

*Mohamed V University  
Faculty of Sciences  
Rabat*



*The S-shape correction in the FCAL ATLAS Electromagnetic  
module "FCal1"*

Prepared by :

✓ *DAHBI Salah-Eddine*

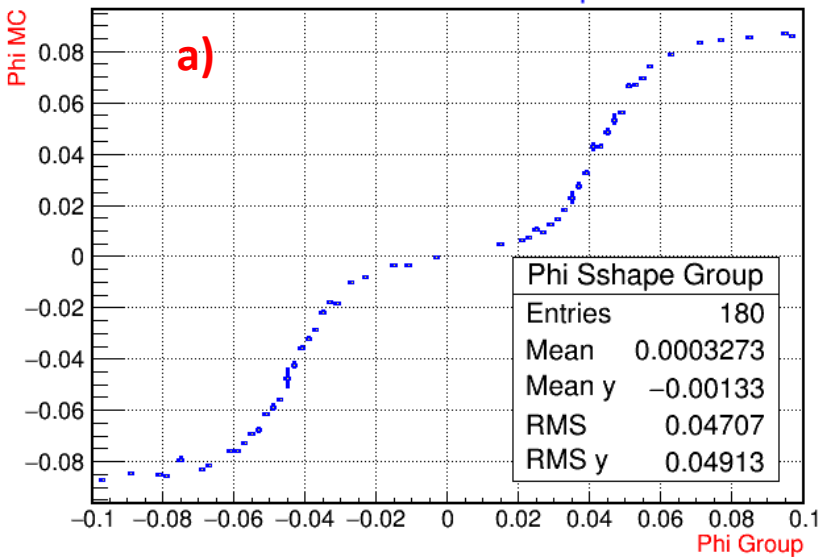


Professor:

