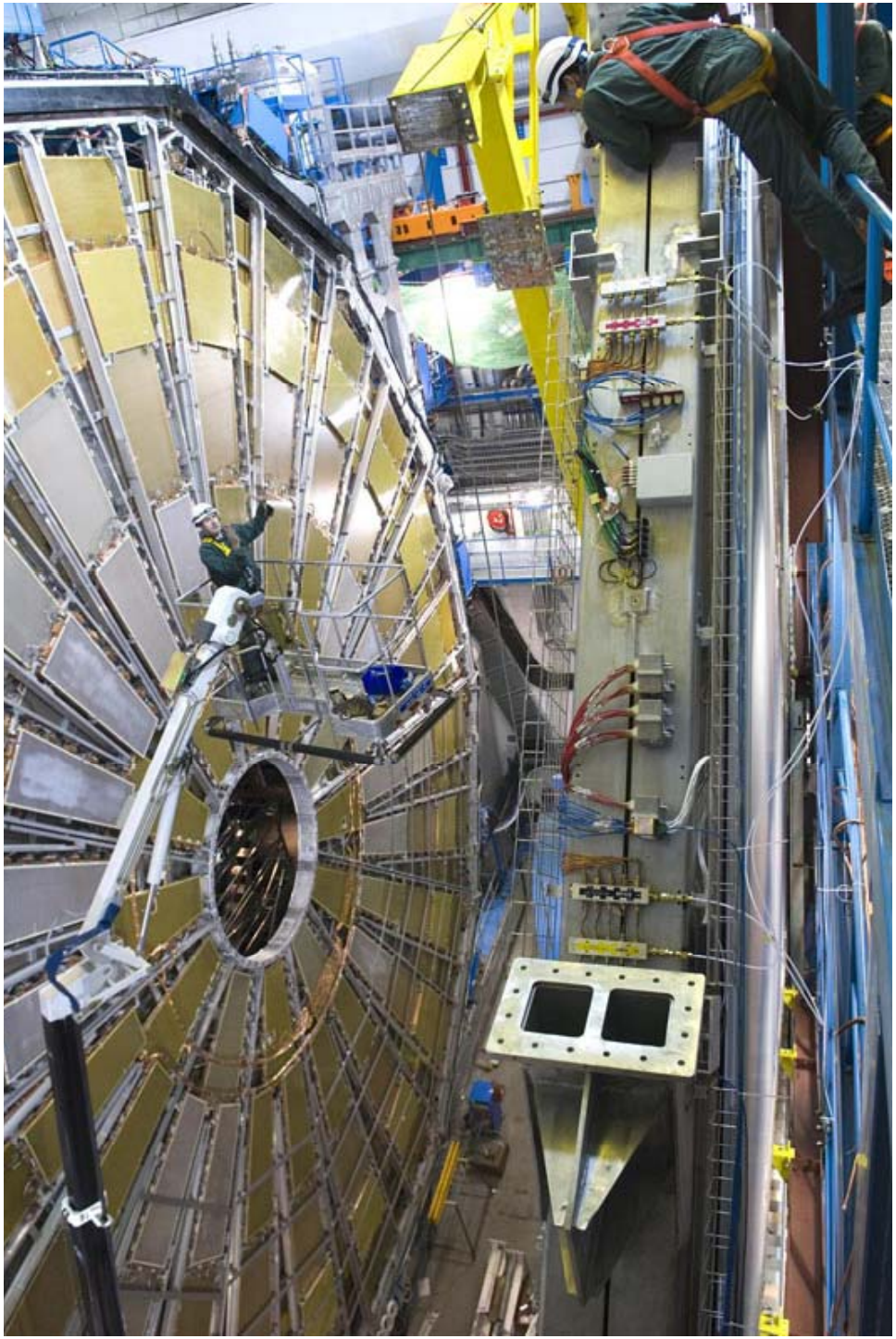


Trigger Validation 14.1.0.1 cache

Ricardo Gonçalo (RHUL) on behalf of several people

Physics Validation – May 16, 2008

Missing ET

Diego Casadei

Calibration Problem in Event Filter:

- Calibration factors should be 1.05 for EM and 1.40 for HAD samplings
- In data produced with 14.1.0.1, factors are 1.05 for EM and 1.40 for HAD samplings
- Problem fixed in tags going to 14.2.0
- Not clear if in time for 14.1.0.2

