

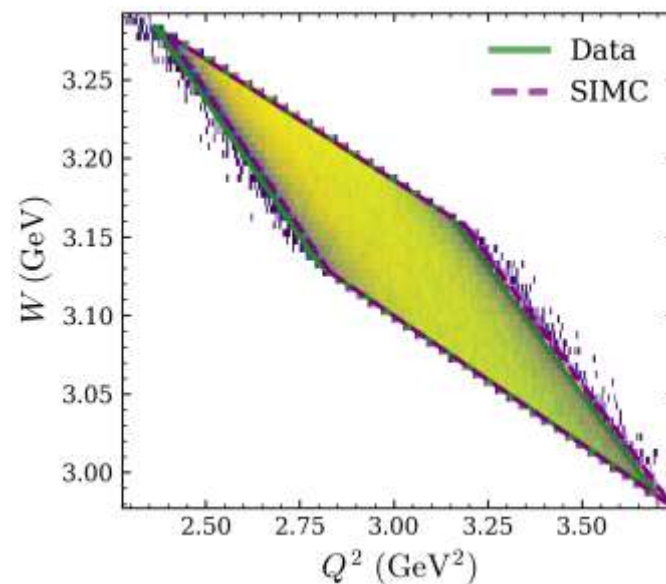
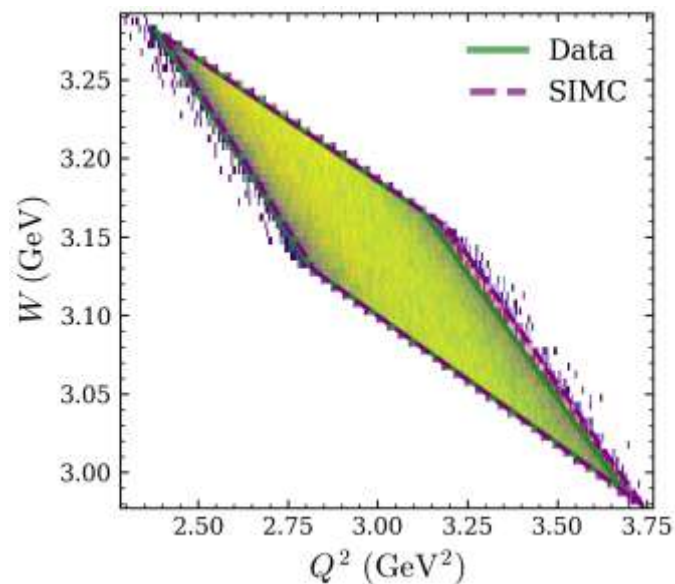
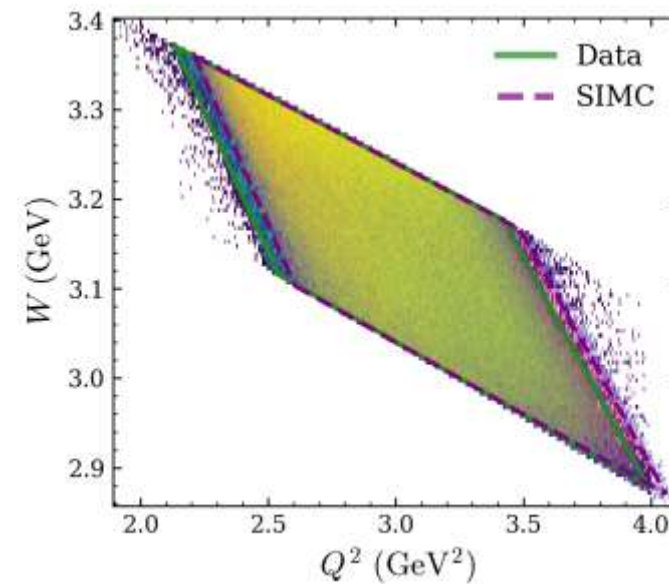
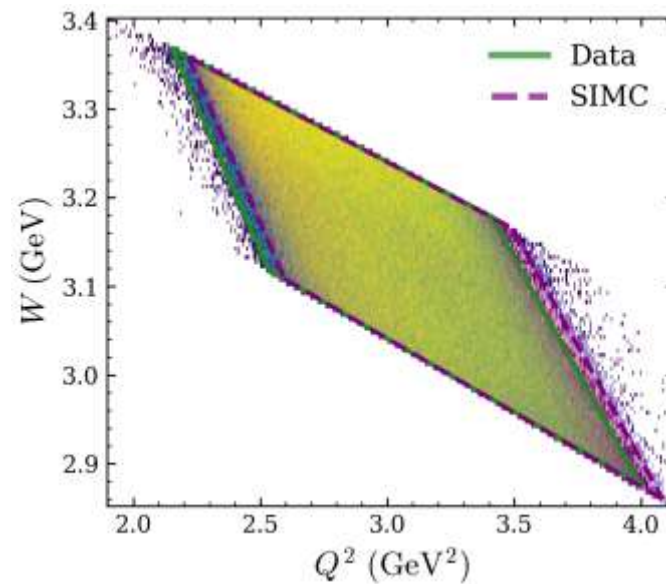
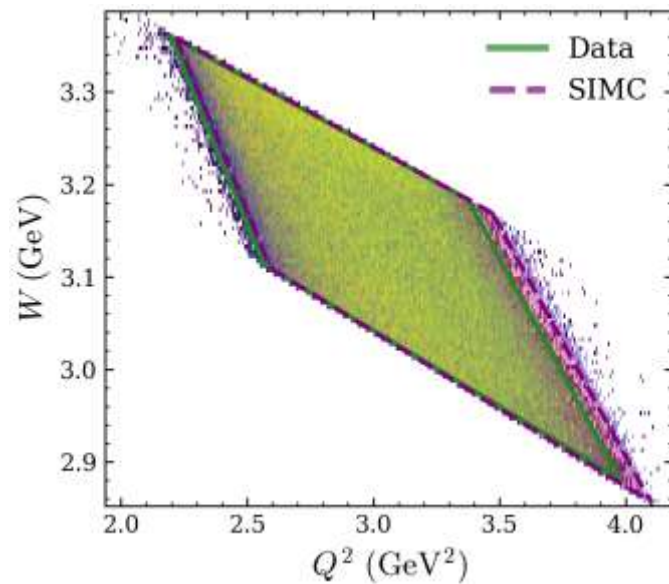
Change in Data

- We found the difference in replay file → a code block regarding bcm current file is commented out
- Pid cut → the DB CUTS and PARAM files were outdated