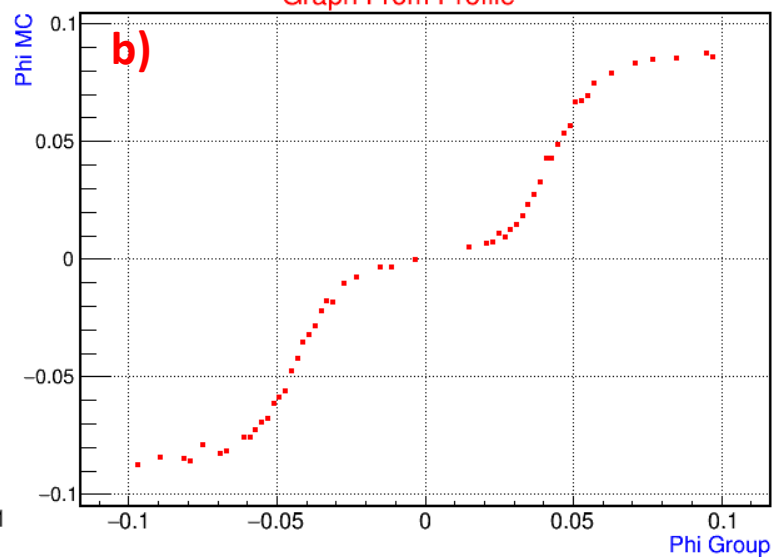
✓ *Prof. TAYALATI Yahya*

# Group S-shape correction For 100 GeV e-

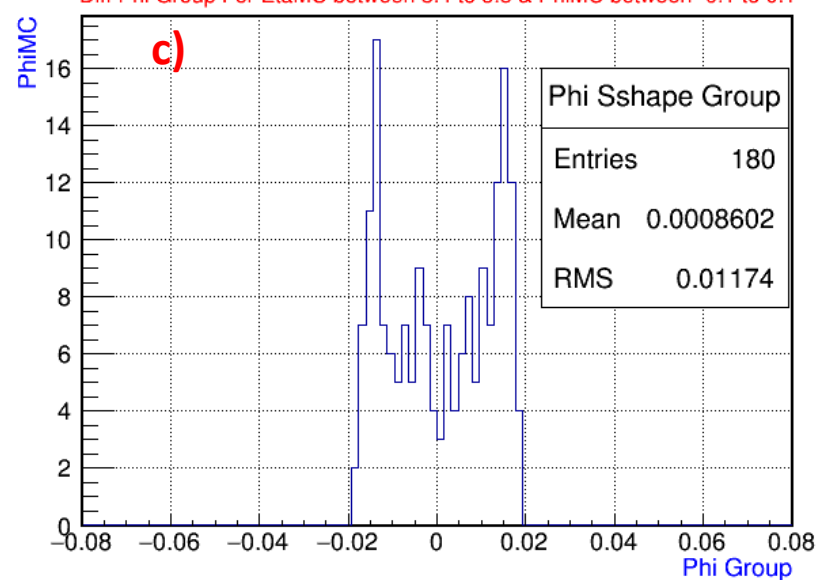
Phi Mc vs Phi Group



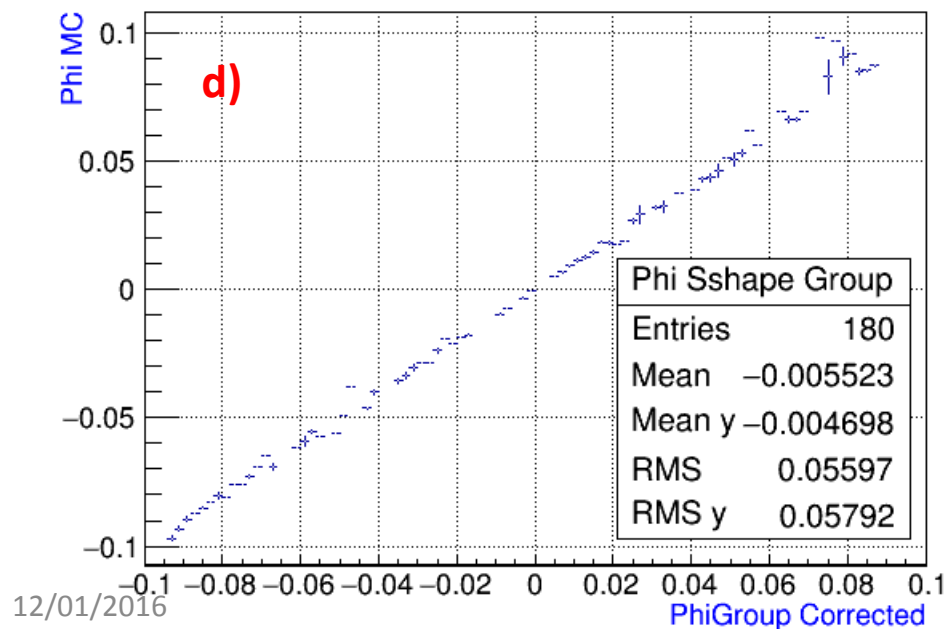
Graph From Profile



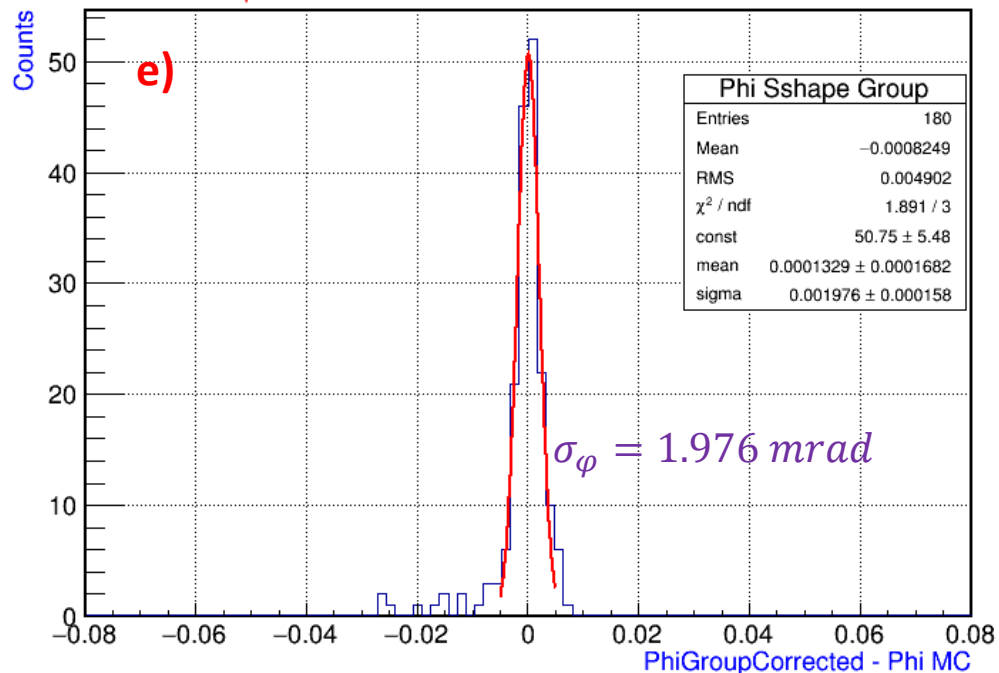
Diff Phi Group For EtaMC between 3.4 to 3.5 & PhiMC between -0.1 to 0.1



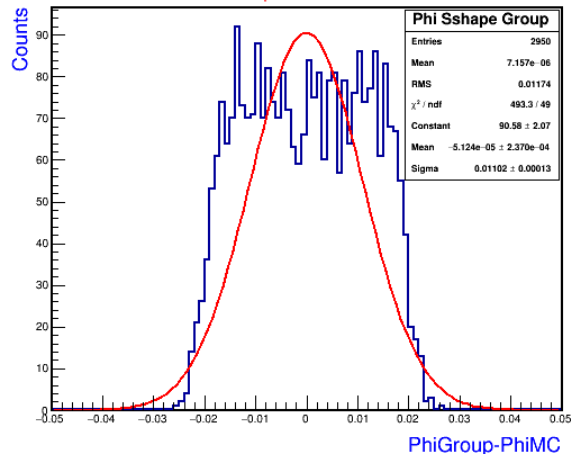
Phi measured vs Phi true Correct



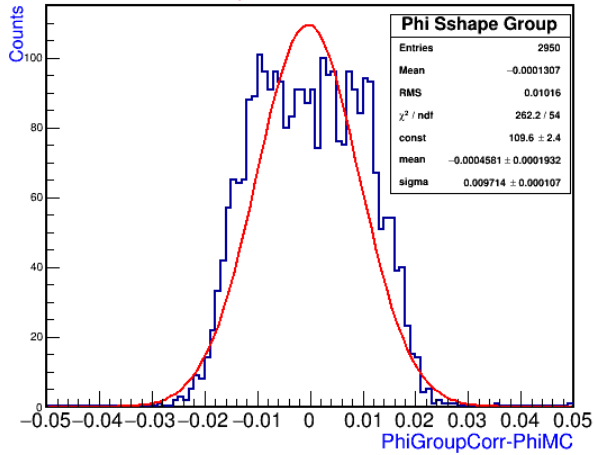
Diff Phi Group Correct For EtaMC between 3.4 to 3.5 & PhiMC between -0.1 to 0.1



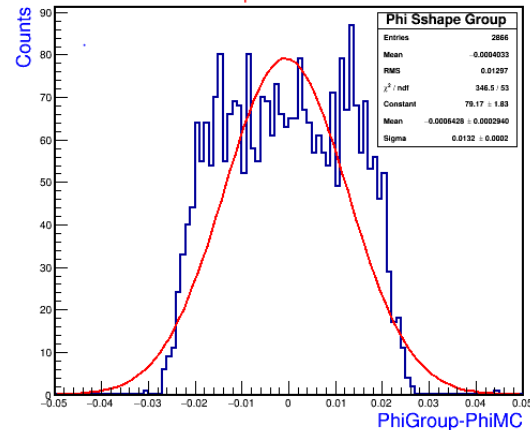
Diff Phi Group For EtaMC 3.4 to 3.5



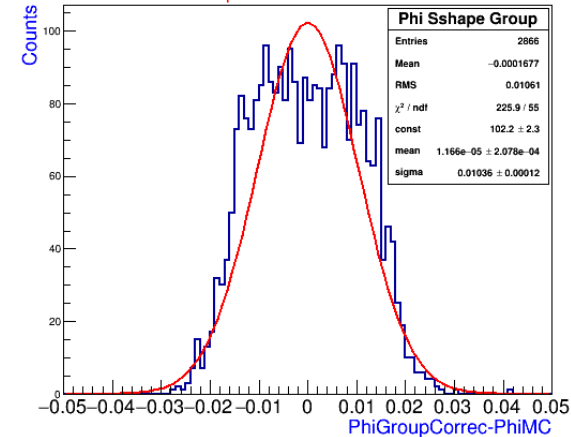
Diff Phi Group Correct For EtaMC 3.4 to 3.5



