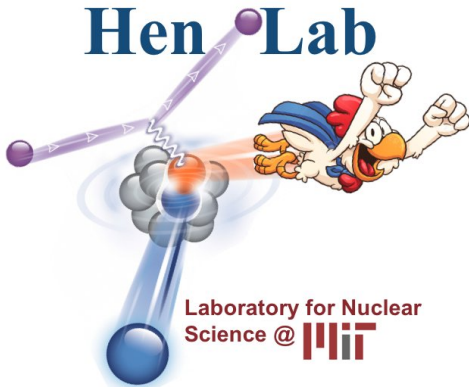
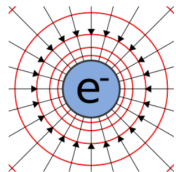


# Electrons for Neutrinos

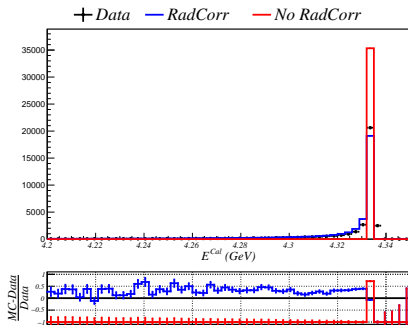
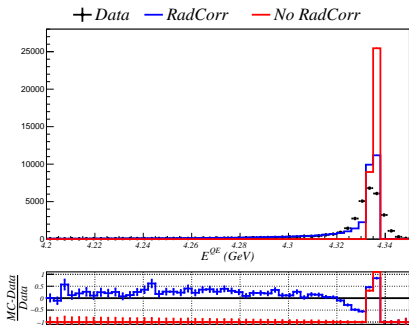


Laboratory for Nuclear  
Science @ MIT

A.Papadopoulou, A.Ashkenazi  
On behalf of the  $e4\nu$  collaboration  
May 1, 2019

# Radiative Corrections

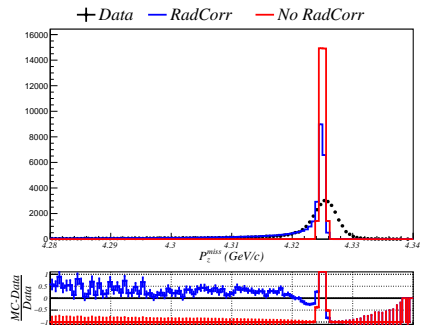
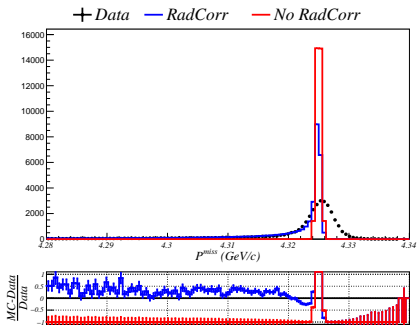
# Radiative Corrections



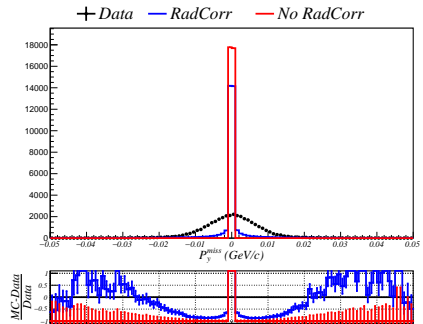
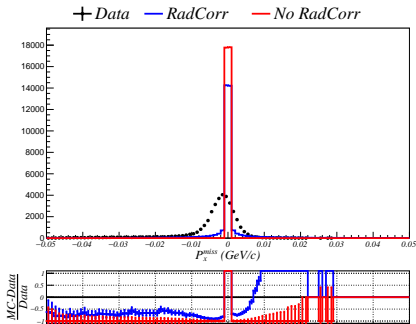
Validation against Hall A proton scattering data

