

Update

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- All info in the MIT Log book

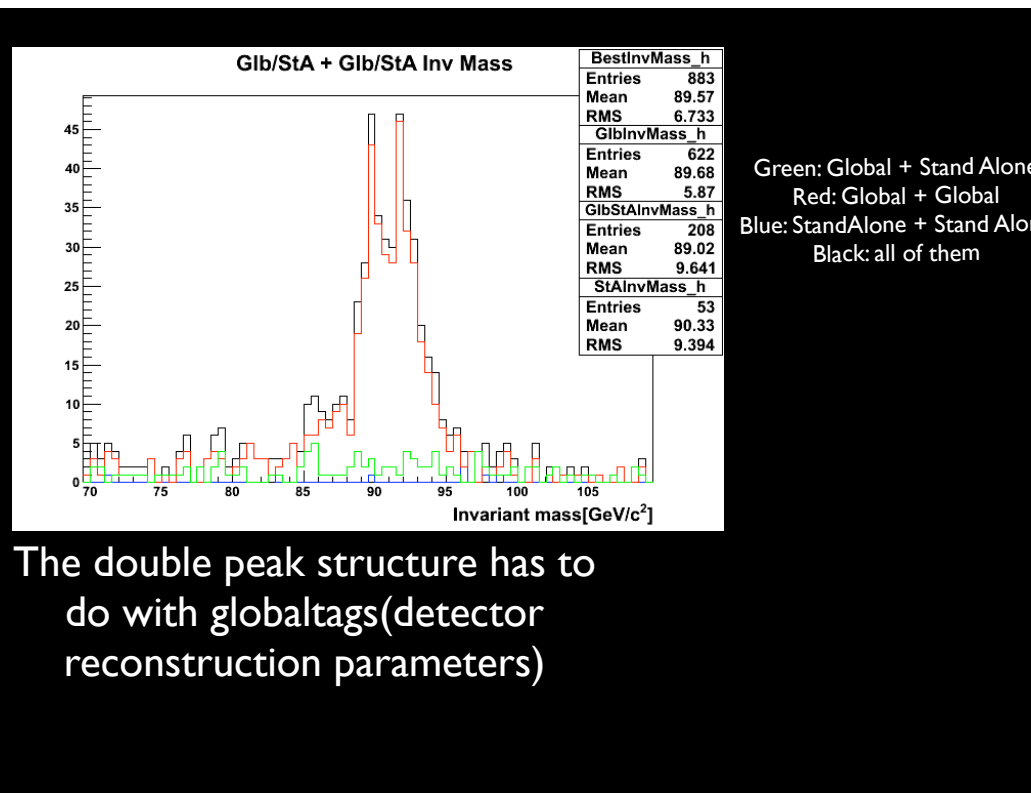
- <http://www.cmsaf.mit.edu/twiki/bin/view/CmsHi/JR0909>

- Sample:892 events ZmumuJet

- `rfile:/castor/cern.ch/cms/store/mc/Summer09/ZmumuJet_Pt170to230/GEN-SIM-RAW/MC_31X_V3-v1/0000/FEBE177C-D37D-DE11-B53C-00144F203518.root`