Muons

Andrea Ventura

- 14.0.0.1 ~22000 ttbar events

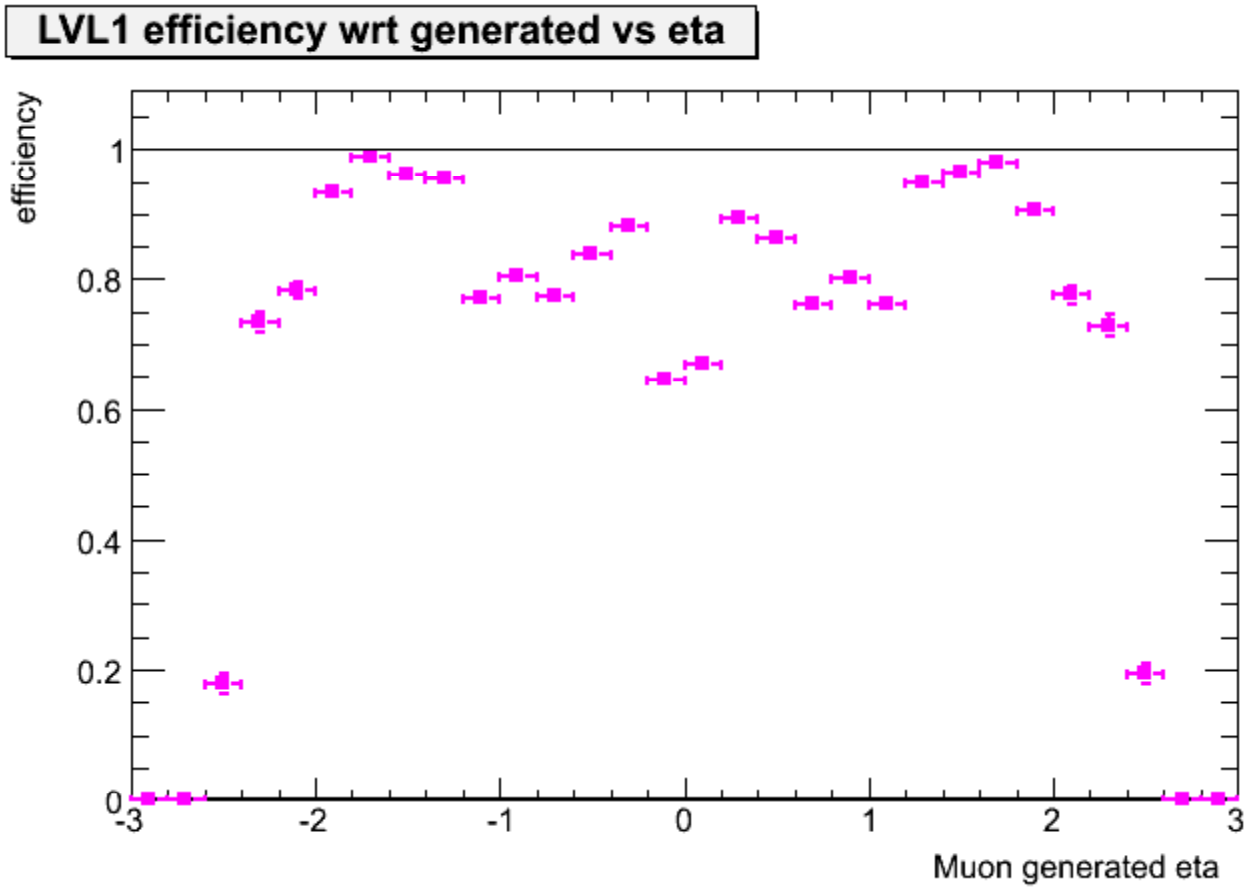
  `/castor/cern.ch/user/j/jgoncalo/valid14000001/valid1.005200.T1_McAtNlo_Jimmy.recon.AOD.e322_s412_r402_tid021650`