Smearing of 0.01% in simulation

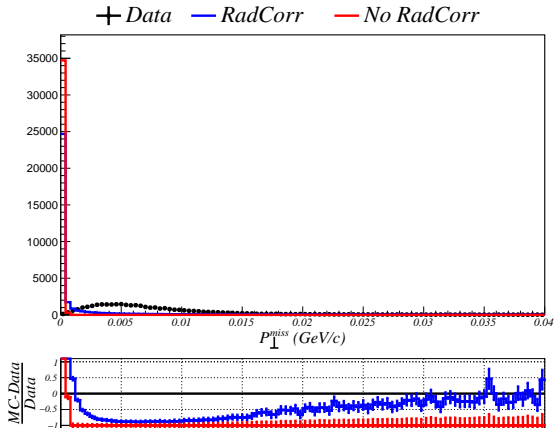
# Missing Momentum



# Missing Momentum

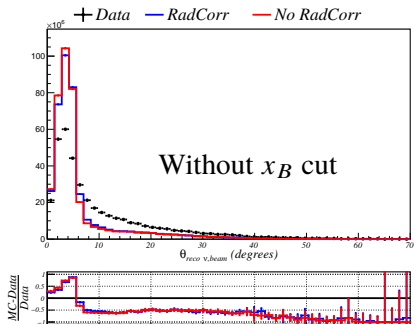
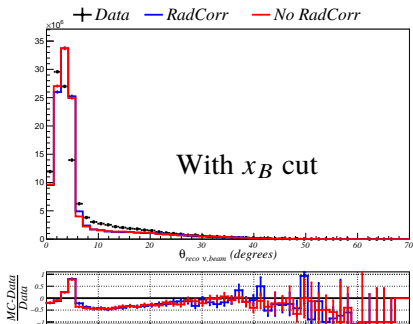


# Transverse Missing Momentum



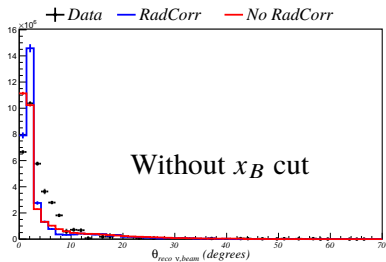
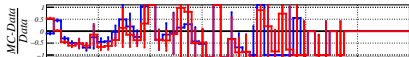
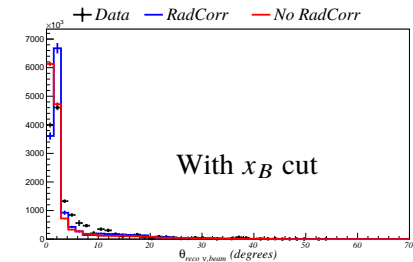
# Angle $\theta_0$

# $^{12}\text{C}$ @ $E = 2.261$ GeV

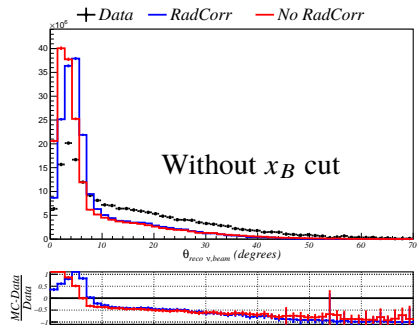
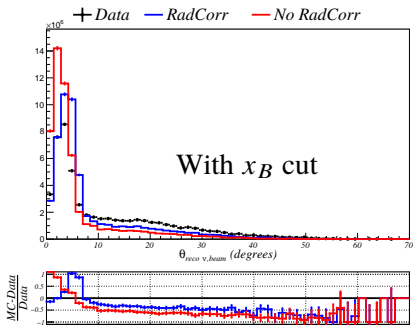




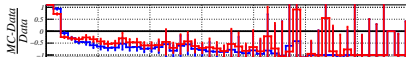
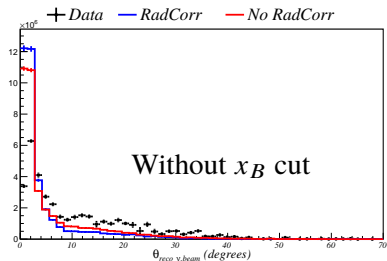
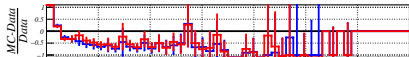
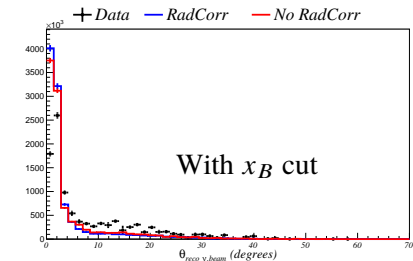
# $^{12}\text{C}$ @ $E = 4.461$ GeV

