



University
Mohammed I



Physique de la Matière et
des Rayonnements



Faculté des Sciences
Oujda

ATLAS Forward Calorimeter's Analysis : Electrons-Sshape

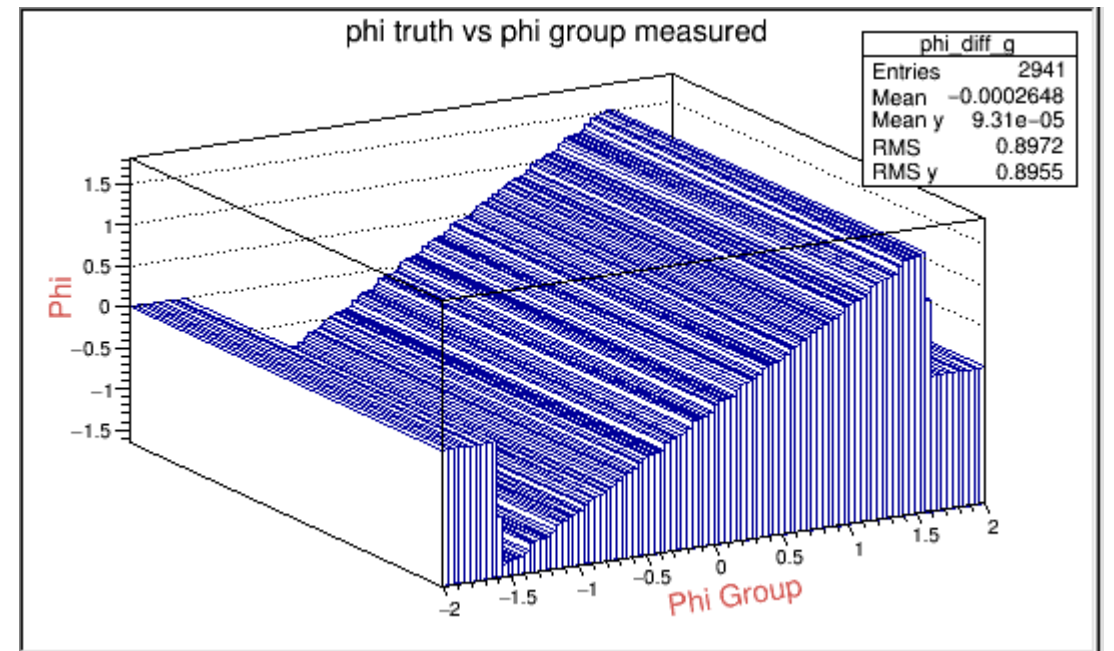
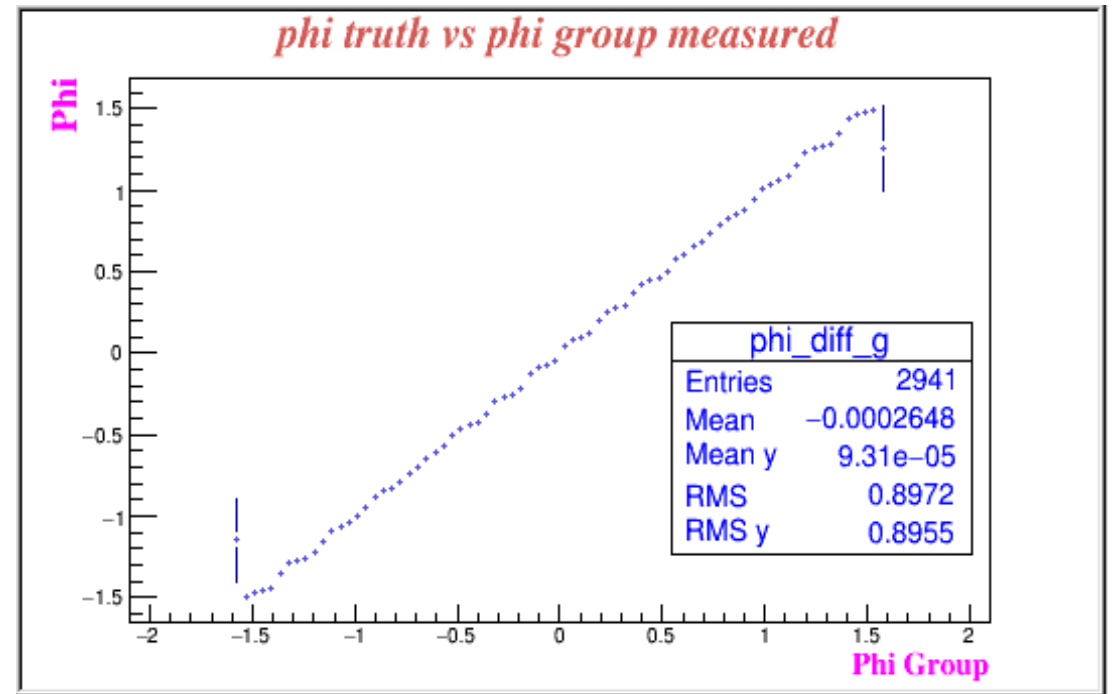
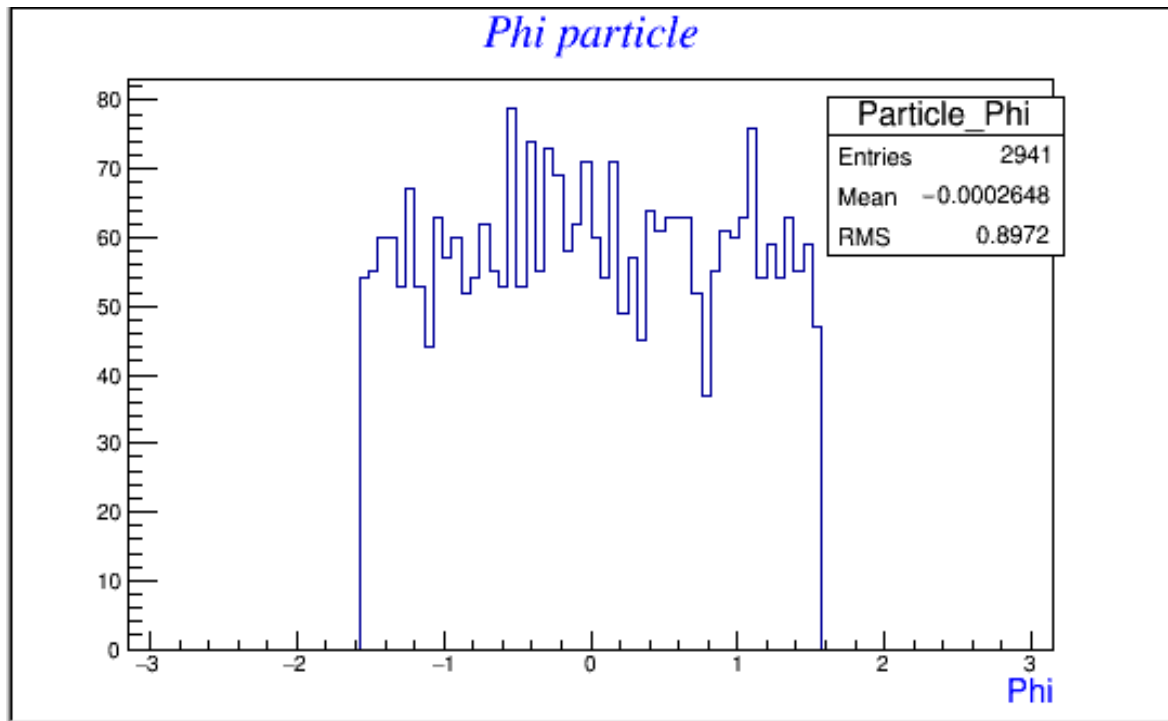
*KTH/ FSO meeting
06/ 01/ 2016*