- 14.1.0.1 e322_s412_r421

  `/castor/cern.ch/user/a/anventur/005200_14101`

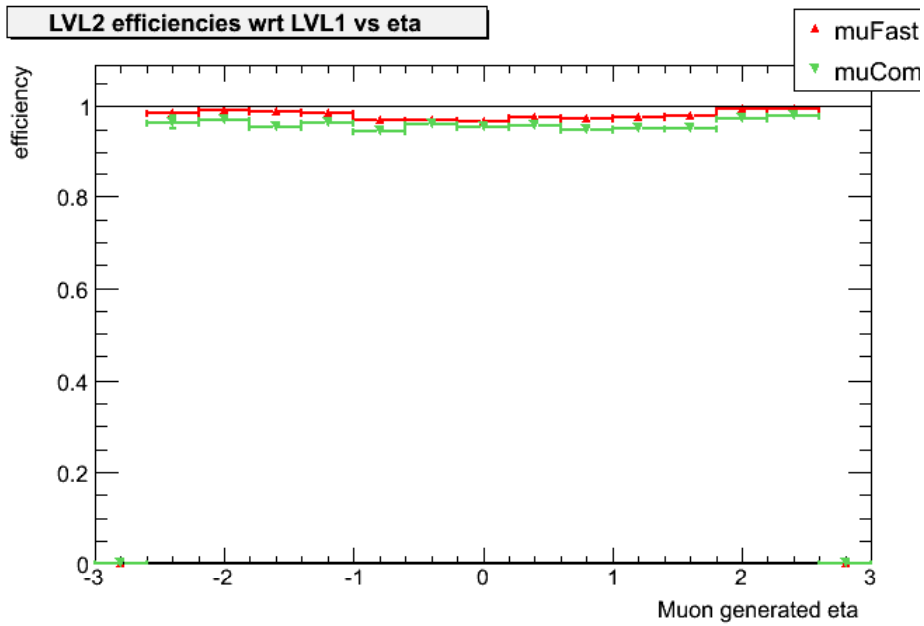
In the following a comparison on **ttbar** events with the two releases is given.

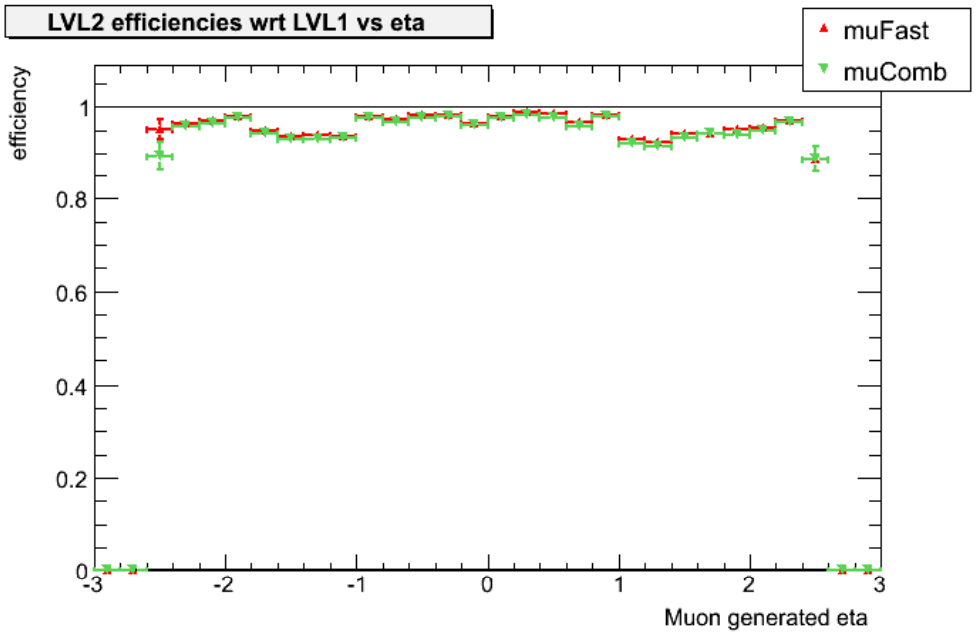
Still problems in LVL1 efficiency



- Usual problem of efficiency loss at |eta|>2
- Here cut at 20 GeV applied on truth & reco

