





Mohamed I University Faculty of Sciences Oujda

# FCAL Analysis Electrons Pointing Resolution

Dahbi Salah-Eddine Laboratory of Physics of Matter and Radiation

#### Eta Tile S-Shape For 100 GeV e-



11/11/2015

2



Difference in Eta between
measured and true particule
direction

- 100 GeV e-
- Fit with Double Gaussian:

Pointing Eta Resolution

 $\sigma_{\eta} = 0.00729271 \pm 0.00024955$ 

### Phi Tile S-Shape For 100 GeV e-





Tile Phi Diff For 100 GeV e-

- Difference in Phi between measured and true particule direction
- 100 GeV e-
- Fit with Double Gaussian:

> Pointing Phi Resolution

 $\sigma_{\varphi} = 6.89027 \pm 0.456985 \ mrad$ 

## Eta Group S-Shape For 100 GeV e-





#### Group Eta diff For 100 GeV e-

Difference in Eta between
measured and true particule
direction

- 100 GeV e-
- Fit with Double Gaussian:

Pointing Eta Resolution

 $\sigma_{\eta} = 0.0184808 \pm 0.000145407$ 

## Phi Group S-Shape For 100 GeV e-





#### Group Phi diff For 100 GeV e-

Difference in Phi between
measured and true particule
direction

- 100 GeV e-
- Fit with Double Gaussian:

> Pointing Phi Resolution

 $\boldsymbol{\sigma}_{\varphi} = 18.5807 \pm 0.18706 mrad$