Malika TOUIL – Yahya TAYALATI



Electrons 100 GeV

$$4.1 < \eta_{\text{truth}} < 4.2$$

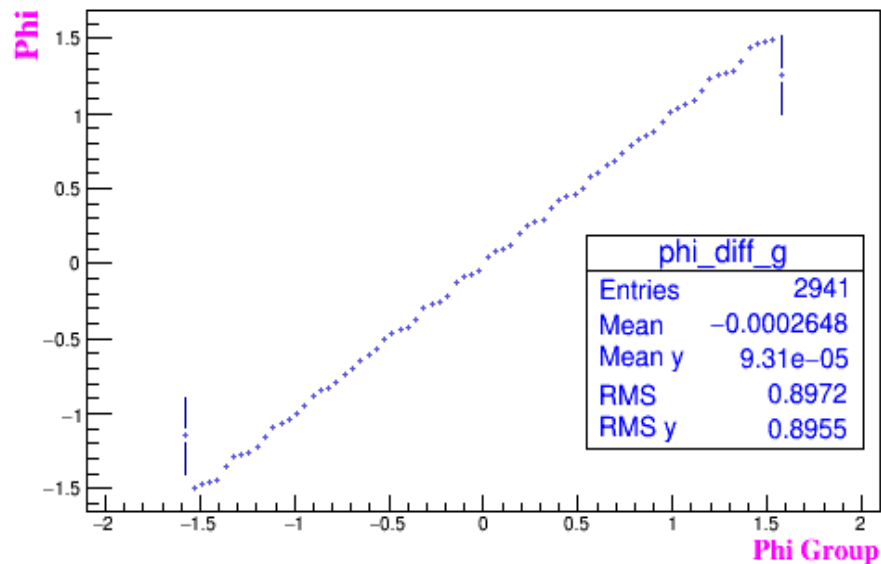




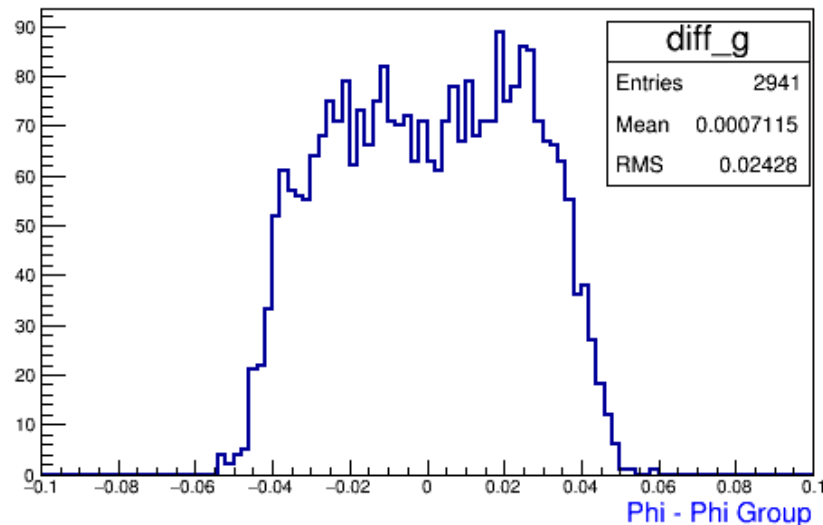
Electrons 100 GeV

$4.1 < \eta_{\text{truth}} < 4.2$

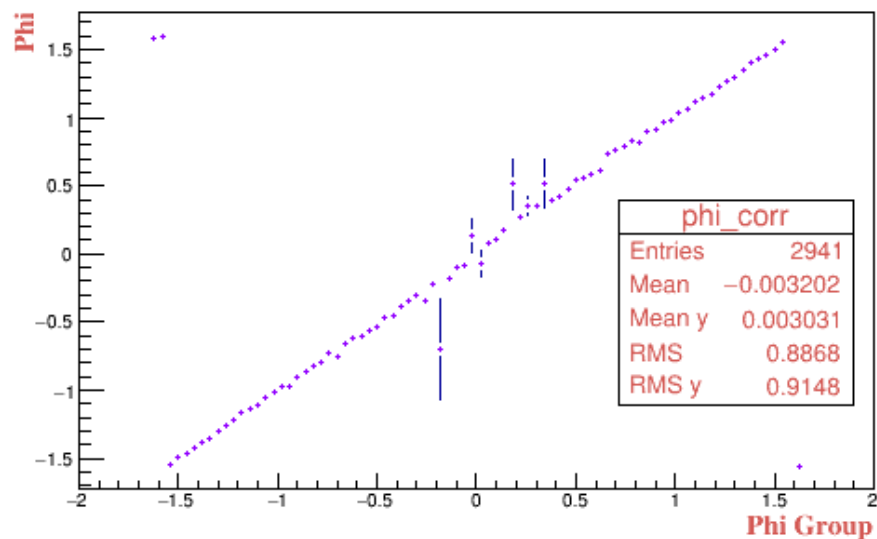