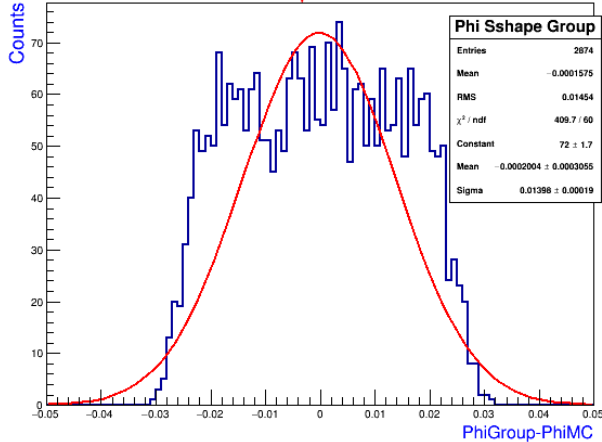
Diff Phi Group For EtaMC 3.5 to 3.6



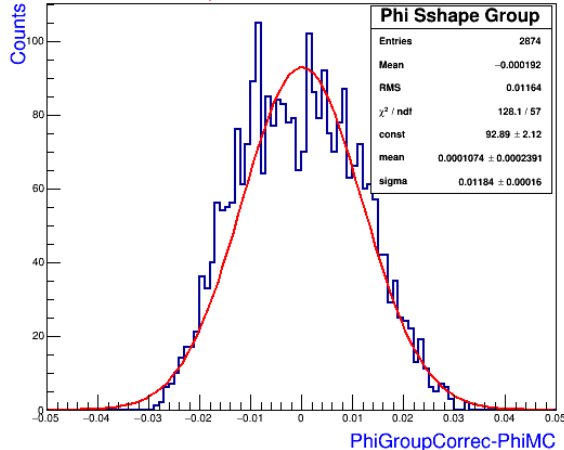
Diff Phi Group Correct For EtaMC 3.5 to 3.6



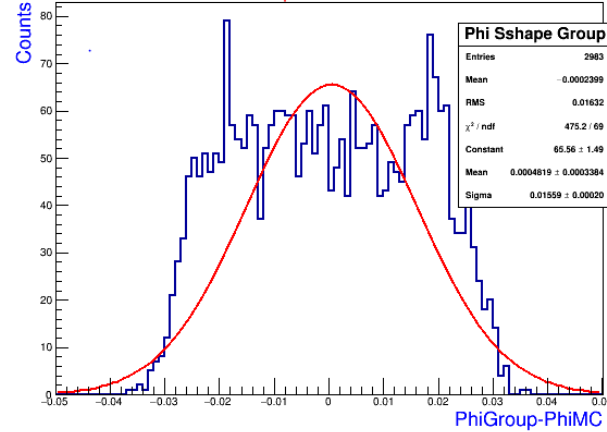
Diff Phi Group For EtaMC 3.6 to 3.7



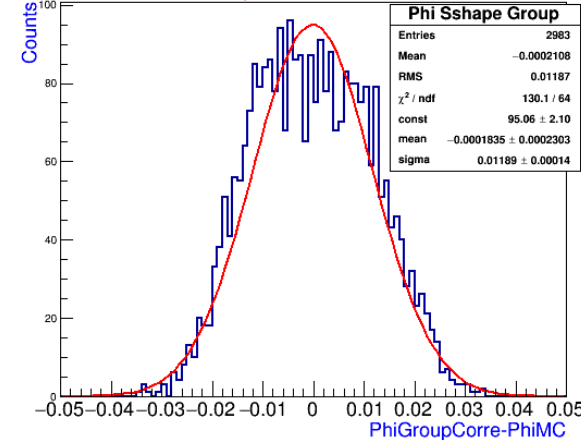
Diff Phi Group Correct For EtaMC for 3.6 to 3.7



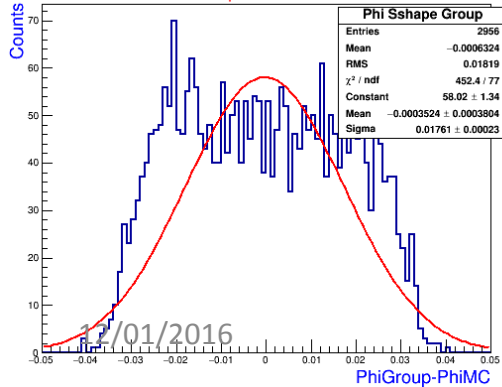
Diff Phi Group For EtaMC 3.7 to 3.8



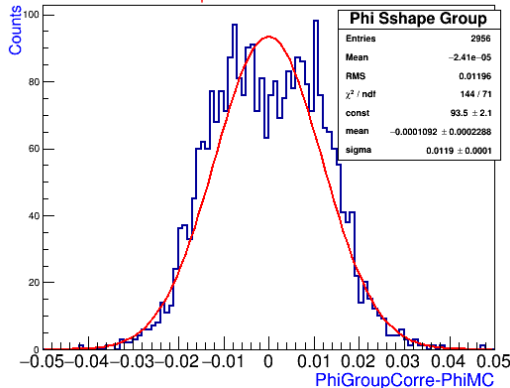
Diff Phi Group Correct For EtaMC 3.7 to 3.8



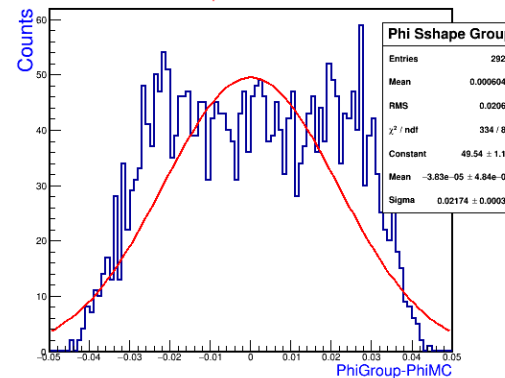
Diff Phi Group For EtaMC 3.8 to 3.9



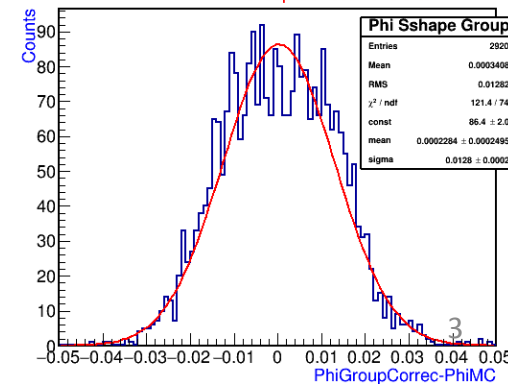
Diff Phi Group Correct For EtaMC 3.8 to 3.9