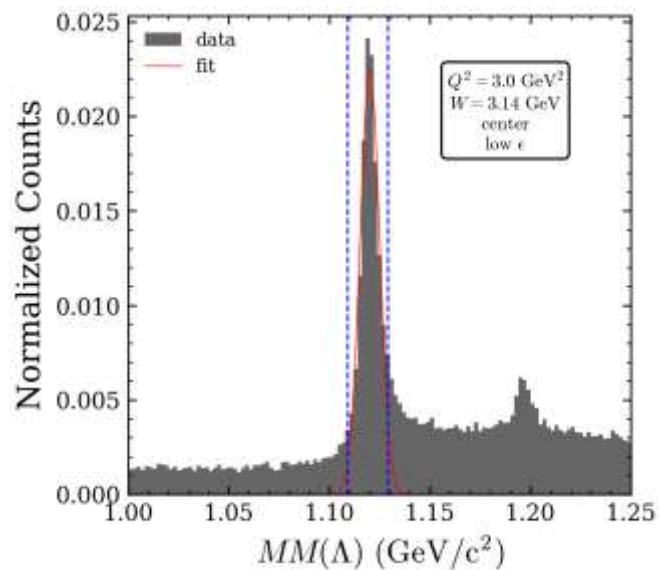
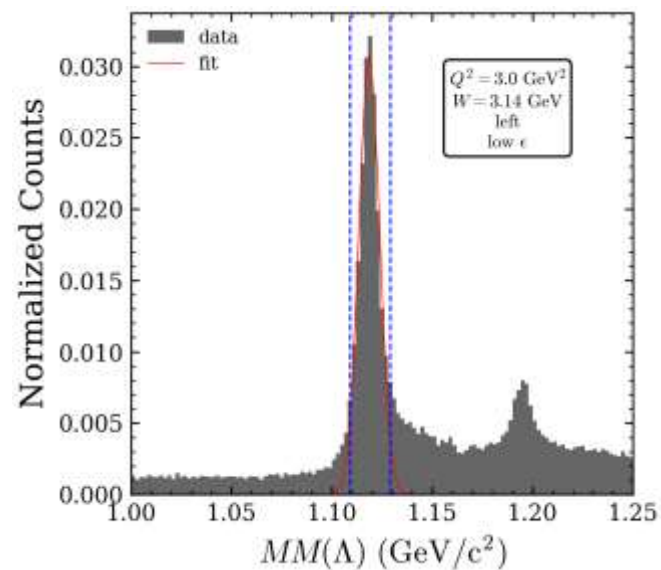
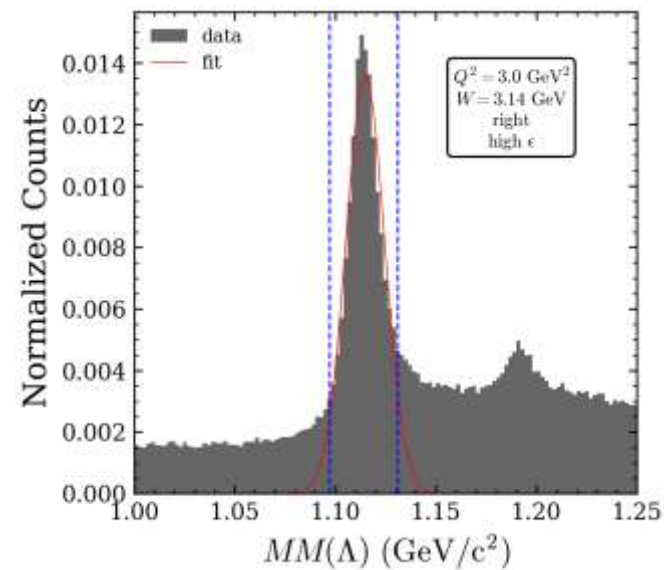
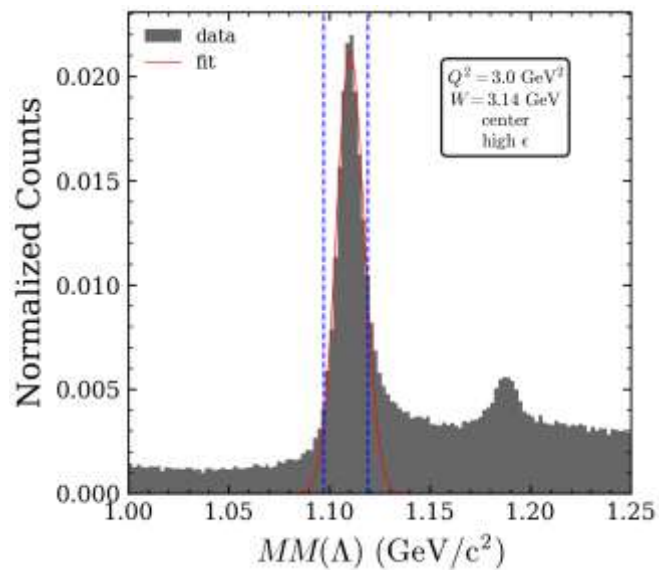
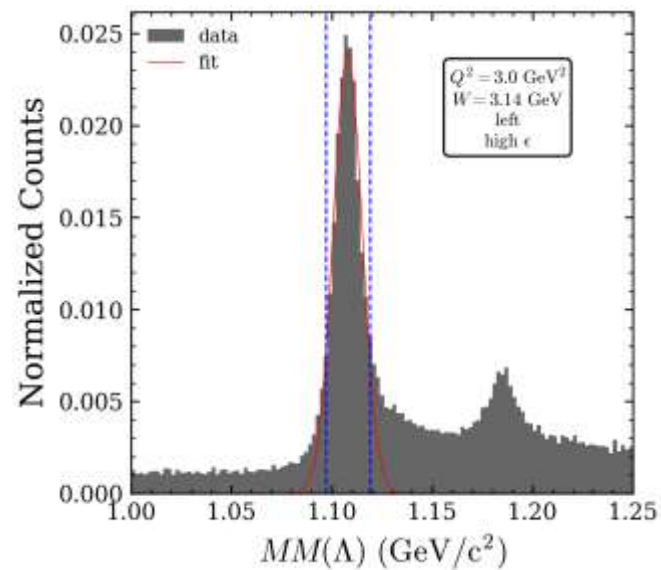
Change in iteration

- Change binning
- Change to use bin centers of t and ϕ

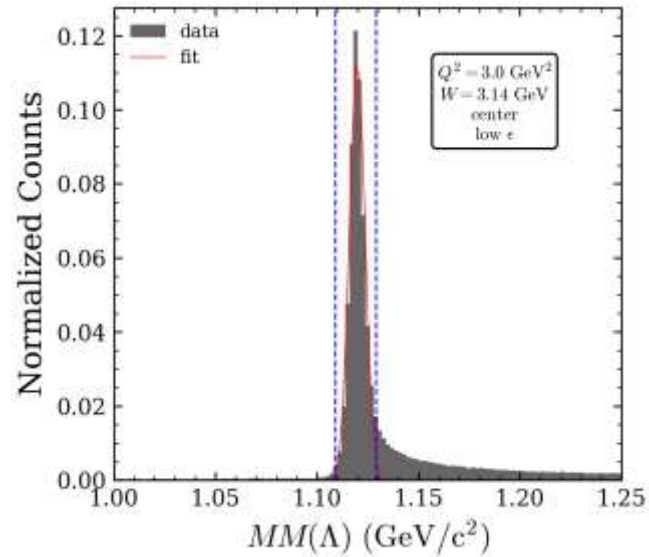
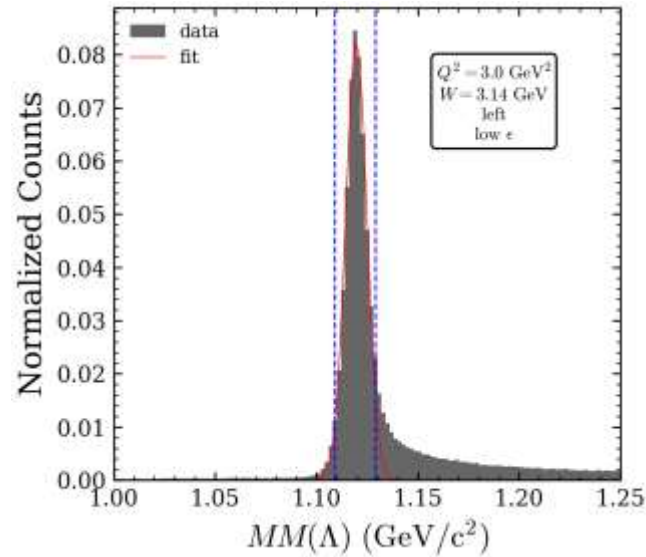
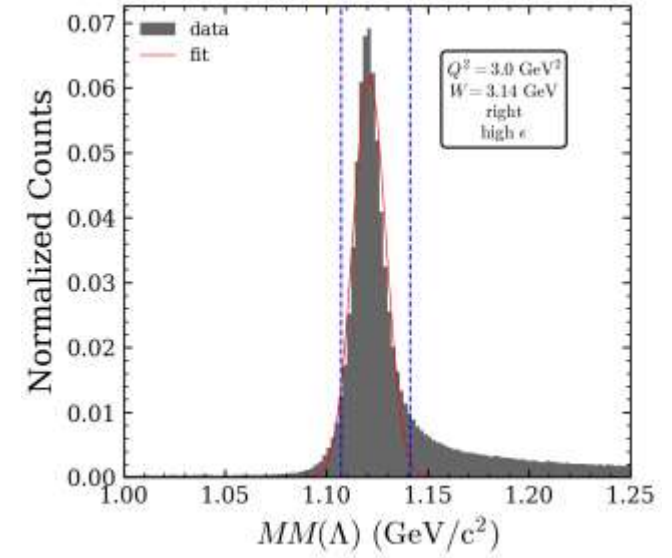
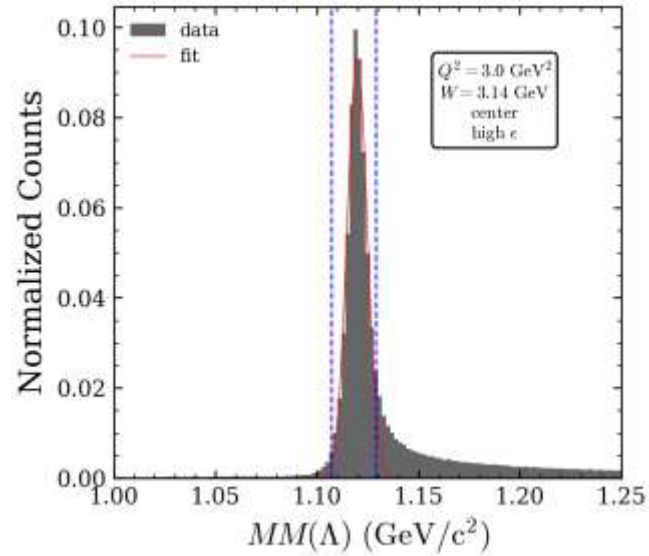
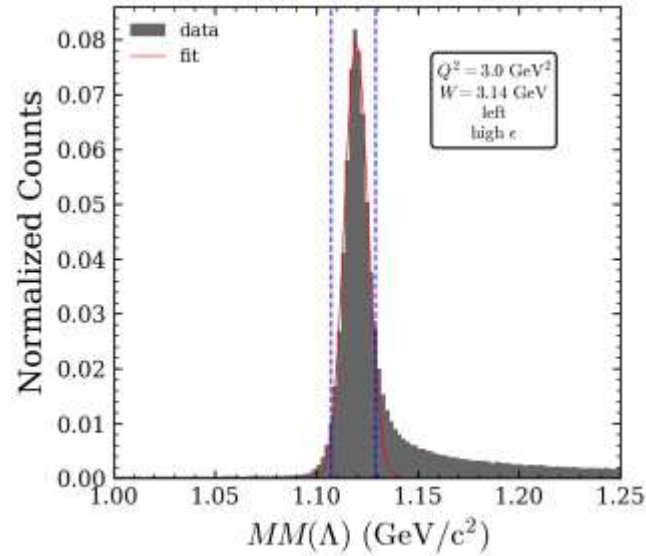
Diamond fixed