Performance comparison on ttbar LVL2 efficiencies wrt LVL1 vs eta



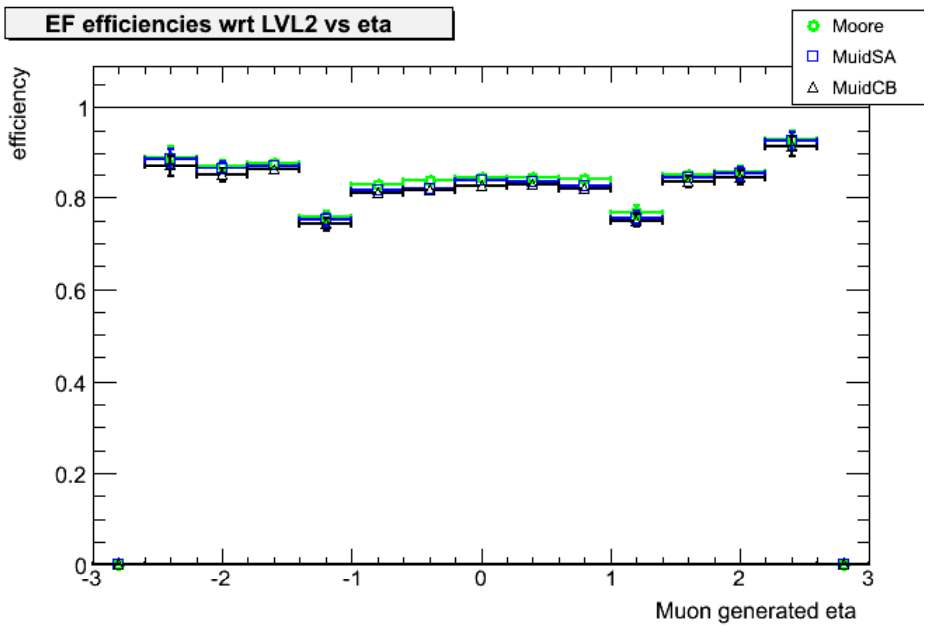


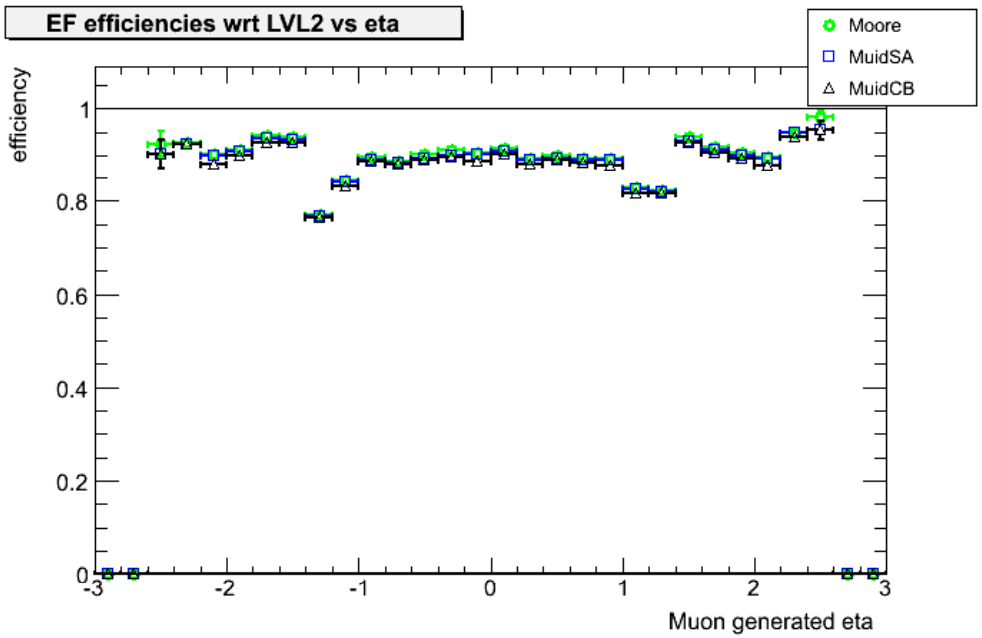
ttbar , 14.0.0.1

ttbar , 14.1.0.1

LVL2 efficiency is OK and under control for both muFast and muComb

Performance comparison on ttbar
EF efficiencies wrt muComb vs eta

