# QA plots for ep collision at 18\*275 GeV energy

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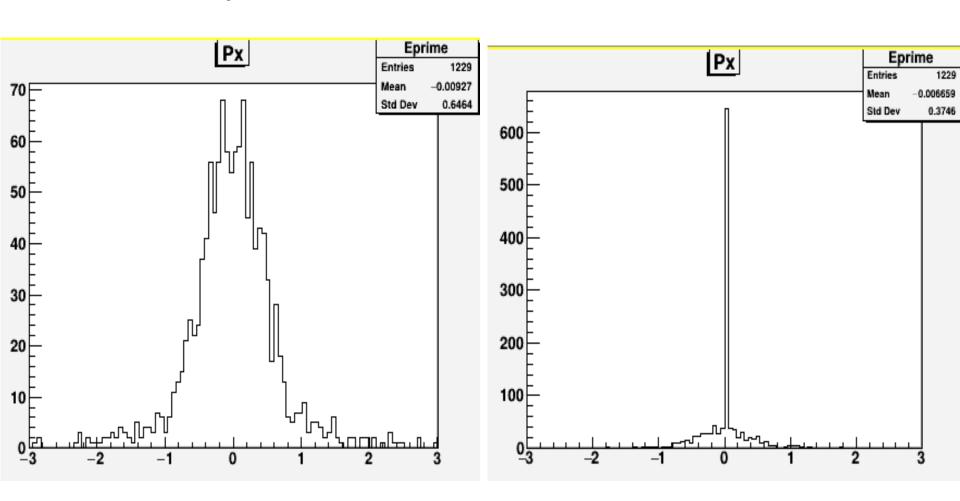
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## Key points

- We used proton, electron beam collision with energies 275, 18 GeV respectively.
- Applying physics cuts mainly for vector meson production i.e. photoproduction of J/psi and decaying by electroproduction into e+e-/mue+mueusing S channel helicity conservation.
- I. Q2 Min = 1
- II. pT max = 1.5
- III. Weak Boson exchange ff2ff
- IV. Multi parton interaction on.