phi truth vs phi group measured



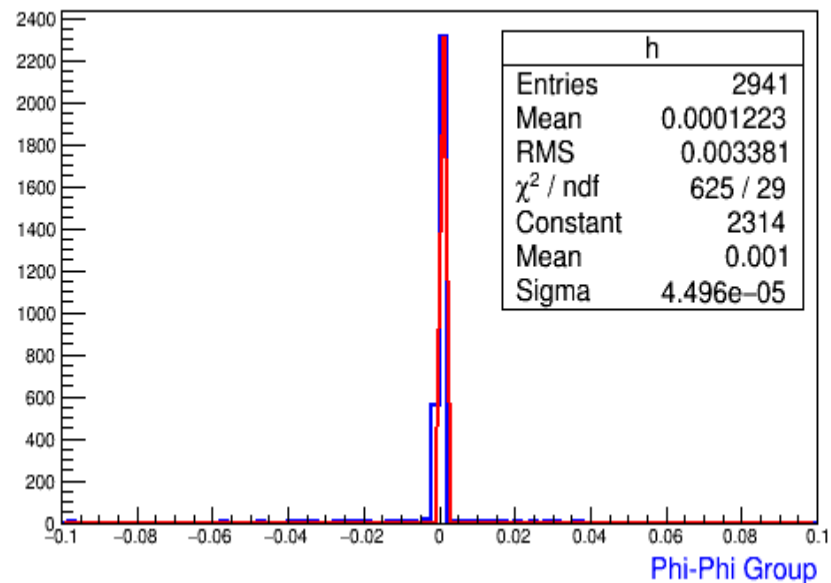
Diff Phi-Phi group



Correction of phi vs Phi Group



correction phi_phigroup



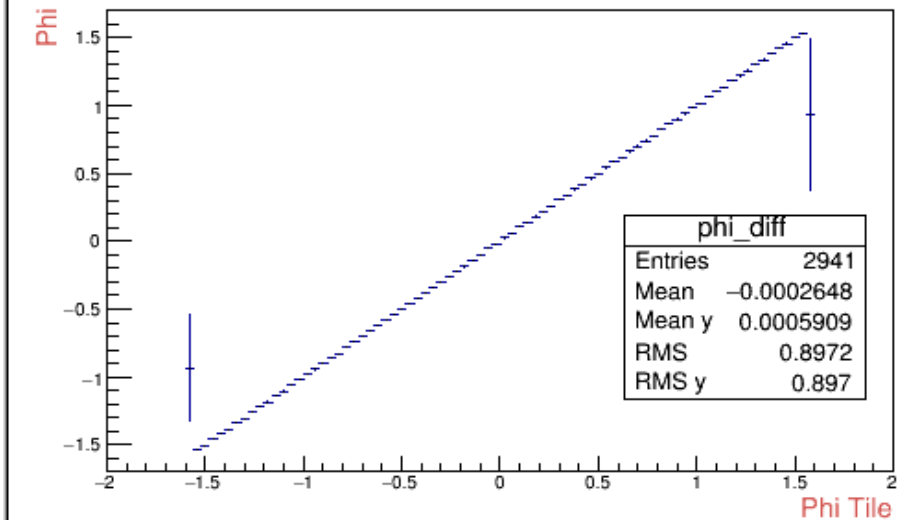
$$\sigma_{\phi} = 0.45 \text{ mrad}$$