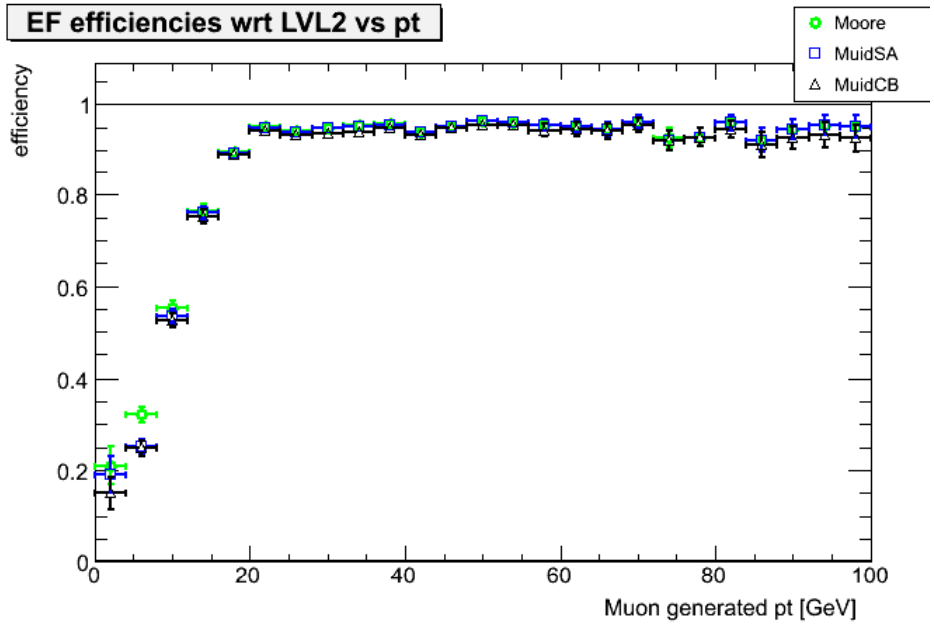


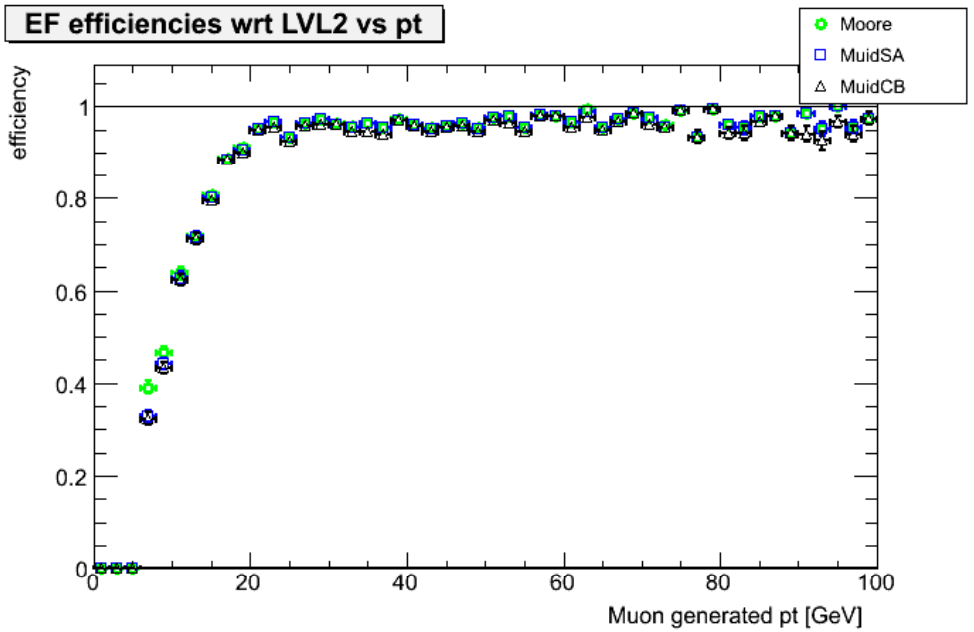


ttbar , 14.0.0.1 **ttbar , 14.1.0.1**

Average efficiency is computed without applying cuts on p_T -> it is about 82%

Performance comparison on ttbar EF efficiencies wrt muComb vs p_T

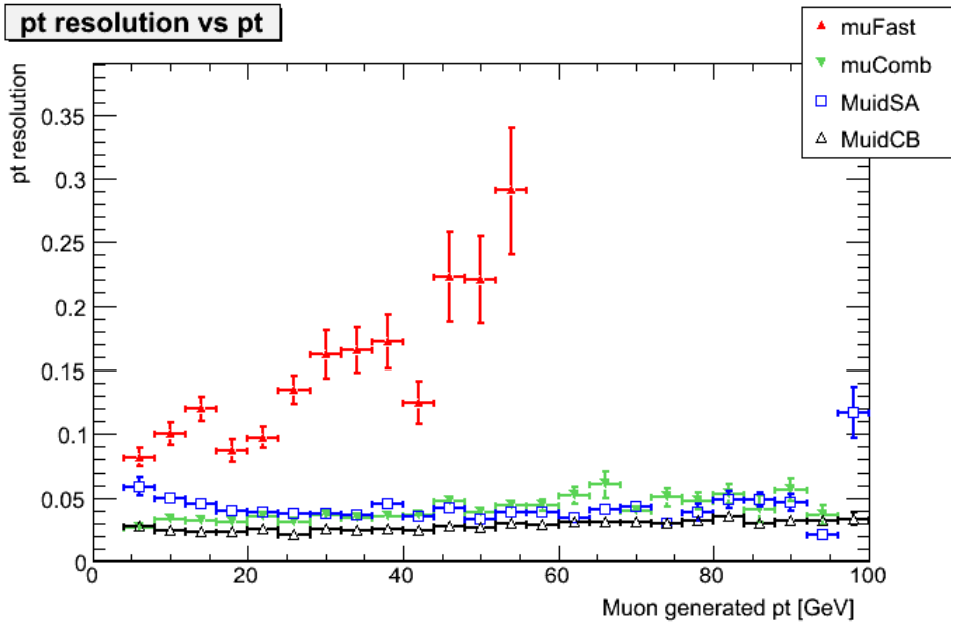