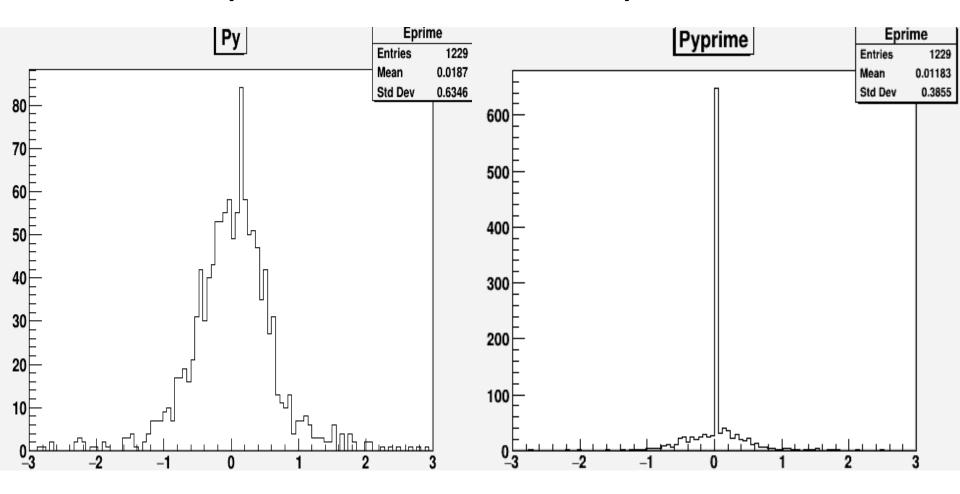
## 1D Px plot

## **Un-smeared particles**



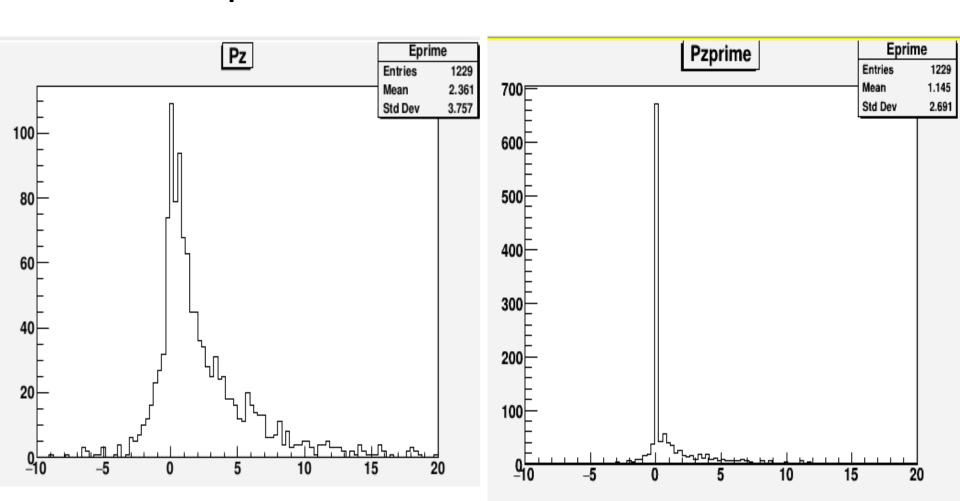
# 1D Py plot

**Un-smeared particles** 



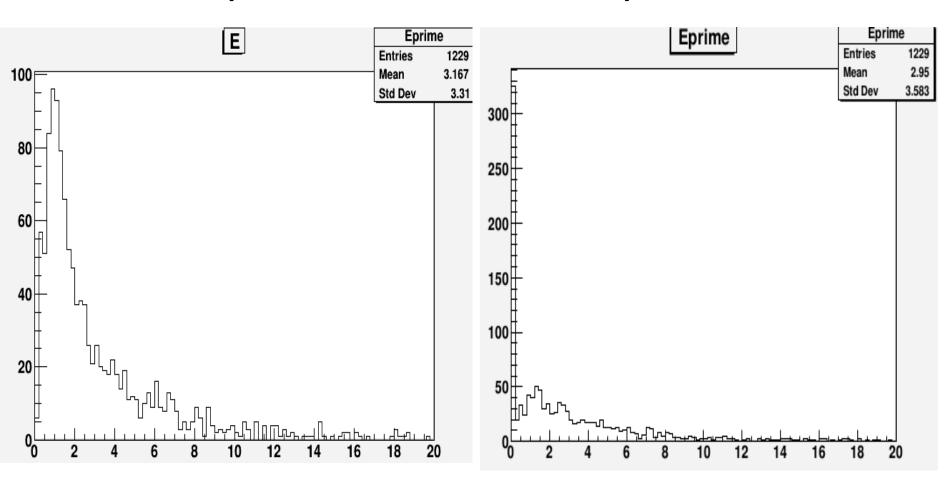
# 1D Pz plot

## **Un-smeared particles**



# 1D plot of Energy

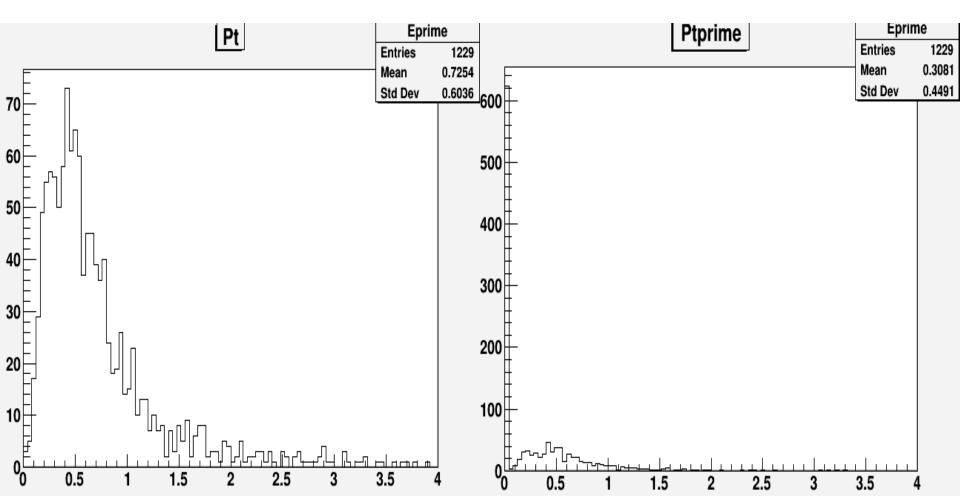