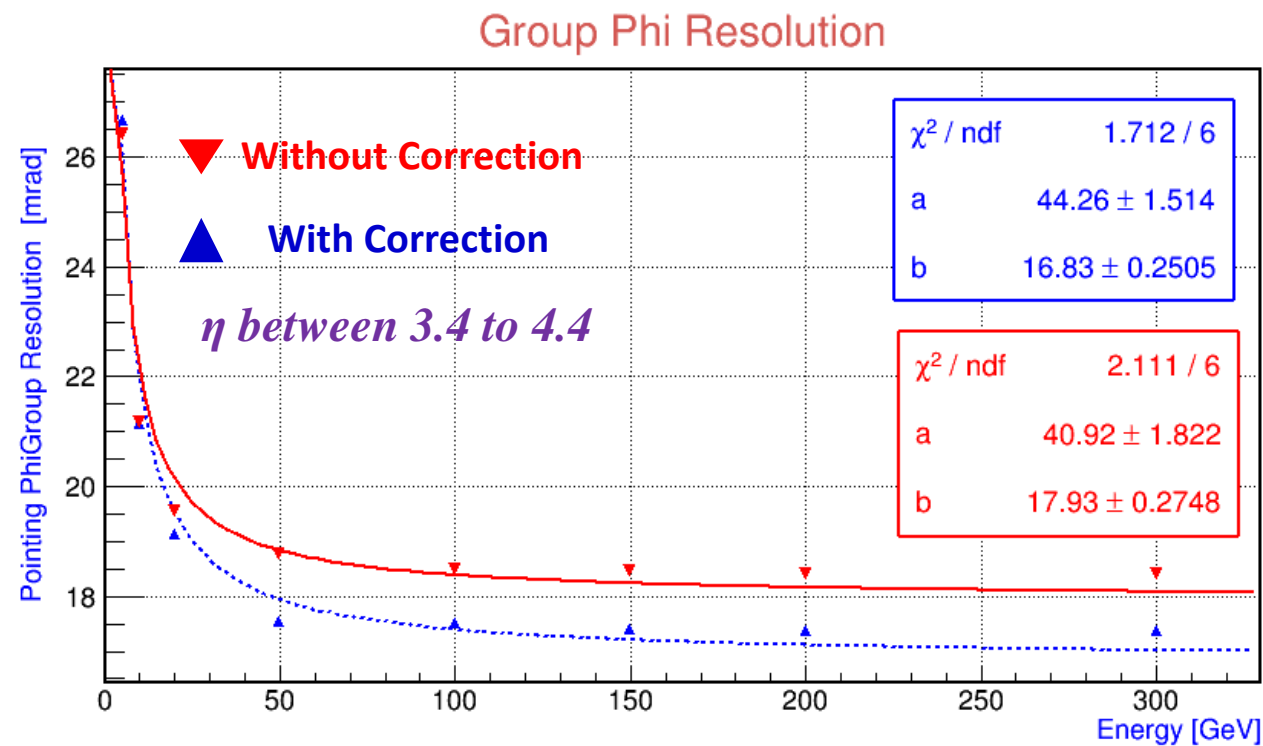
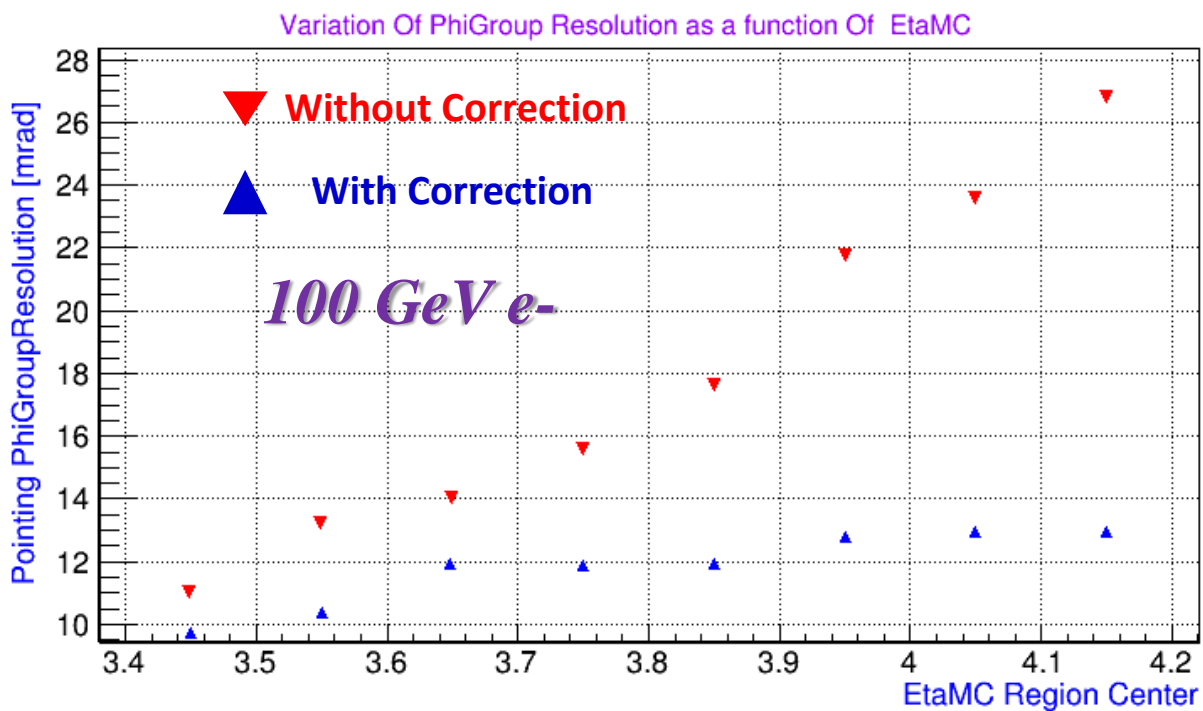
Diff Phi Group For EtaMC 3.9 to 4