Missing mass shift



Missing mass shift (SIMC)



Q2,W,SHMS,epsilon,shift

3p0,3p14,left,low,-0.00401961961961983

3p0,3p14,left,high,-0.00401961961961983

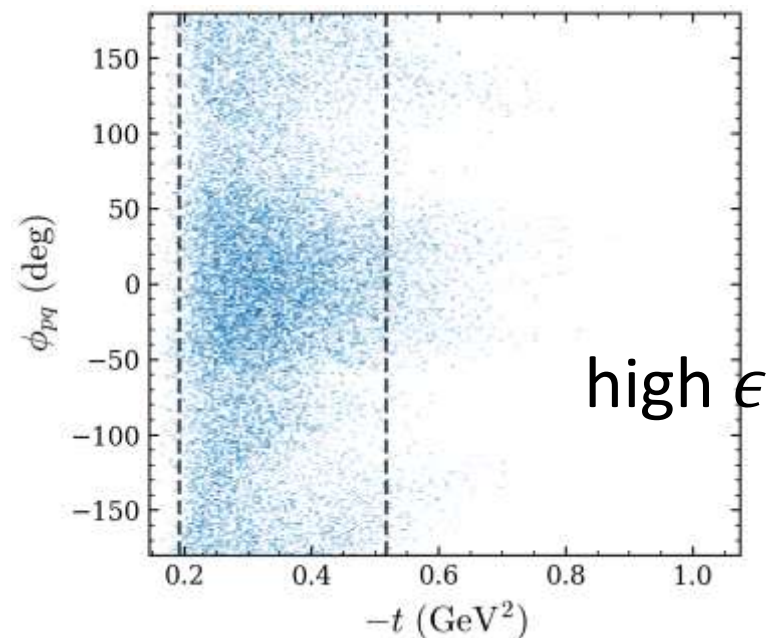
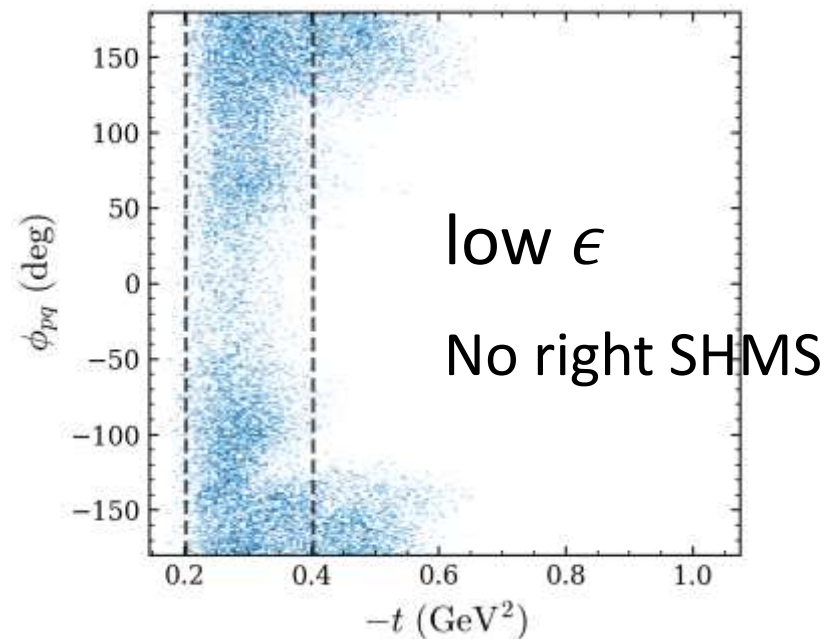
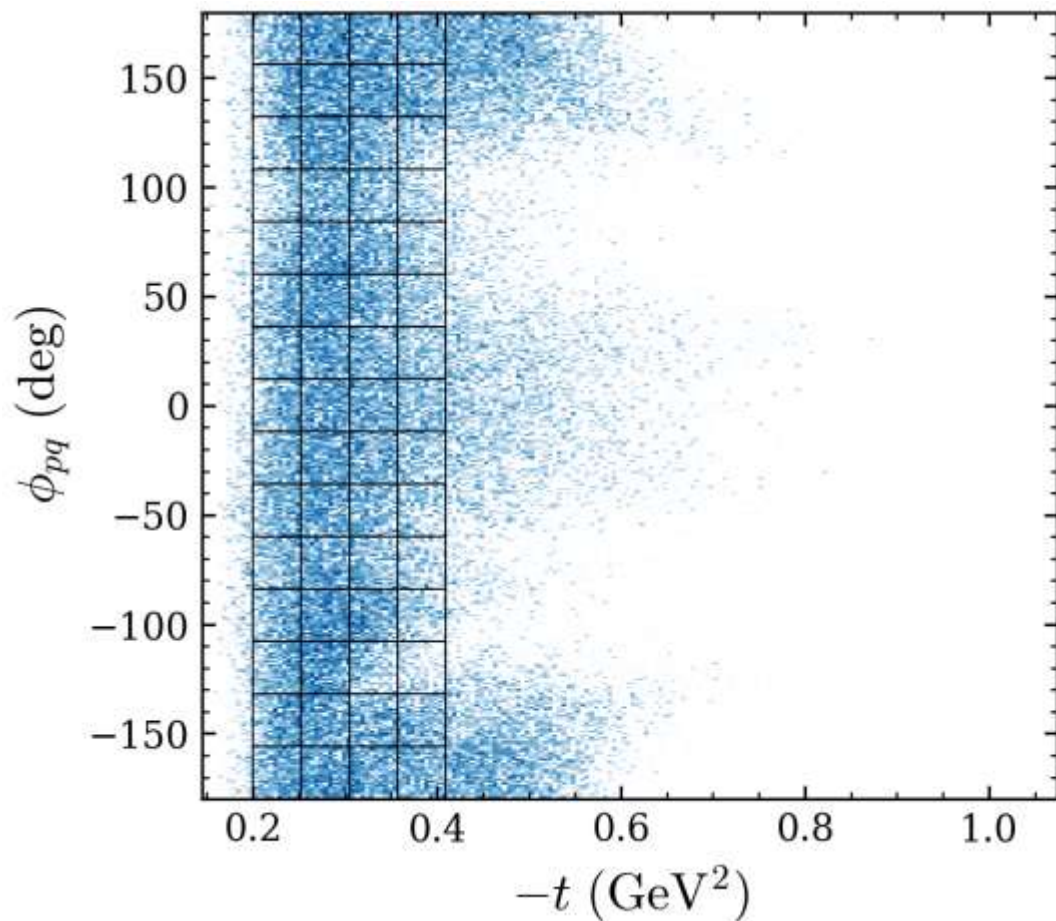
3p0,3p14,right,high,-0.005020620620620697