## **Un-smeared particles**



## 1D plot of transverse momentum pT

**Un-smeared** 

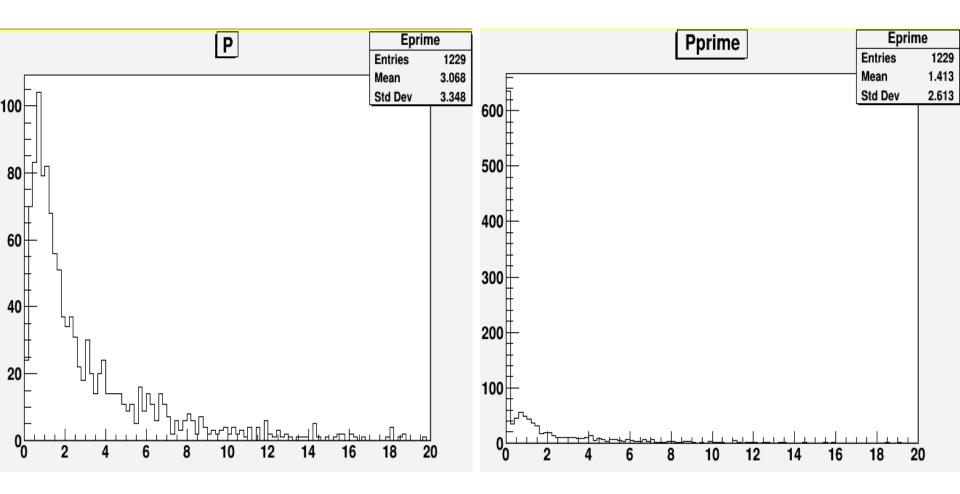
**Smeared** 



## 1D plot of total momentum P

**Un-smeared** 

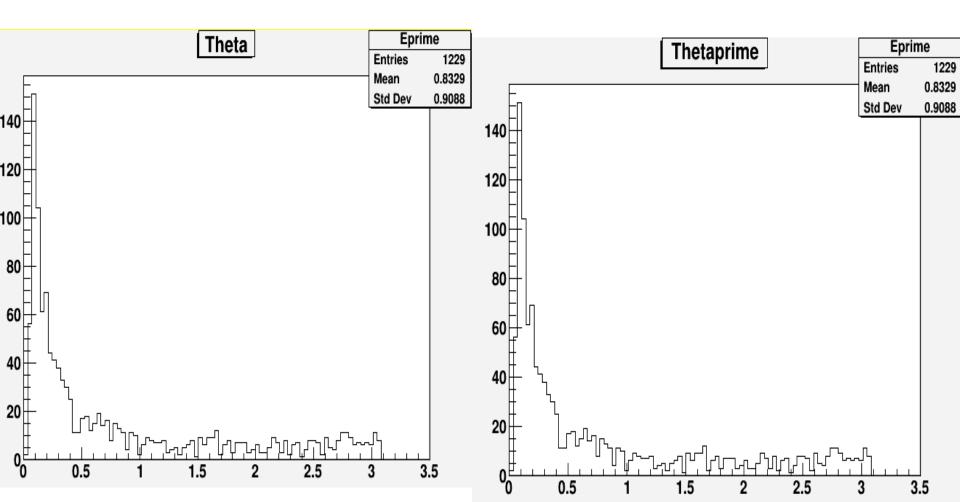
**Smeared** 



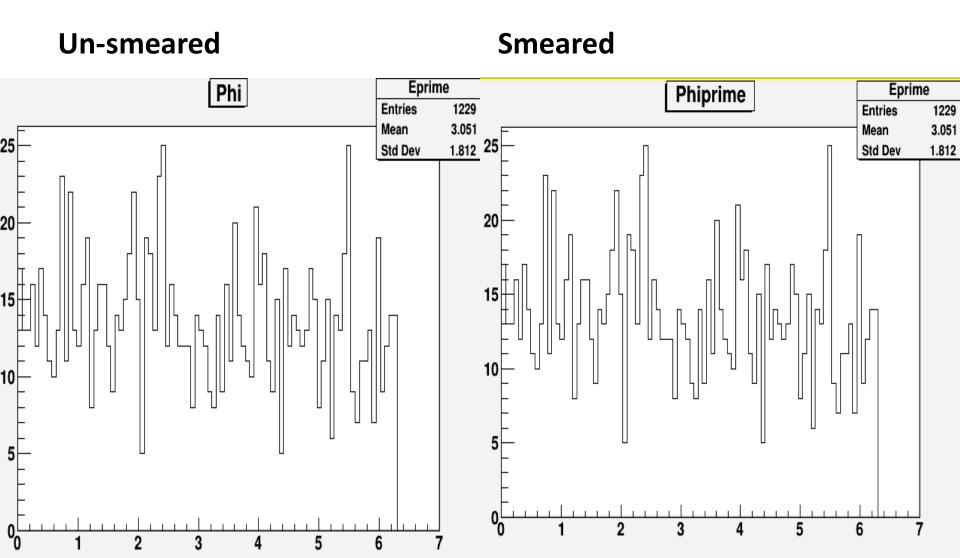