Diff Phi Group Correct For 3.9 to 4

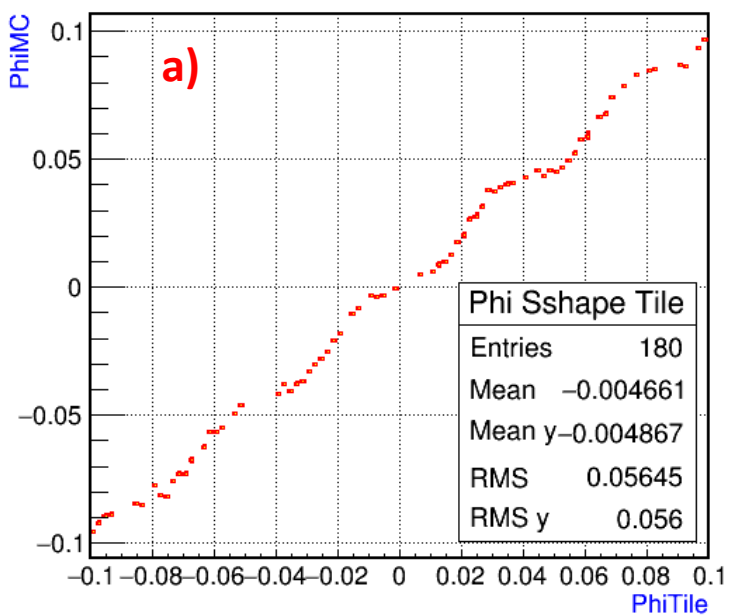


# Group S-shape correction

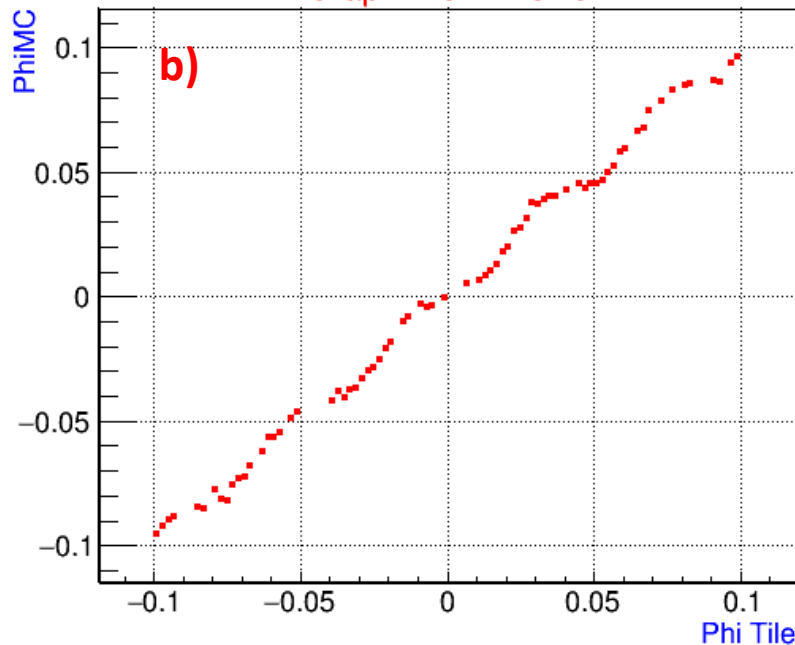


# Tile S-shape correction For 100 GeV e-

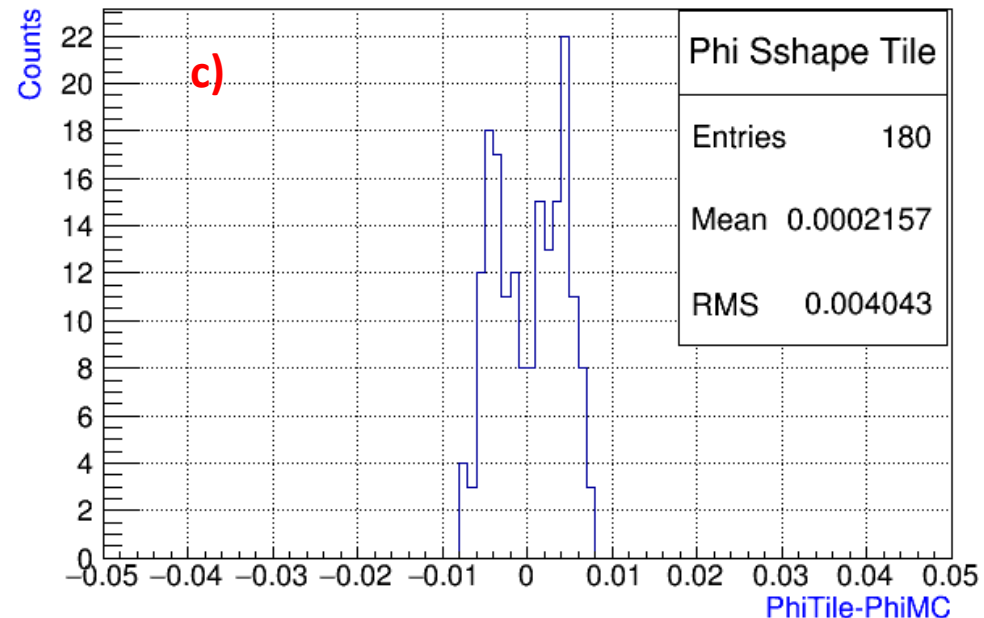
Phi MC vs Phi Tile



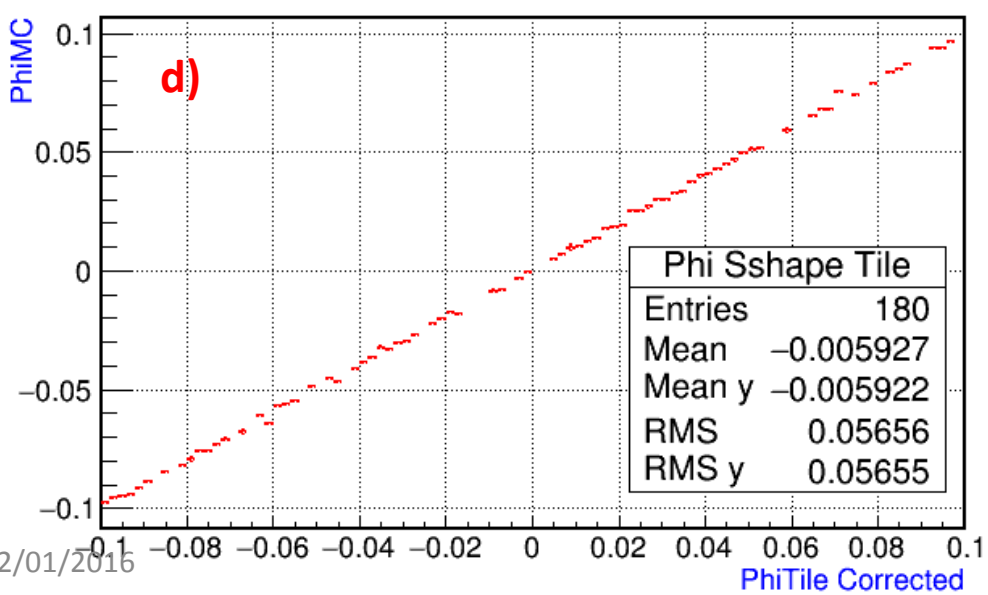
Graph From Profile



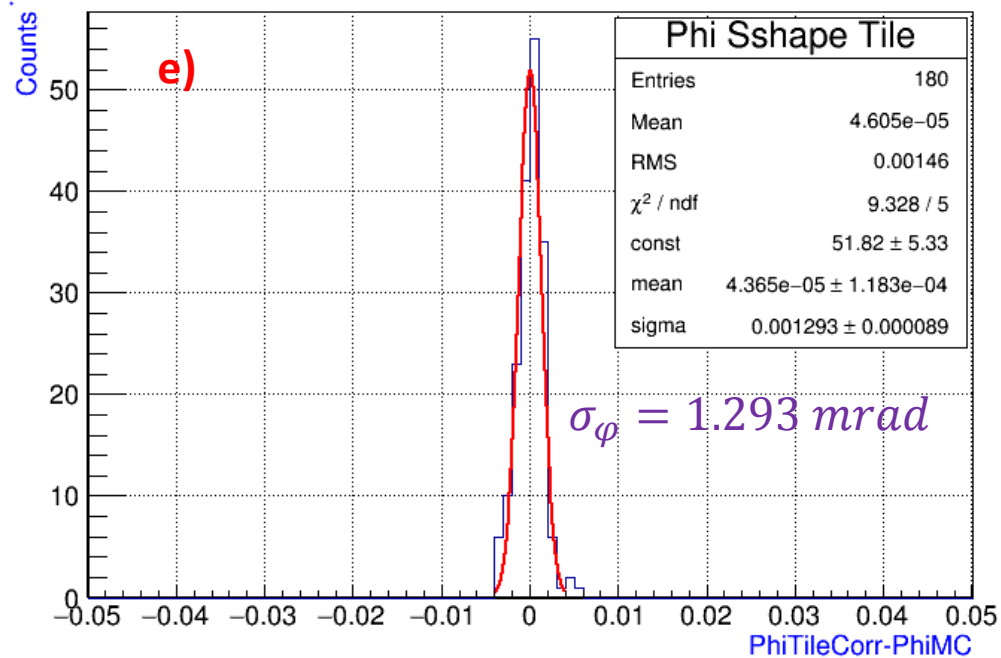
Diff Phi Tile for EtaMC between 3.4 to 3.5 & PhiMc between -0.1 to 0.1