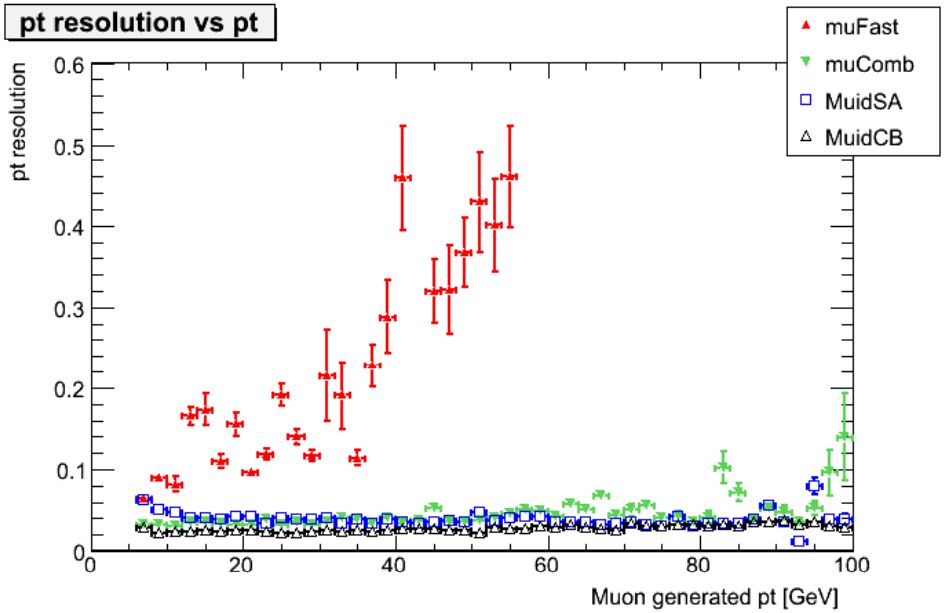


ttbar , 13.0.40.2 **ttbar , 14.0.0.1**

Turn on efficiency curves for EF algorithms agree for the two releases

Performance comparison on ttbar $1/p_T$ resolution vs p_T





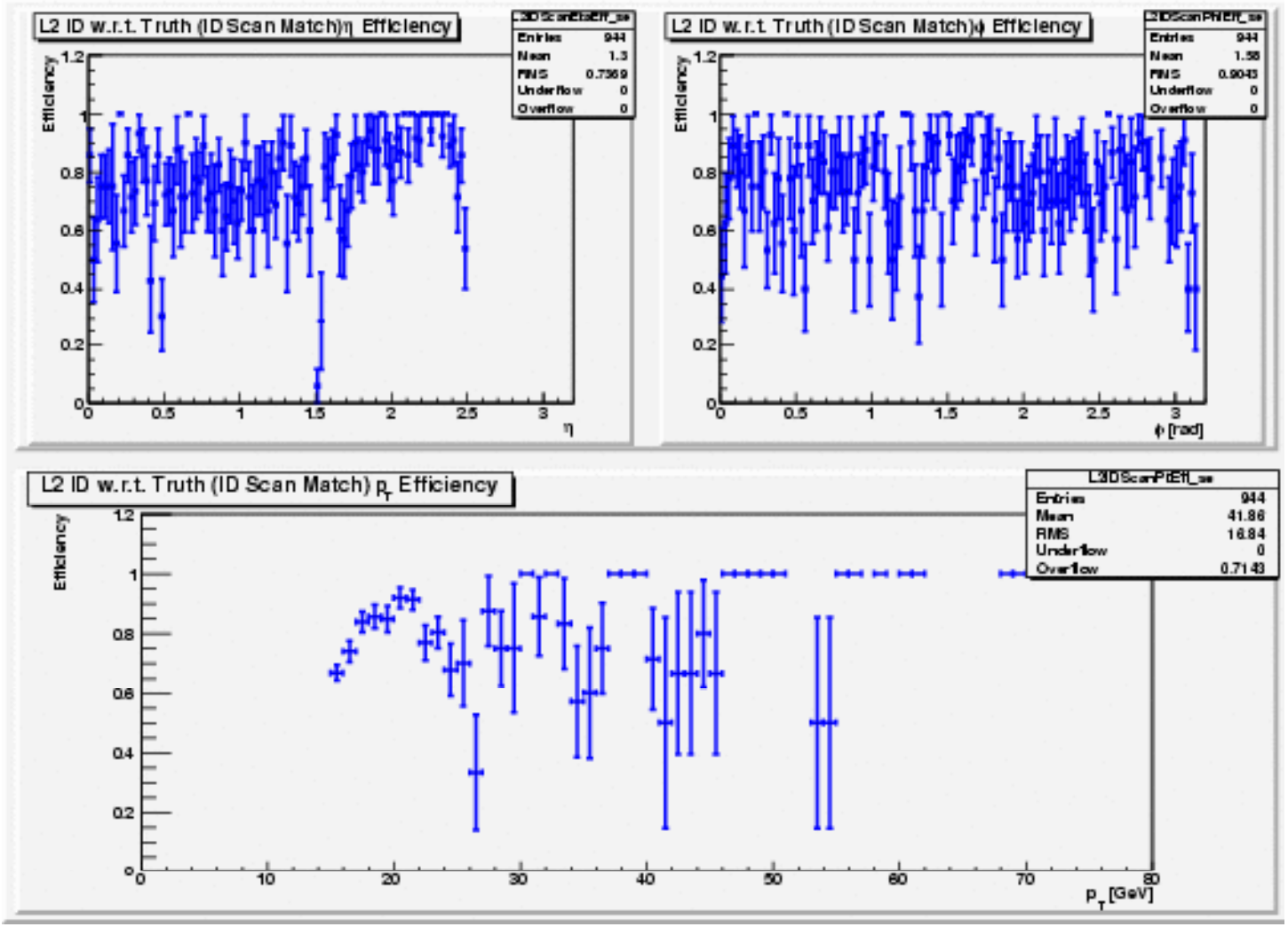
ttbar , 14.0.0.1 **ttbar , 14.1.0.1**

From 14.0.0.1 to 14.1.0.1 maybe some degradation in muFast?

E/gamma

Danilo Ferreira

- L2 looks ok



Event Filter has a strange feature:

- Apparently low efficiency (for ET=10GeV single electrons…)
- Turns out to be ok for first file in the run
- Many events in subsequent files seem to have no EF CaloClusters in StoreGate
- Data seems to be ok