

# Double Parton Scattering

Varsha Ramakrishnan

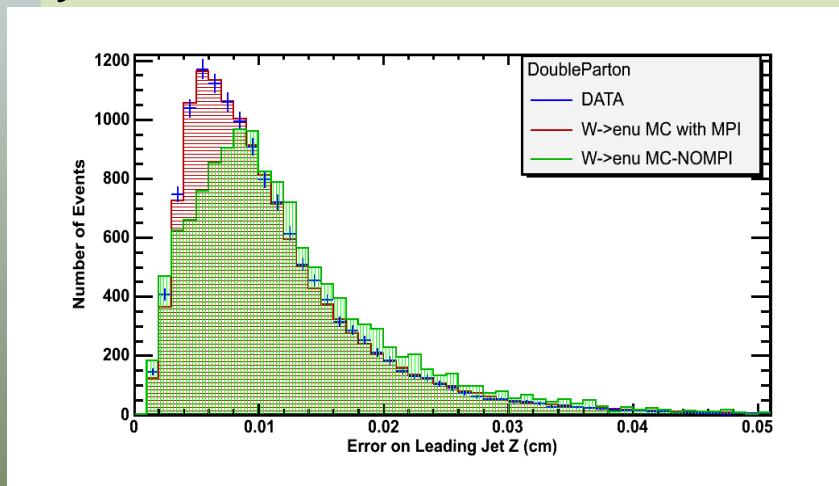
Monday, May 02, 2011

# Content of the Talk

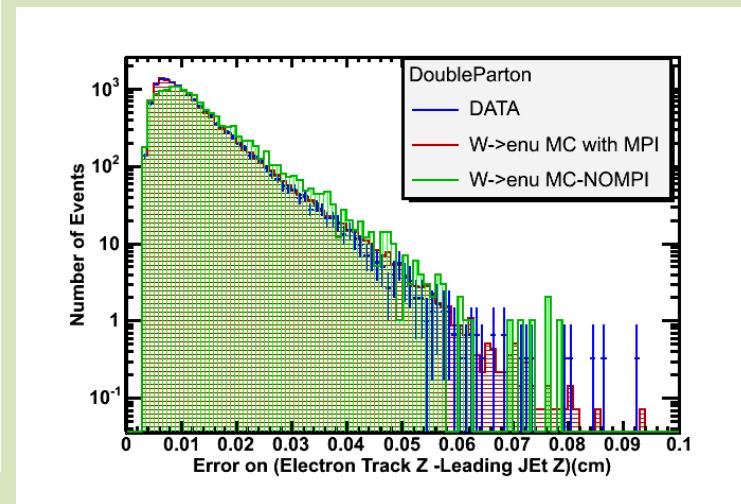
- Error on the Leading/Next-to-Leading and Electron
- $\Delta Z$  between Leading/Next-to-Leading(i.e referred to as Second jet )/Electron Track Z
- Error on the above  $\Delta Z$  plotted
- Kinematical distributions between W/Leading/Second/Electron/MET

# Error on the Leading Jet Z

Linear Scale-Error on Leading Jet Z



Log Scale-Error on Leading Jet Z

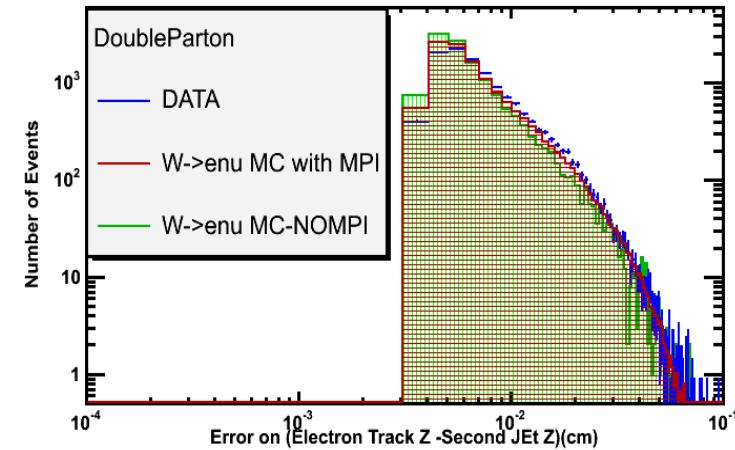
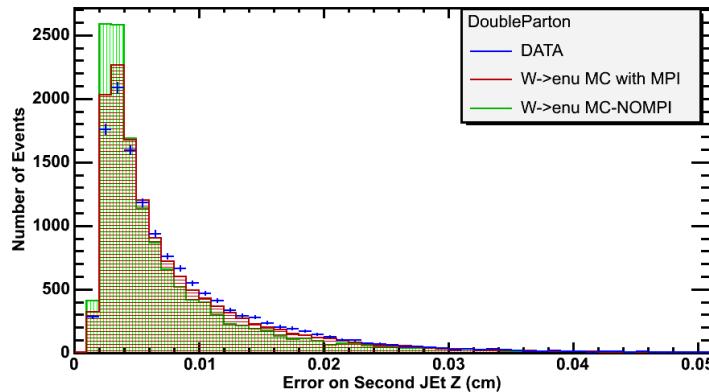