# 1D plot of theta



#### **Smeared**



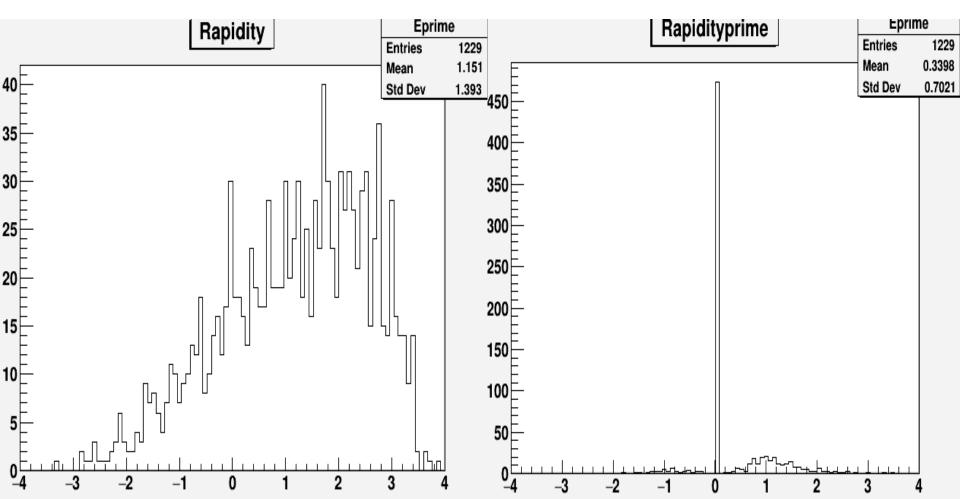
# 1D plot of scattering angle phi



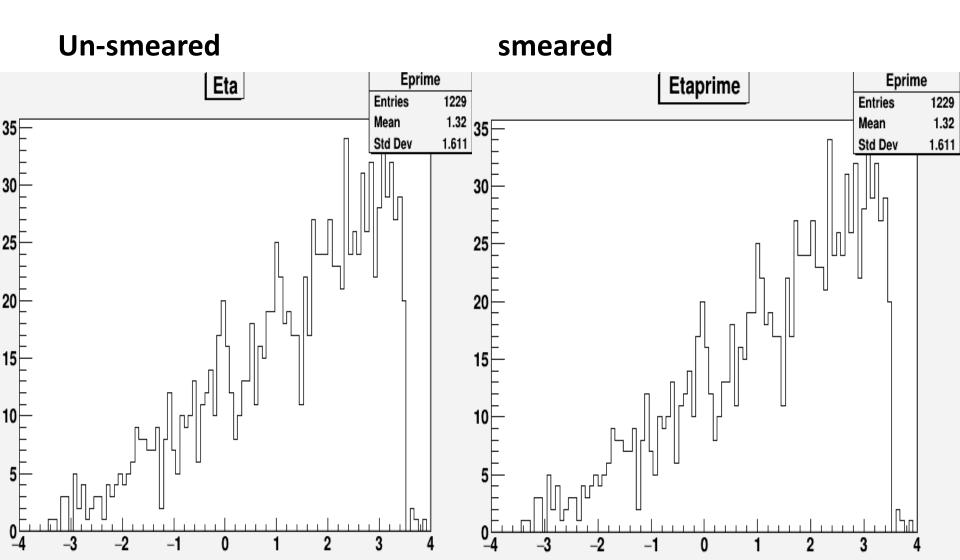
# 1D plot of rapidity



#### smeared



# 1D plot of eta(psuedorapidity)



# 1D mass plots

## **Un-smeared particles**