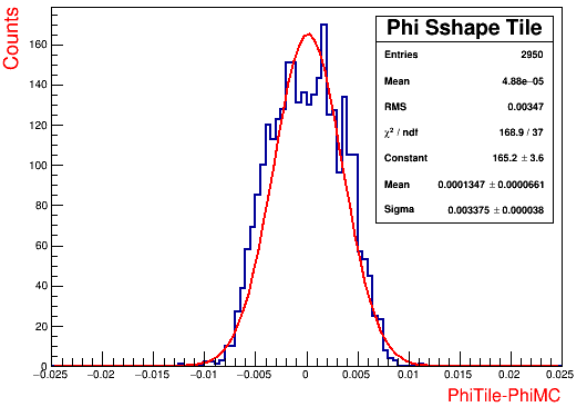
Phi Mc vs PhiTile Corrected



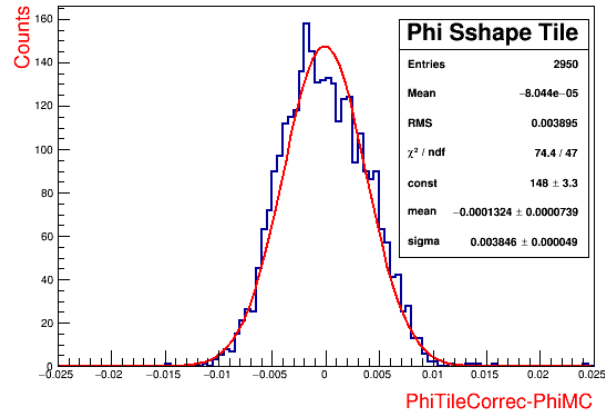
Diff Phi Tile Correct for EtaMC between 3.4 to 3.5 & PhiMC between -0.1 to 0.1



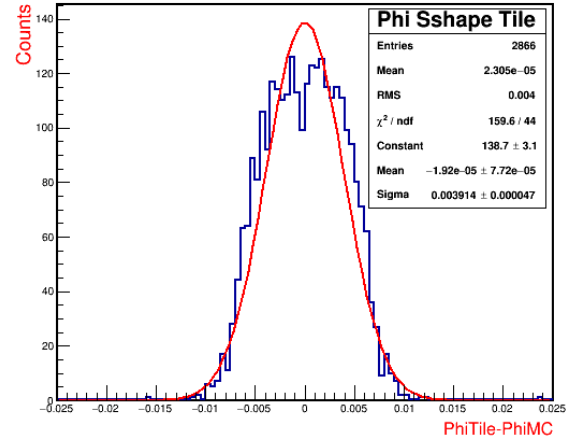
Diff Phi Tile For EtaMC 3.4 to 3.5



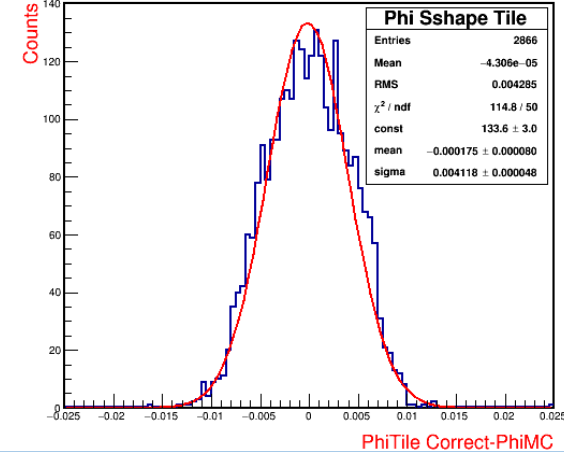
Diff Phi Tile Correct For EtaMC 3.4 to 3.5