3p0,3p14,center,low,-0.00401961961961983

3p0,3p14,center,high,-0.00401961961961983

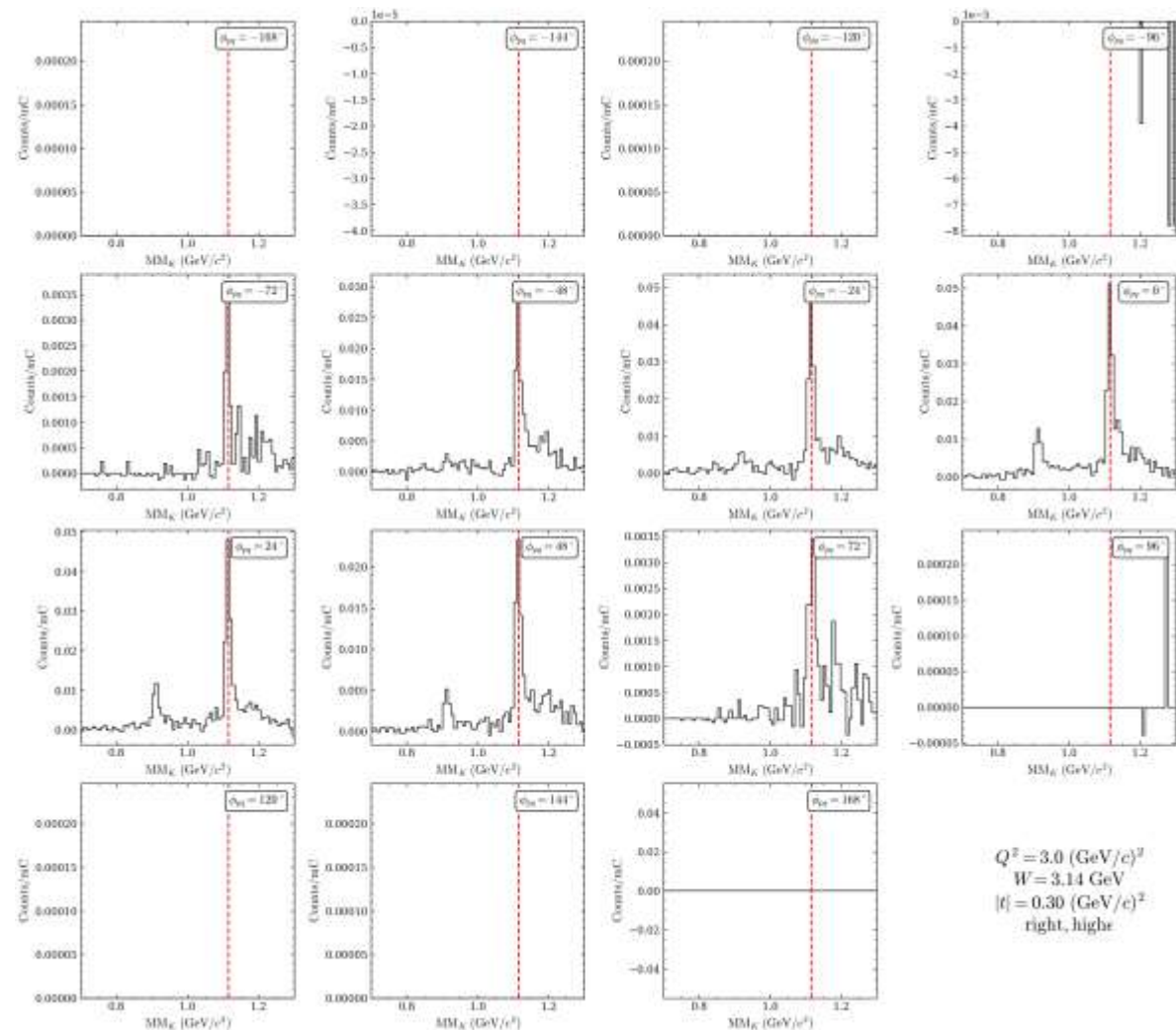
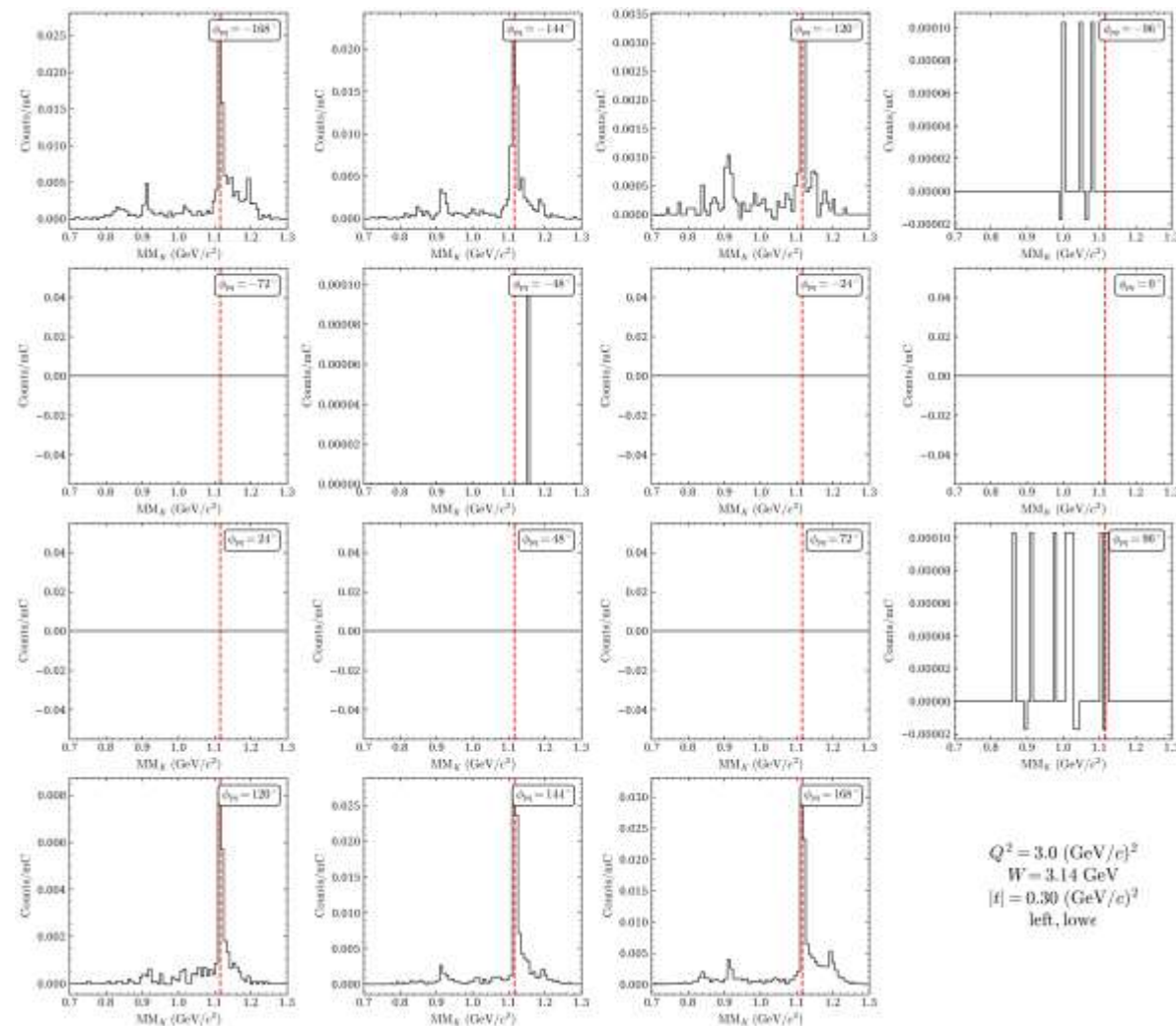
Binnings

