

Update on the γ -hadron correlation

Astrid Vauthier

LPSC-Grenoble

Group Meeting - April 29, 2015

► Purity :

- Invariant mass distribution fit
- Procedure is decided
- Do the fit with signal in parallel with other stuffs
- Commit changes in AliROOT

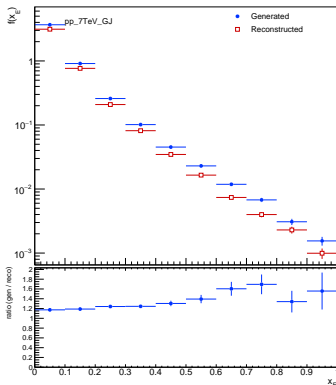
► Efficiency :

- Commit changes in AliROOT
- Efficiency in away side : comparison vs MC and p_T^{trig}
- Efficiency in UE : only for GJ

Efficiency in away side

- Efficiency defined as

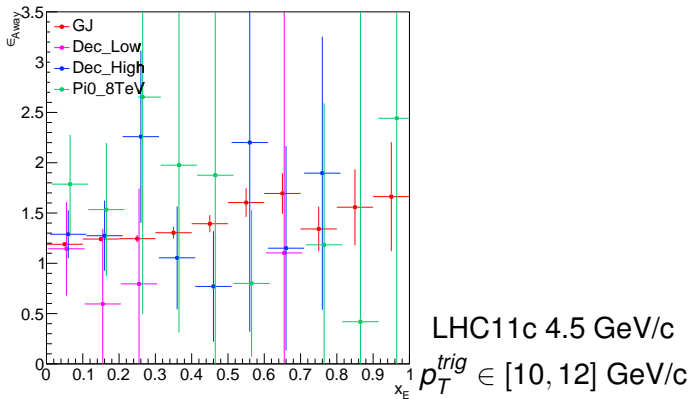
$$\epsilon_{away} = \frac{f(x_E)^\gamma_{generated}}{f(x_E)^\gamma_{reconstructed}} \quad (1)$$



LHC11c 4.5 GeV/c
 $p_T^{trig} \in [10, 12]$ GeV/c

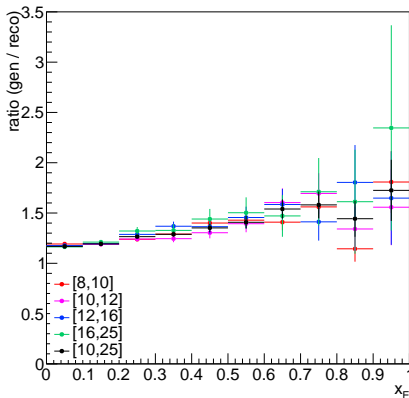
Efficiency in away side vs simu

- ▶ Check if all MC are compatible
- ▶ First results seem compatible with Nicolas' ones



Efficiency in away side vs p_T^{trig}

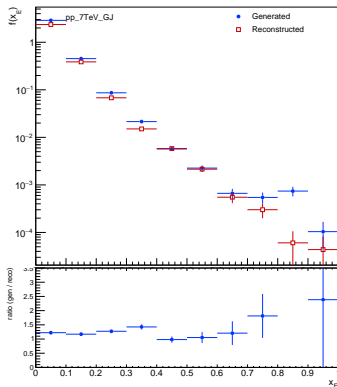
- ▶ Check if there is a p_T^{trig} dependency
- ▶ Not easy to conclude, all distributions seem compatible



LHC11c 4.5 GeV/c
GJ simu

Efficiency in UE for GJ

- ▶ Wait for commit to do same analysis as for away side
- ▶ First results : not compatible with away side



LHC11c 4.5 GeV/c
 $p_T^{trig} \in [10, 12]$ GeV/c

BACK UP