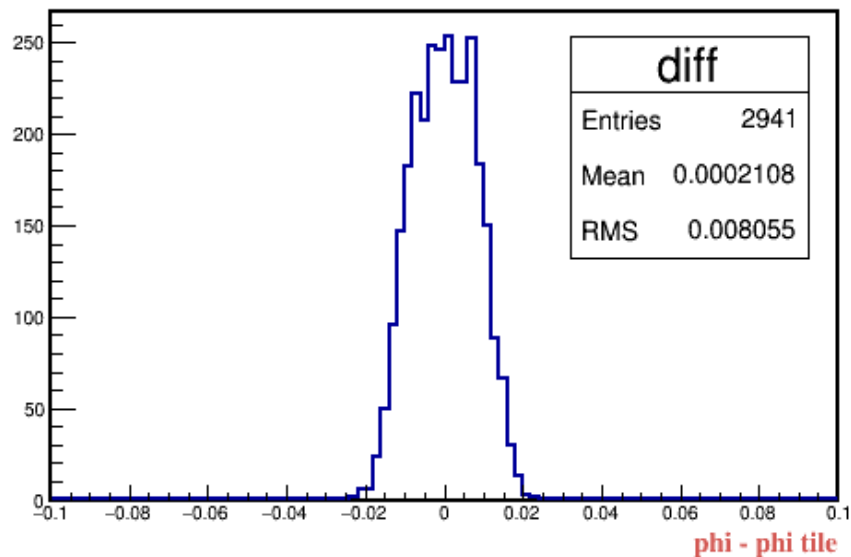
Electrons 100 GeV

$4.1 < \eta_{\text{truth}} < 4.2$

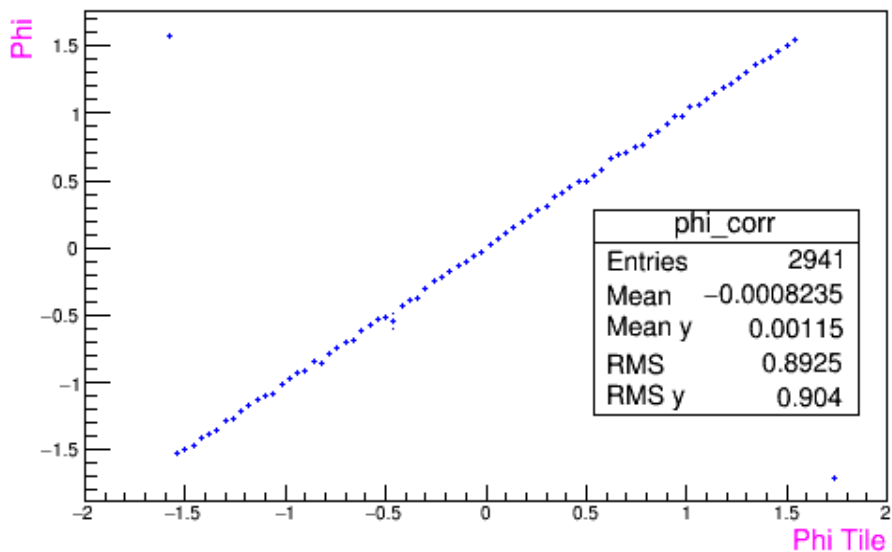
phi truth vs phi tile measured



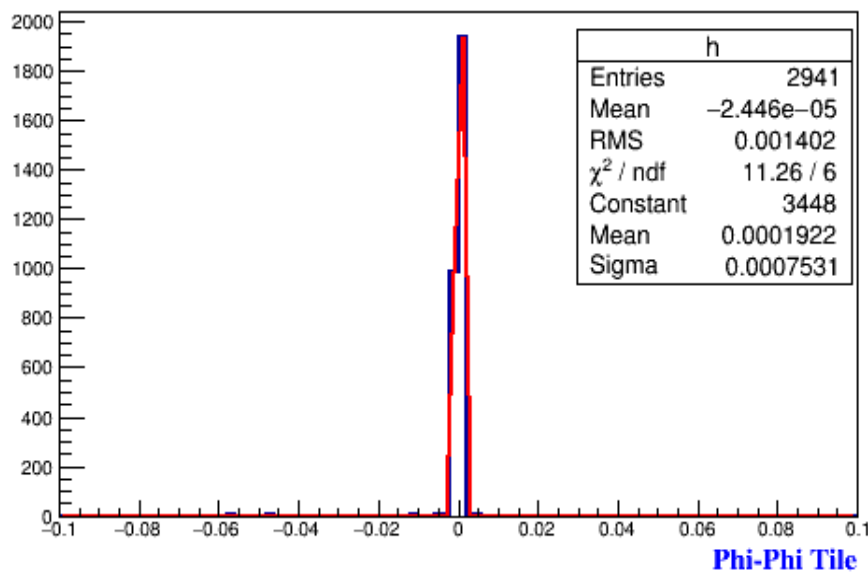
Diff Phi-Phi Tile



Correction of Phi vs Phi Tile



Correction phi-phi Tile