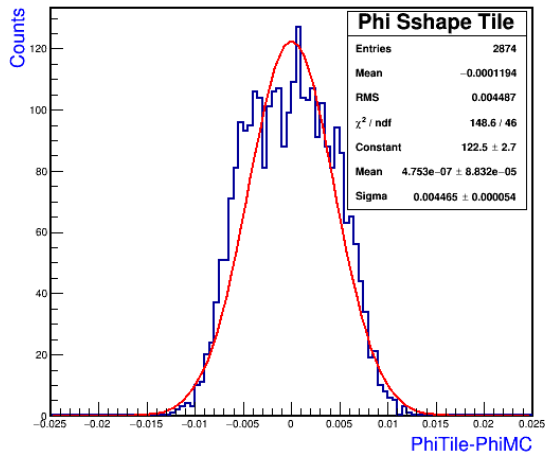
Diff Phi Tile For EtaMC 3.5 to 3.6



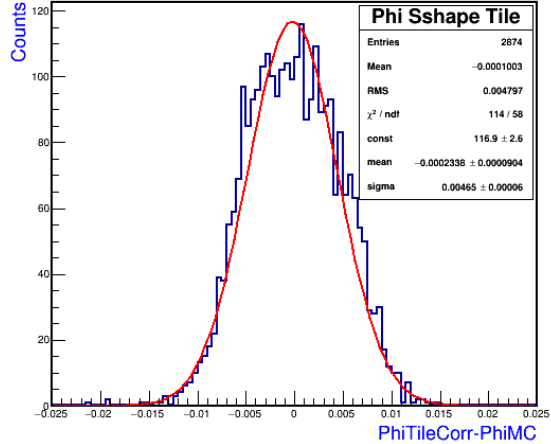
Diff Phi Tile Correct For EtaMC 3.5 to 3.6



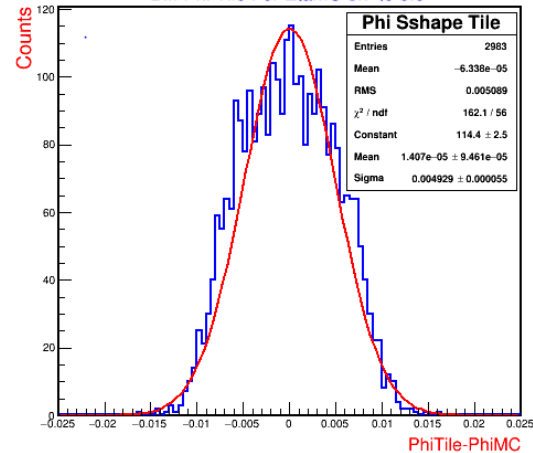
Diff Phi Tile For EtaMC 3.6 to 3.7



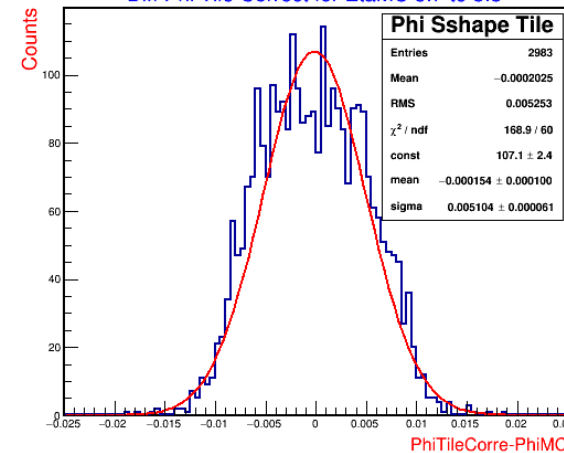
Diff Phi Tile Correct For EtaMC 3.6 to 3.7



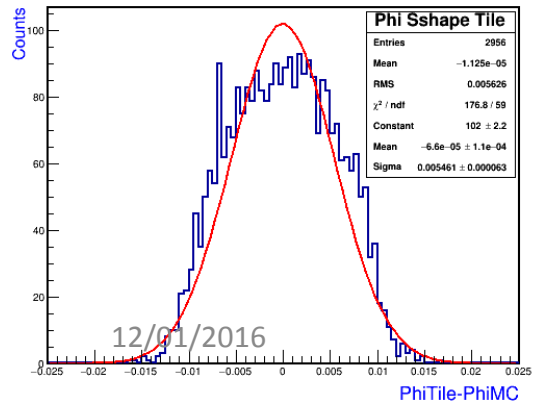
Diff Phi Tile For EtaMC 3.7 to 3.8



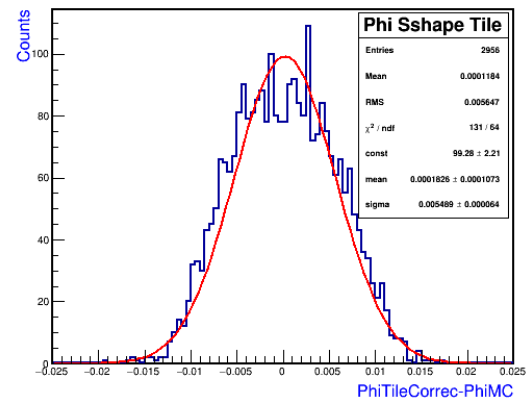
Diff Phi Tile Correct for EtaMC 3.7 to 3.8



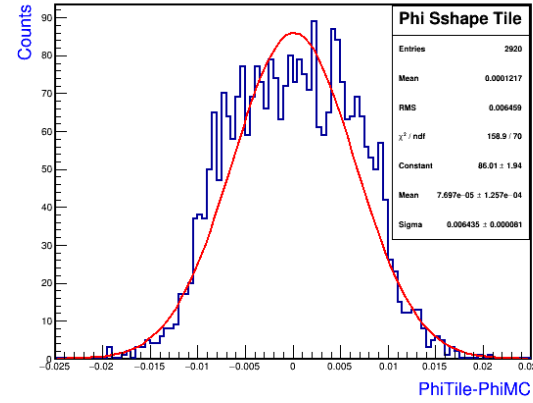
Diff Phi Tile For EtaMC 3.8 to 3.9



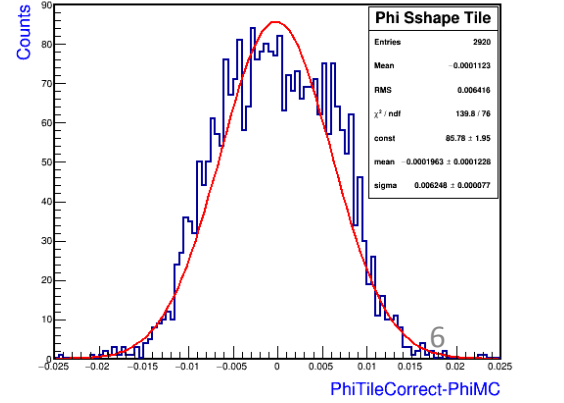
Diff Phi Tile Correct For EtaMC 3.8 to 3.9