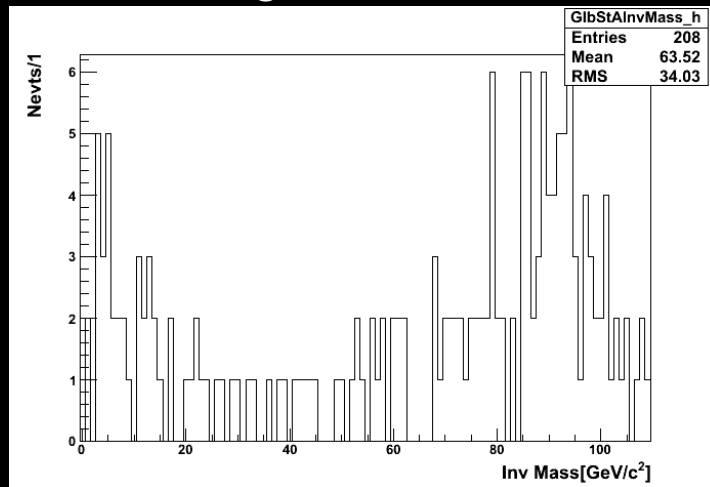
Details

- With HI reconstruction : get muon objects
- Form reco::Muon can obtain StandAlone Muon, Global Muon if available and the tracker part of the Global.
- The point of the code is to always aim to get the Global Muon + Global Muon pair, if not possible the Global Muon + StandAlone Muon, and as as last resort StandAlone Muon + StandAlone Muon.
- Using the fact that Z^0 will decay into two high p_T muon we can get away with 'ignoring' tracker muons (Note: Tracker muons \neq tracker part of Global Muons)

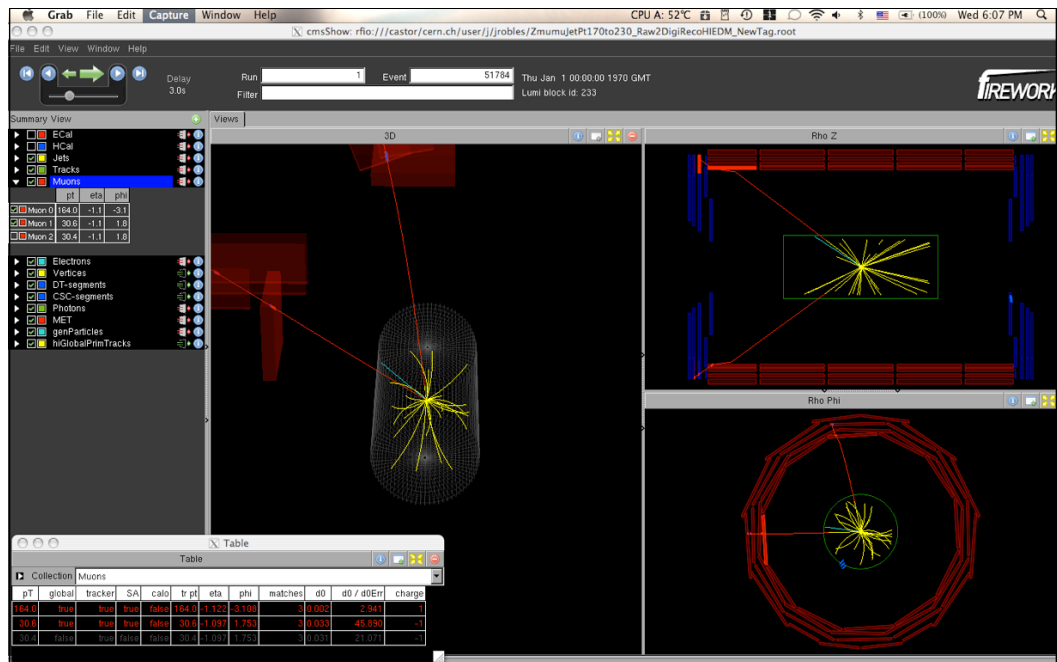


The double peak structure has to do with globaltags(detector reconstruction parameters)

Looking closer at Global+ Stand Alone



Just to verify that the signal from this combination is not a continuum, but a peak. small compared to the Glb+Glb. Bin size here is twice as big than previous plot.



Simulation of Zmumujets: Red: Muons, Yellow: GlobalPrimTracks, Green: GenZ0 (the line is only to orient the viewer)

Future

- Re-do reconstruction with correct Global tags
 - Will be done tomorrow.
 - Maybe even some efficiencies.
- Maybe reach into a tracker muons if available, with specific cuts.
- Embed in HI events, very time consuming, currently doing
- For completeness will also run over the signal only samples