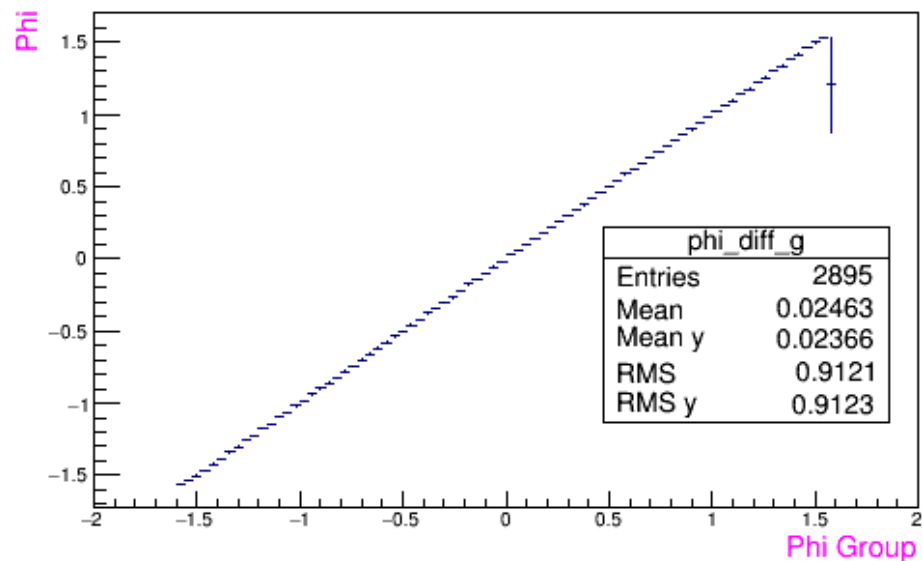
$\sigma_{\phi} = 0.75 \text{ mrad}$



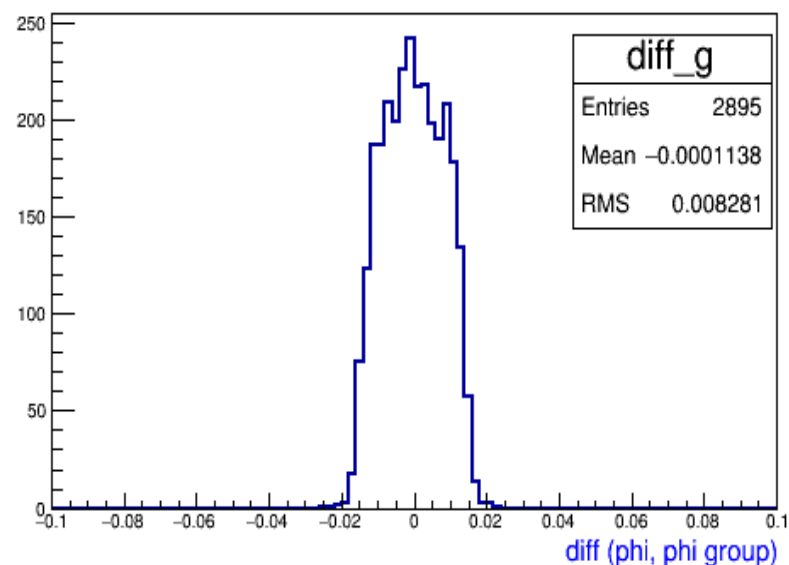
Electrons 100 GeV

$3.1 < \eta_{\text{truth}} < 3.2$

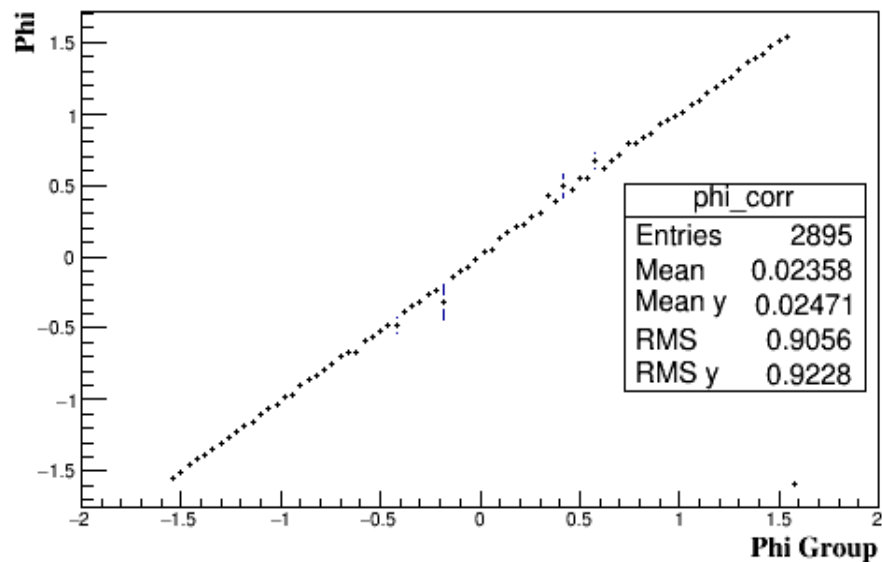
phi truth vs phi group measured