- SHMS are summed over in both cases
- In both settings, get the t -range s.t. ϕ coverage > 0.5
- Combine settings, uniform binning



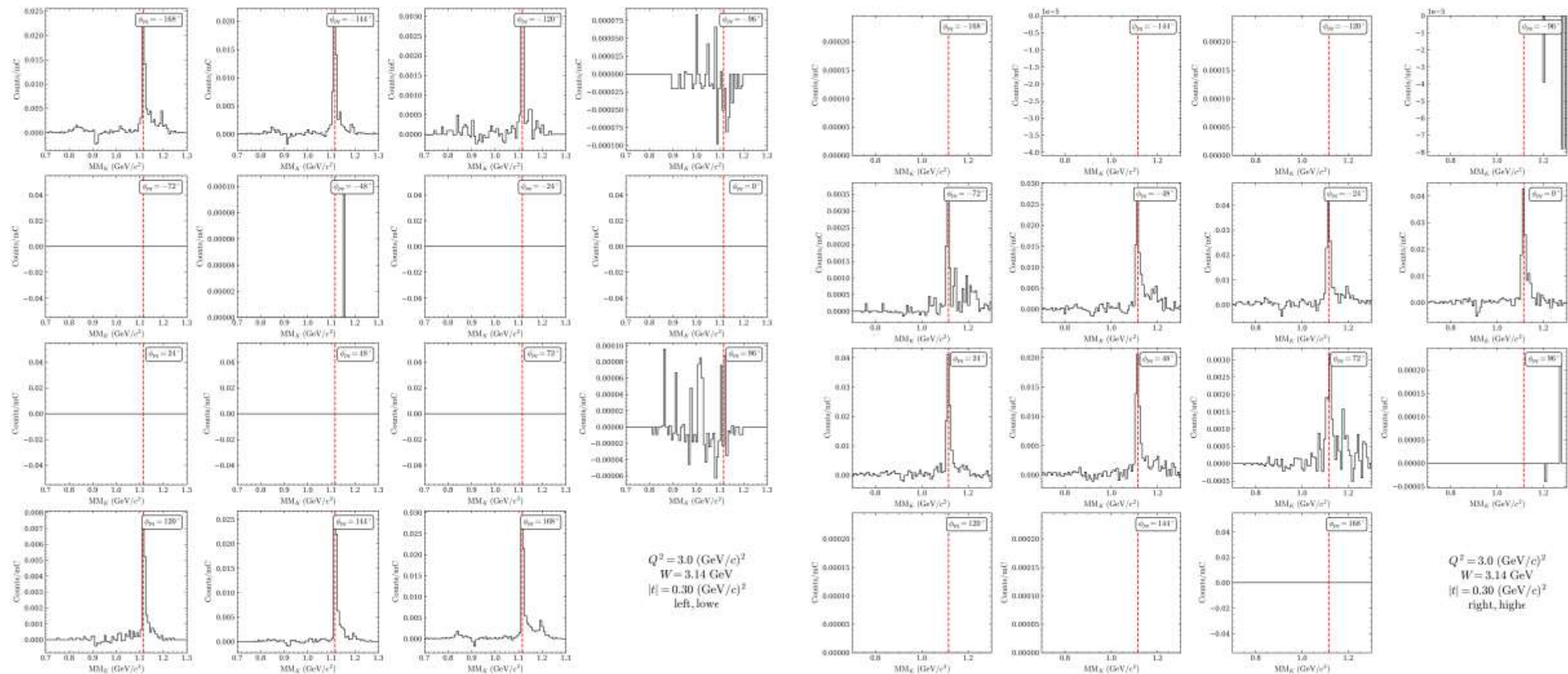
Random, Dummy subtraction

- Perform for each t/ϕ bin for each of the 5 settings



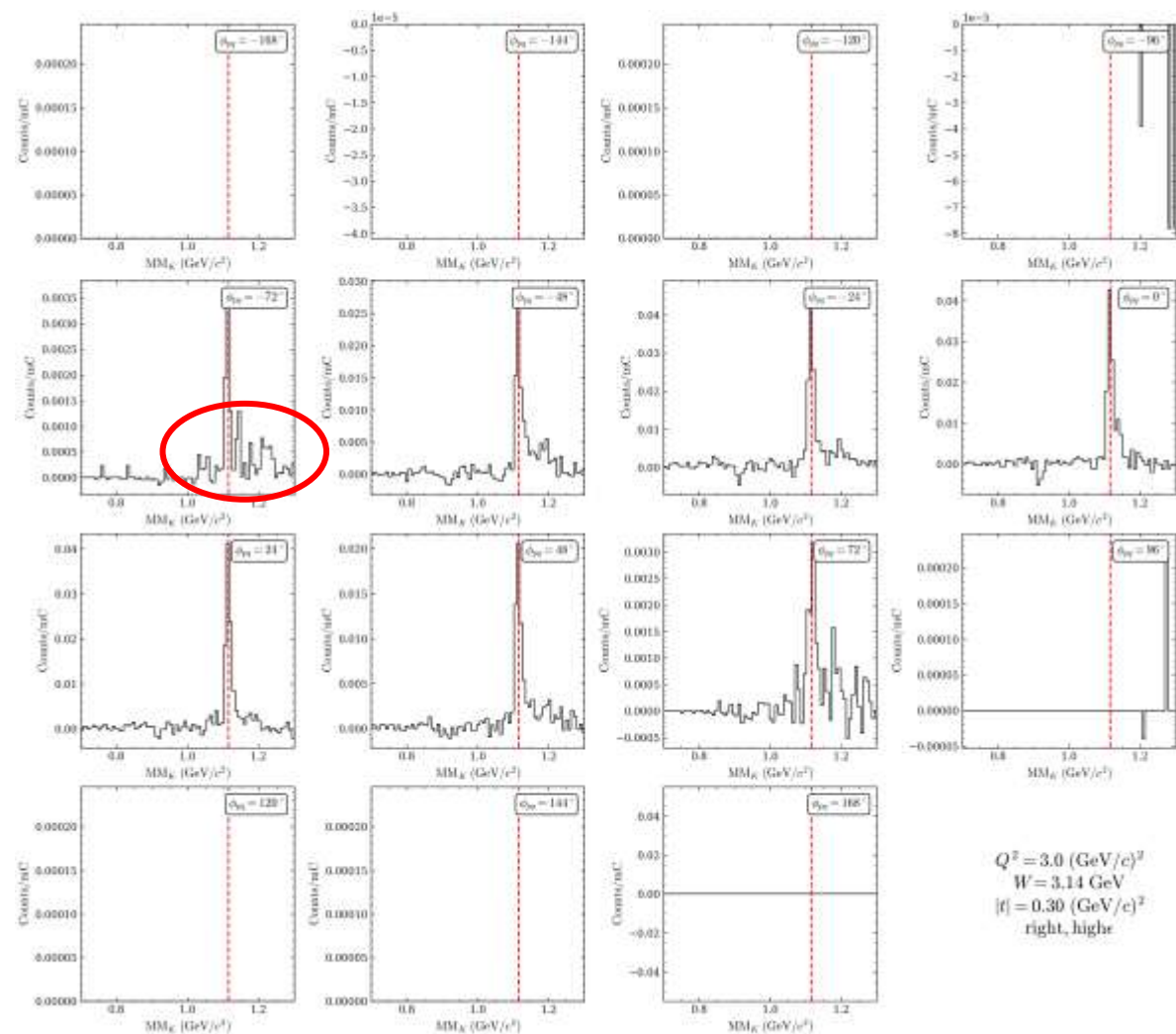