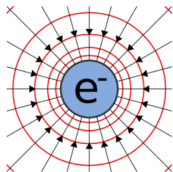


# $^{56}\text{Fe}$ @ $E = 2.261$ GeV



# $^{56}\text{Fe}$ @ $E = 4.461$ GeV



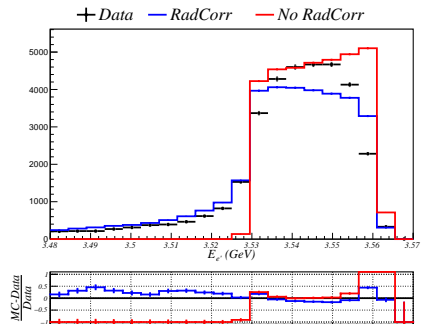
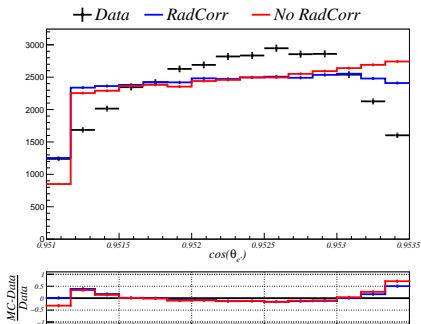


Thank you!



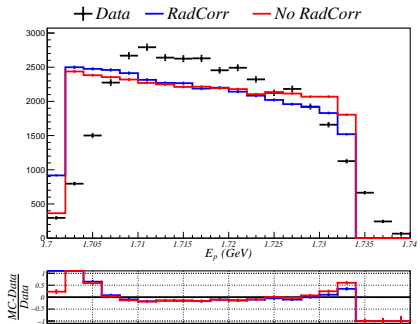
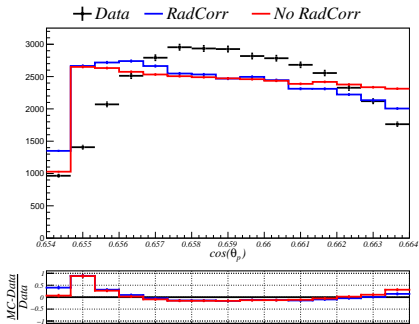
# Backup Slides

# Electron



Validation against Hall A proton scattering data

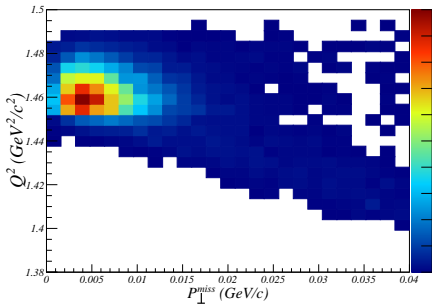
# Proton



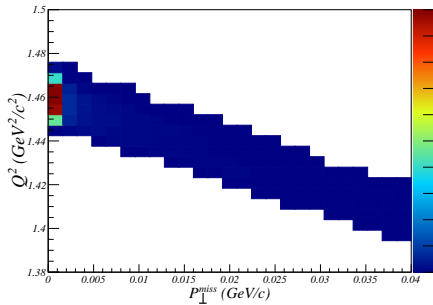
Validation against Hall A proton scattering data

# 2D Comparisons

$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (Data)



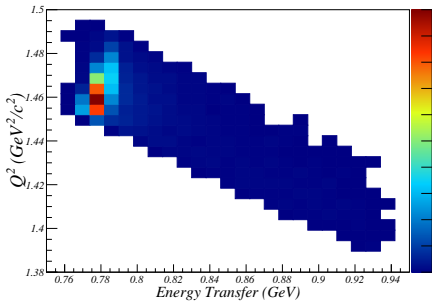
$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (hA2018\_RadCorr)



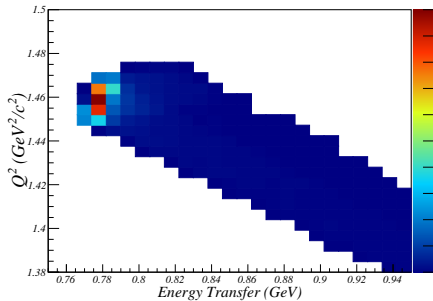


# 2D Comparisons

$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (Data)

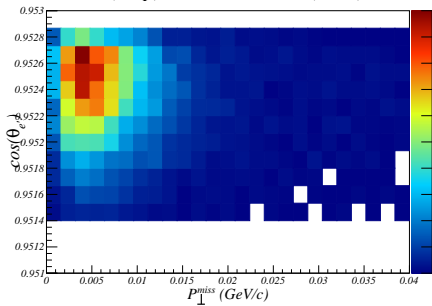


$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (hA2018\_RadCorr)



# 2D Comparisons

$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (Data)



$^1\text{H}(e,e'p)$  @  $E = 4.325$  GeV (hA2018\_RadCorr)