Diff Phi Tile for EtaMC 3.8 to 4

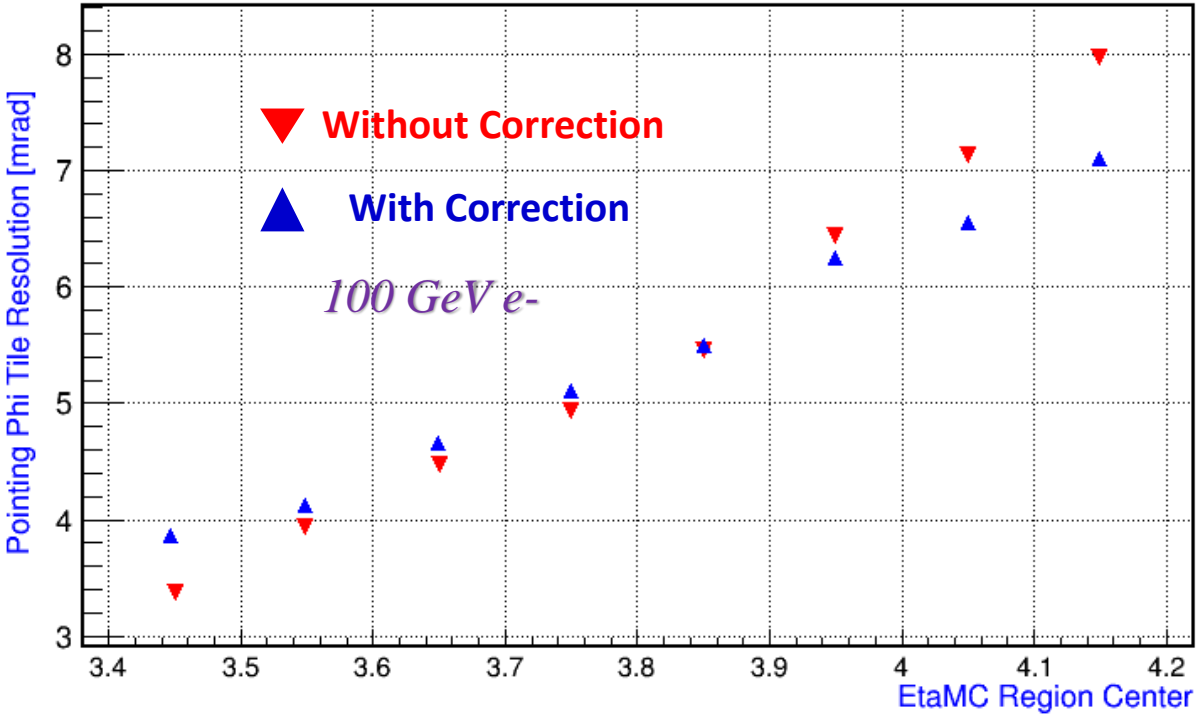


Diff Phi Tile Correct for EtaMC 3.8 to 4

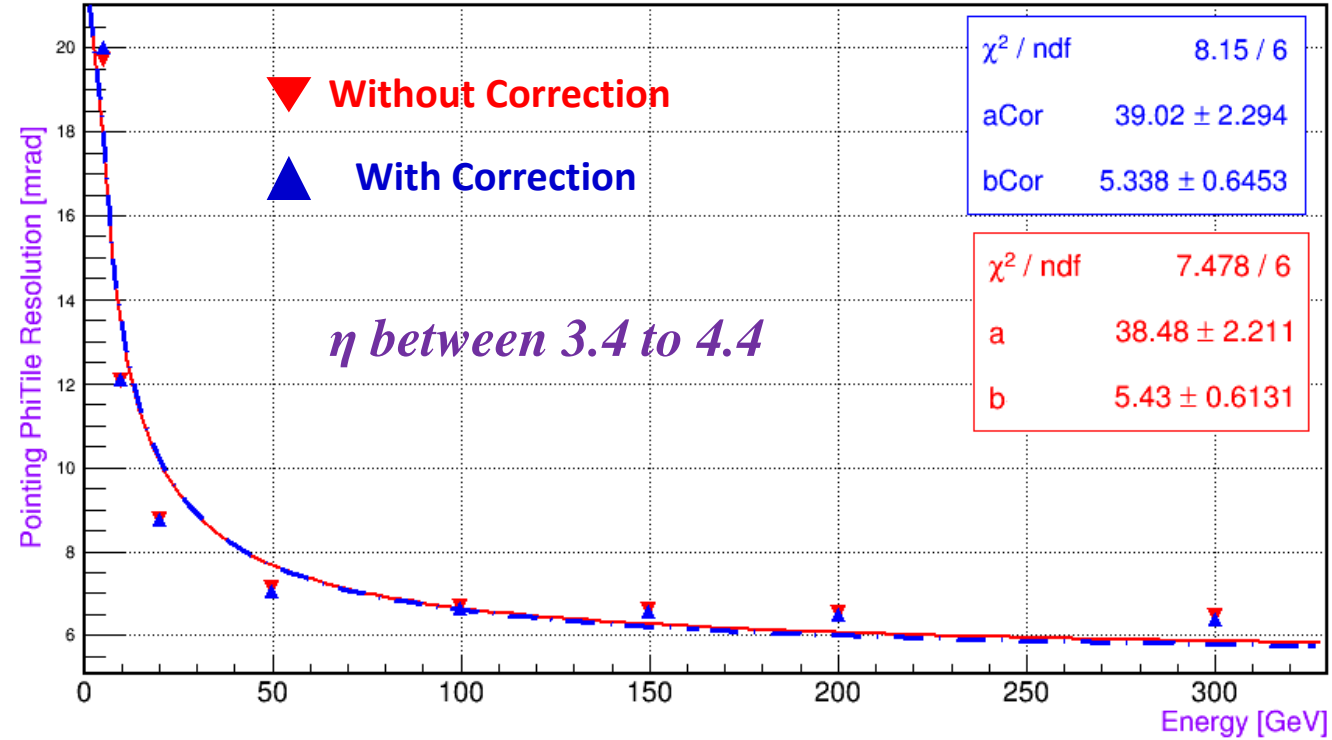


# Tile S-shape correction

Variation of Phi Resolution as a Function of EtaMC



Tile Pointing phi Resolution



Thank you!