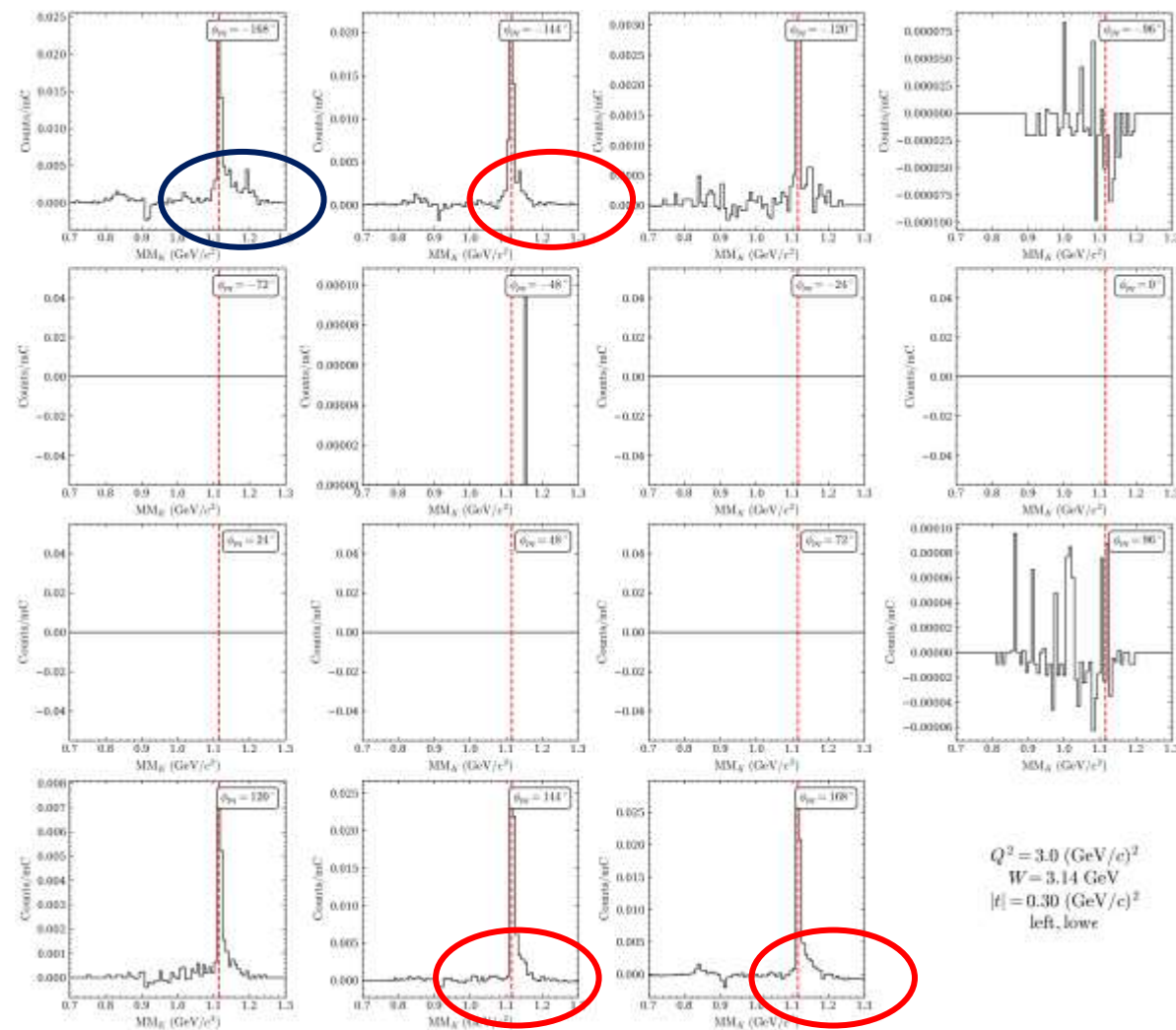
Pion subtraction

- Perform for each t/ϕ bin for each of the 5 settings



Sigma peak subtraction

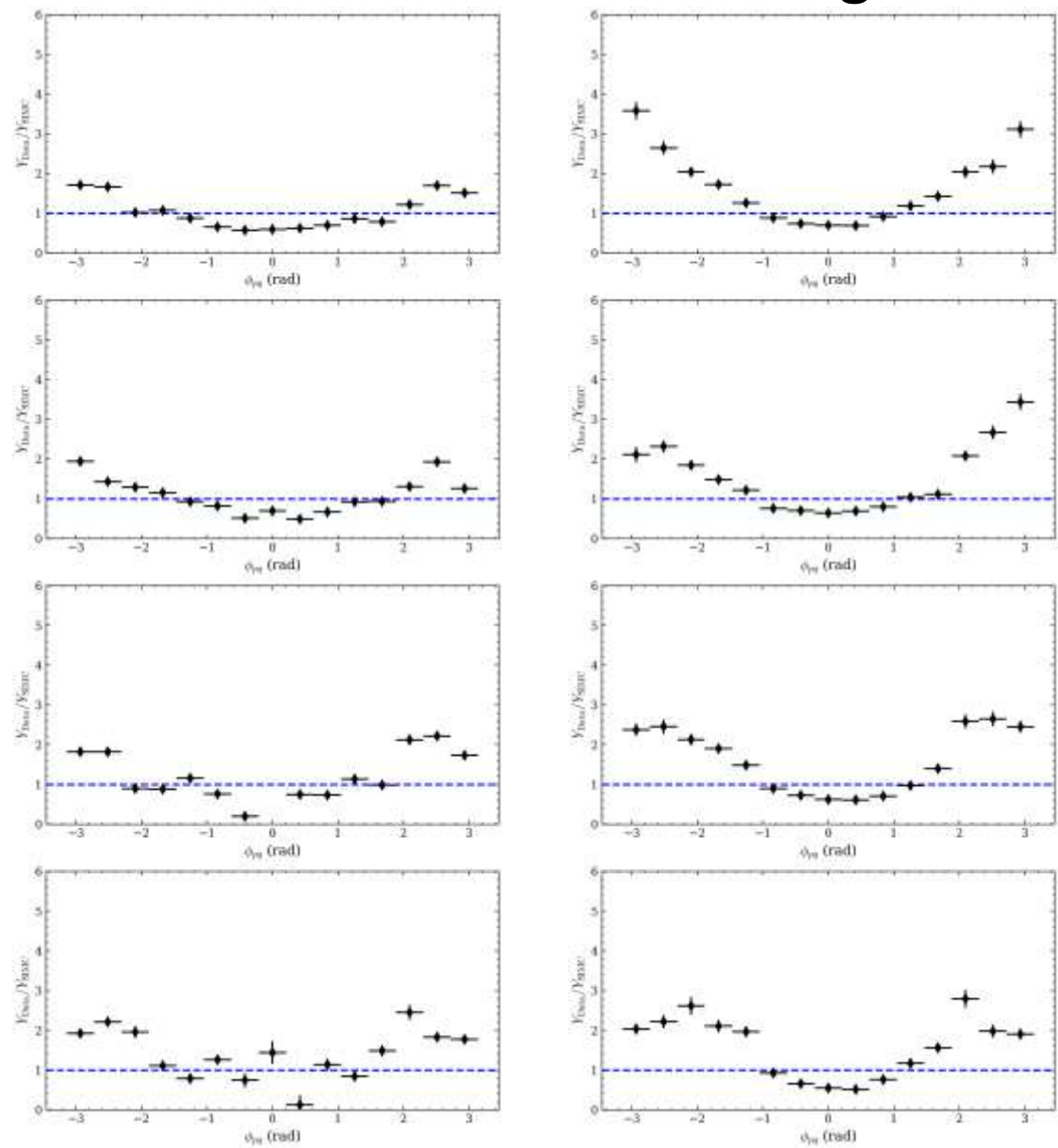
- Perform for each t/ϕ bin for each of the 5 settings, if statistics allowed



