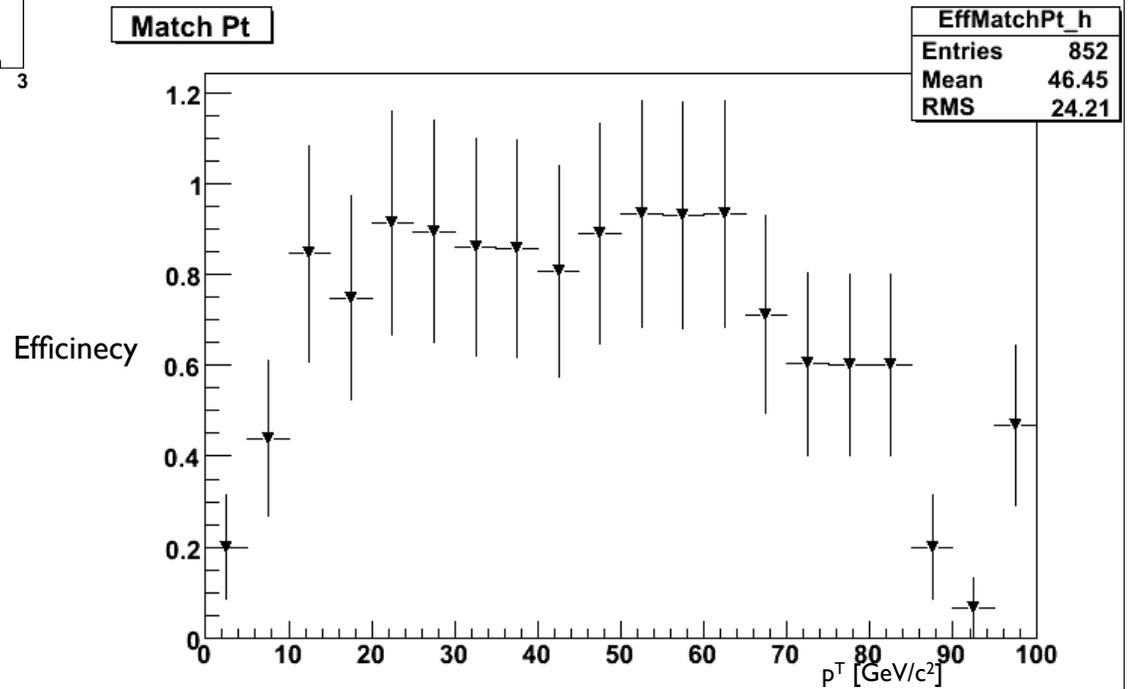
Match Pt

EffMatchPt_h	
Entries	852
Mean	46.45
RMS	24.21

Efficinecy

p^T [GeV/c²]

Check Efficiency as function of cut?

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Other

- Disecting muon reco chain with Dong Ho

- Taking shifts with CSC group

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To Do

- ReDo plots taking all the muons, with more statistics

- Try new Reco sequence

- Plot Eff at different steps of reco chain

- Create data sample with flat pt and eta

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