1. Minimum Error is < the least track Z error (i.e.  $\sim 50\mu$  as constrained by the detector)
2. Maximum is about the same as the tail seen in Track Z Error
3. Disagreement: Green MC does not have MPI in it, implies higher Error Tracks

# Error on the Second Jet Z

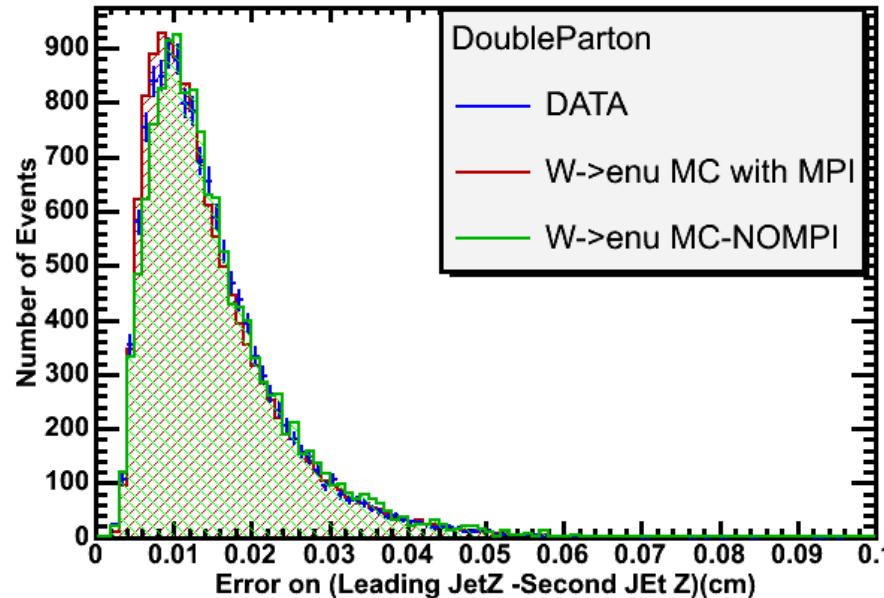
## Linear Scale-Error on Second Jet Z

## Log Scale



1. Minimum Error is < the least track Z error (i.e.  $\sim 50\mu$  as constrained by the detector)
2. Maximum is about the same as the tail seen in Track Z Error
3. Disagreement: Peak for the Data has moved to higher error