Iter 00 – yield ratios and xsect

low

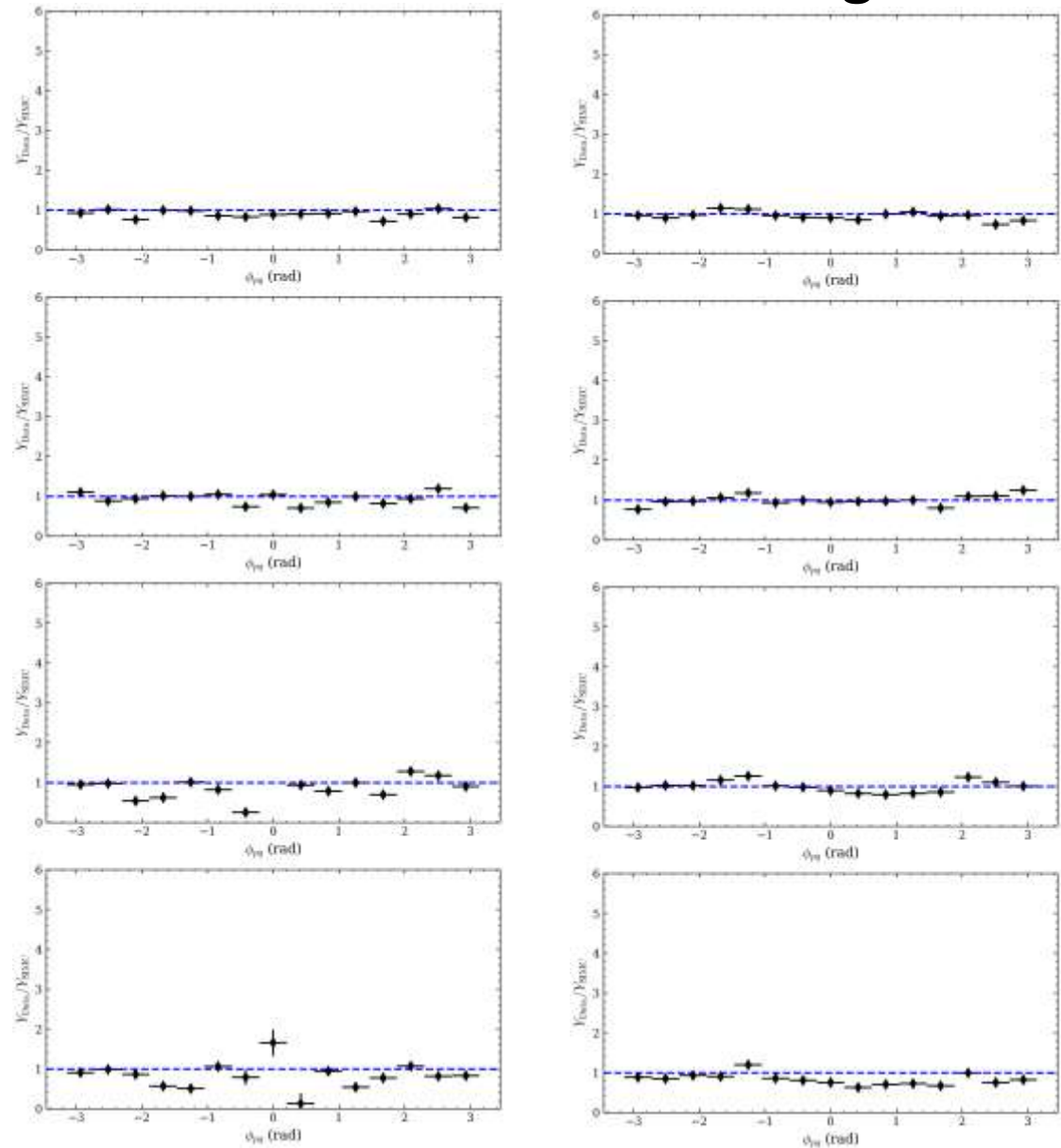
high



Iter 01 – yield ratios and xsect

low

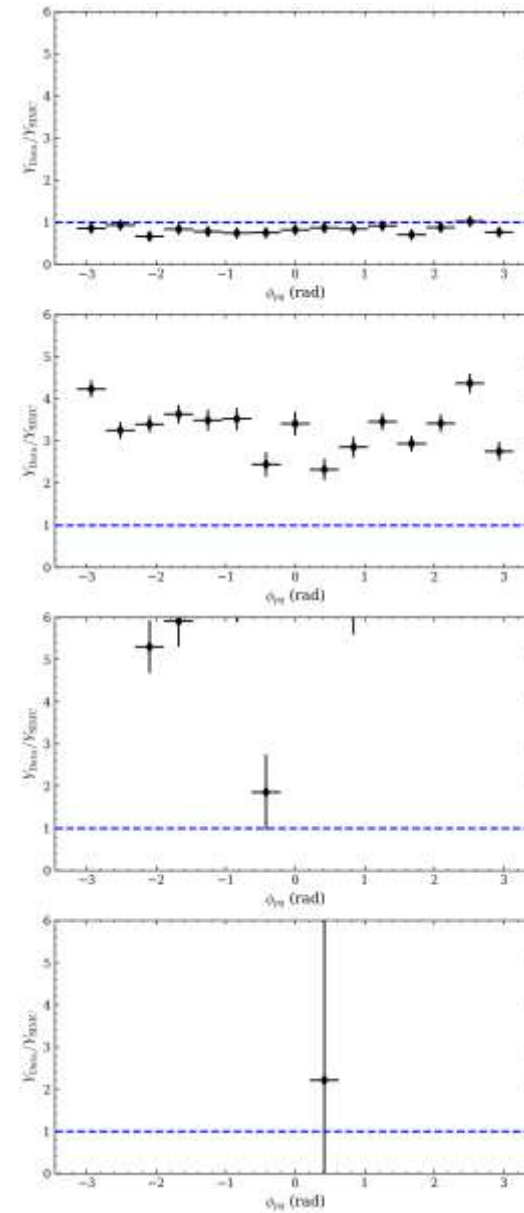
high



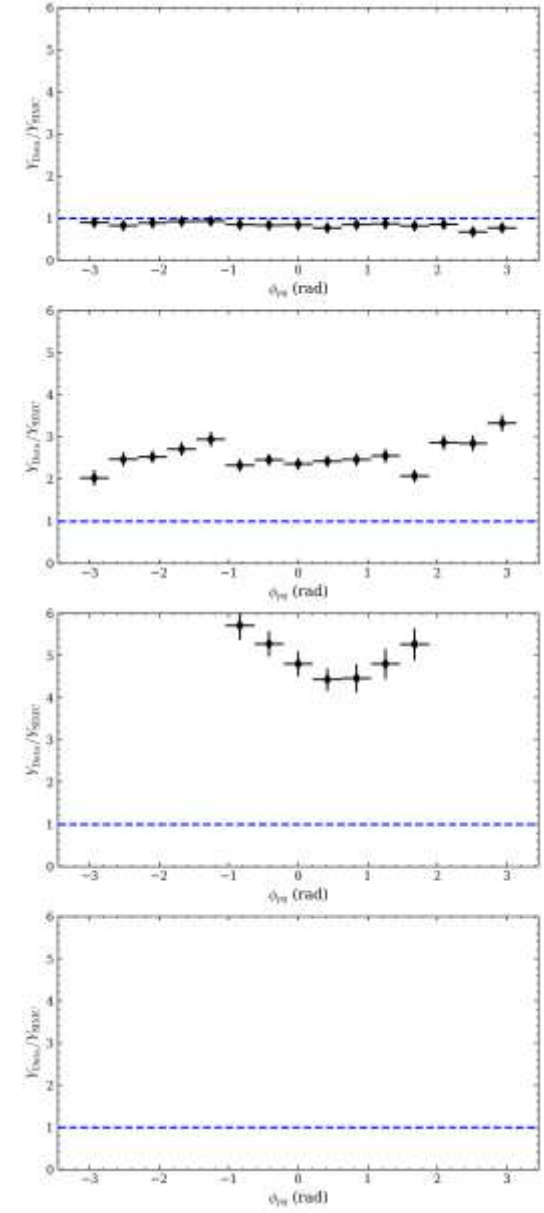