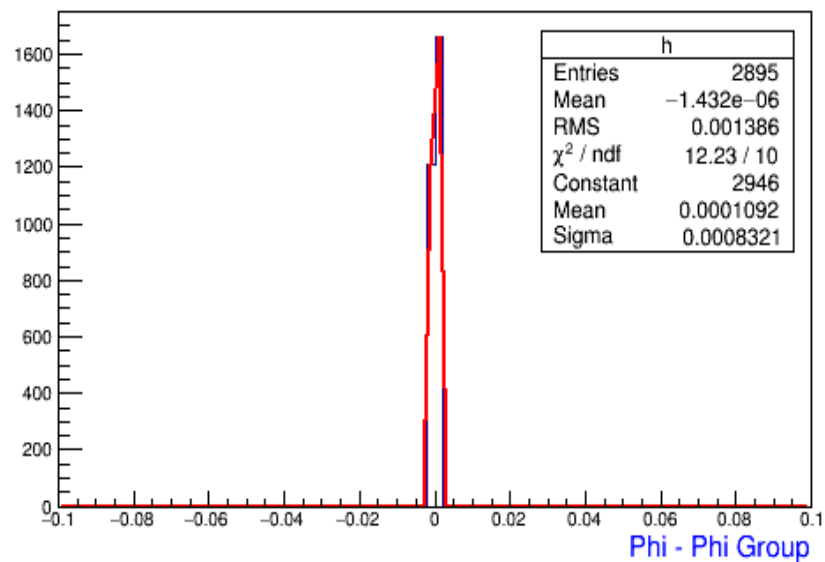
Diff Phi-Phi group



correction of phi vs phi group



Correction phi-phi group



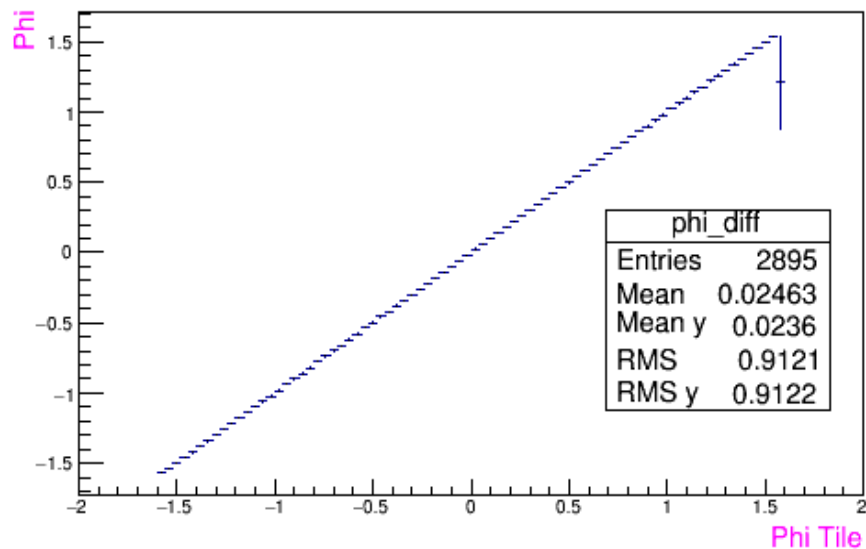
$$\sigma_{\phi} = 0.83 \text{ mrad}$$



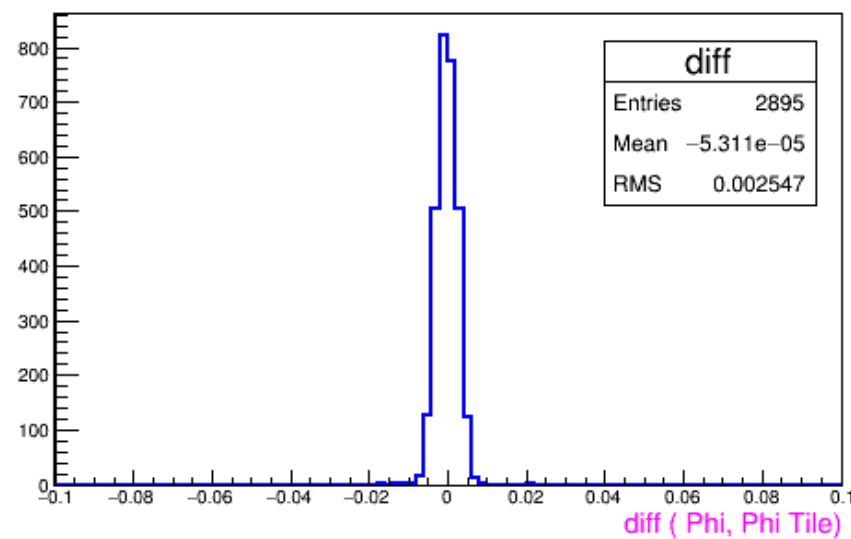
Electrons 100 GeV