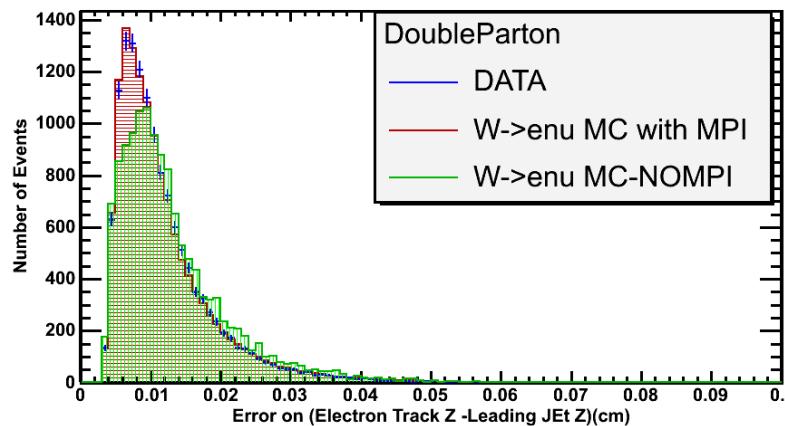
# Error on the Leading Z-Second Z



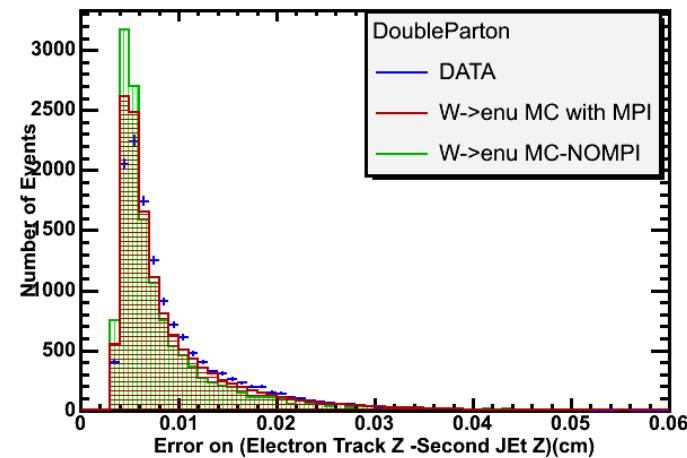
- Agreement between all three Data/Mc-without MPI and MC with MPI
- Peak has shifted  $\sim 100 \mu$

# Error on Leading /Second/Electron

Error on electron Track Z-  
Leading Jet Z

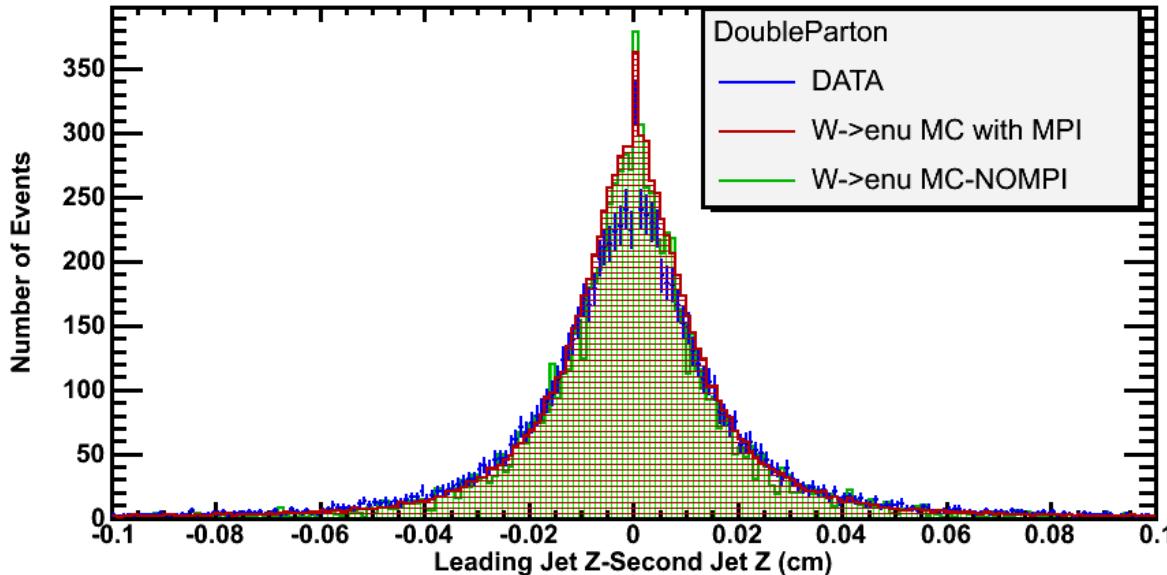


Error on electron Track Z-  
second Jet Z



- Errors Driven by the respective jet rather the Lower-Z-Erro-Electron Track

# $\Delta Z$ (Leading-Second Jet Z)

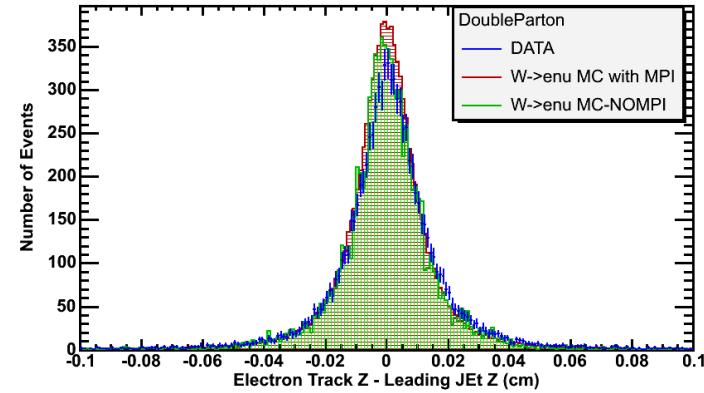
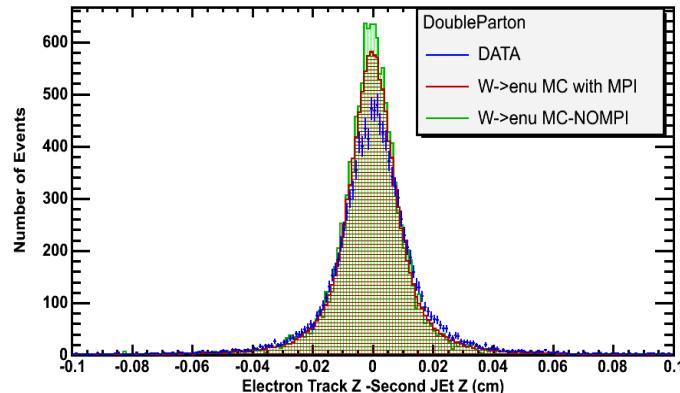


- Spike in the Both the MC- artifact of the plotting
- Same spike did not show up in the Error plots

# $\Delta Z$ (Leading-Second Jet Z)

Electron Track Z-Second Jet Z

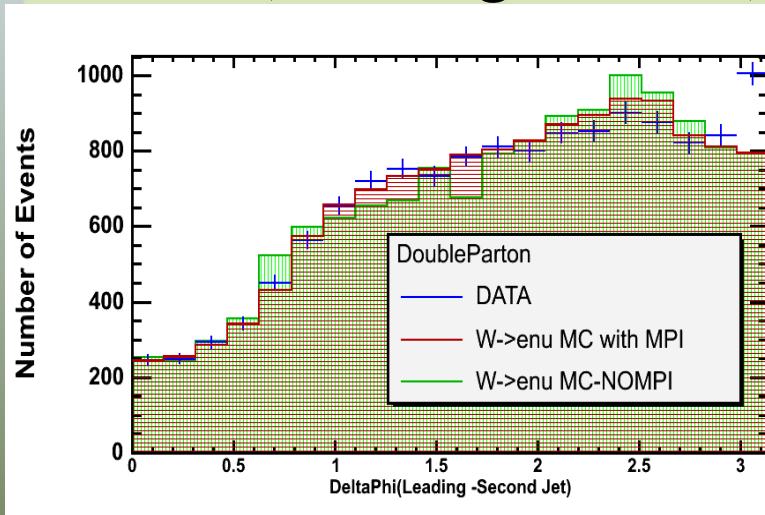
Electron Track Z-Leading Jet Z



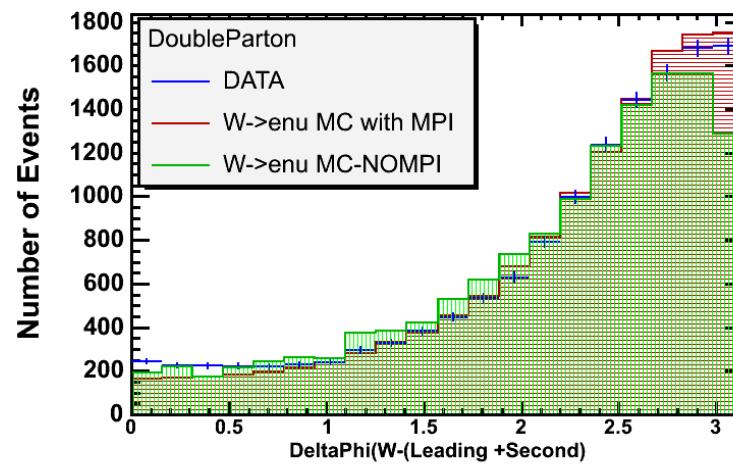
- Disagreement need to be understood

# $\Delta\phi(\text{Leading-Second Jet } Z)$

DeltaPhi(Leading-Second)



DeltaPhi(W,Leading+Second)



- Need to divide the Plot on left in to sections and reemaxine the Plot on Right

# Conclusions

- More Kinematical distributions coming up