$3.1 < \eta_{\text{truth}} < 3.2$

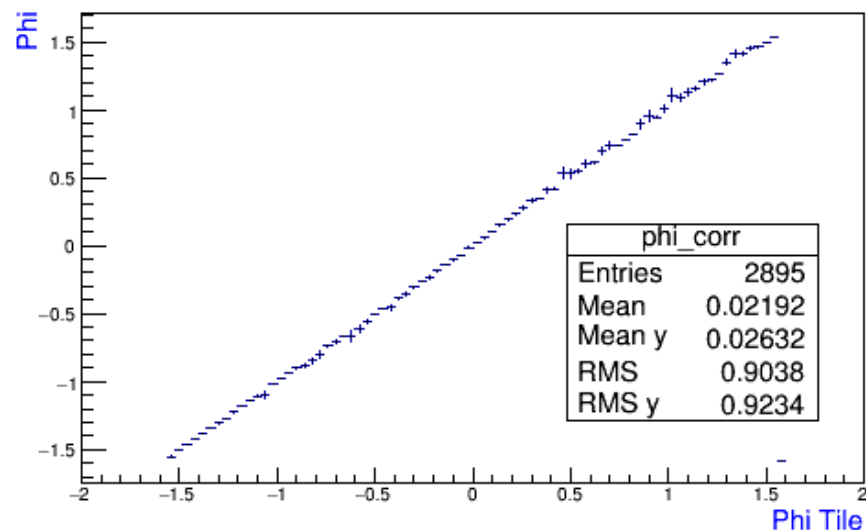
phi truth vs phi tile measured



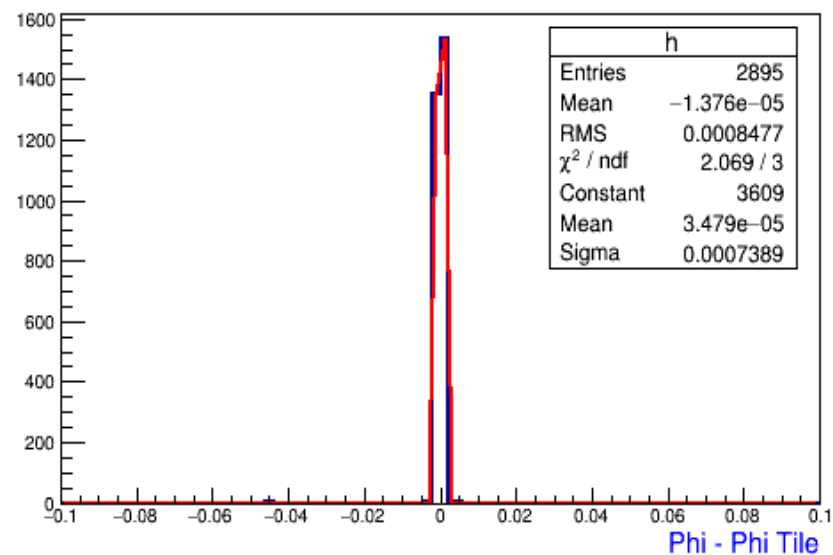
Diff Phi-Phi Tile



correction of phi vs phi tile



Correction Phi-Phi Tile



$$\sigma_{\phi} = 0.73 \text{ mrad}$$