Iter 02 – yield ratios and xsect

- Blows up

low



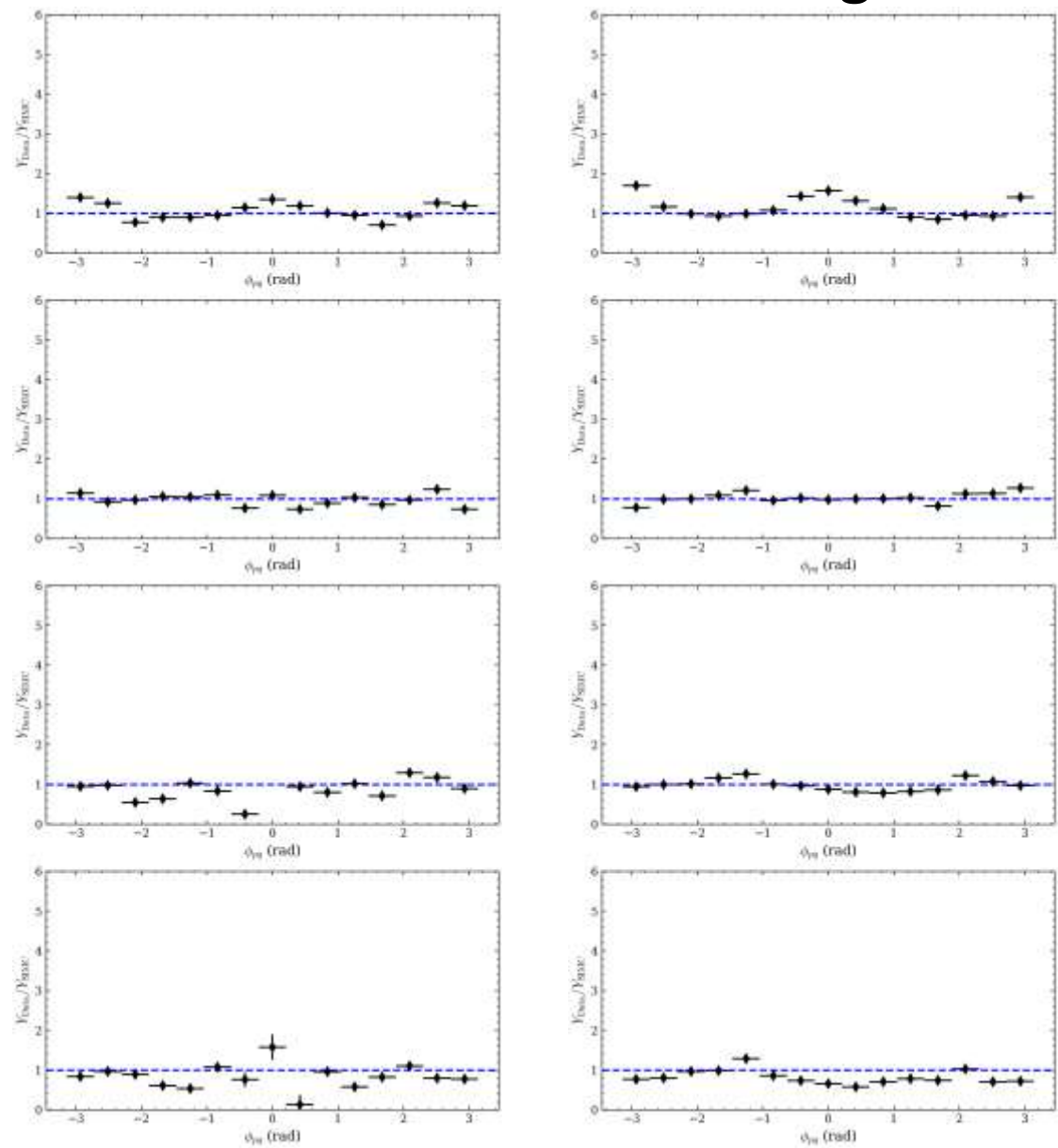
high



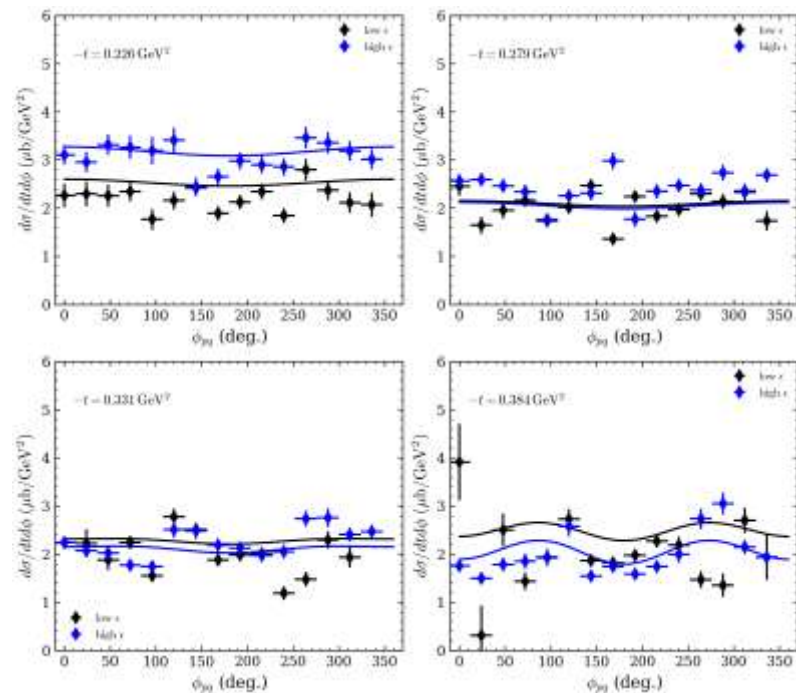
Iter 04 – yield ratios and xsect

low

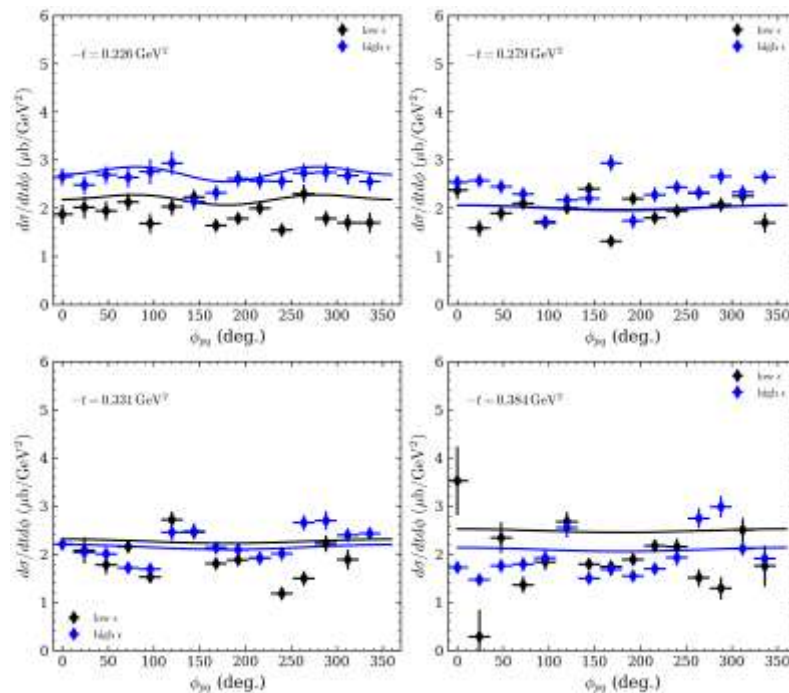
high



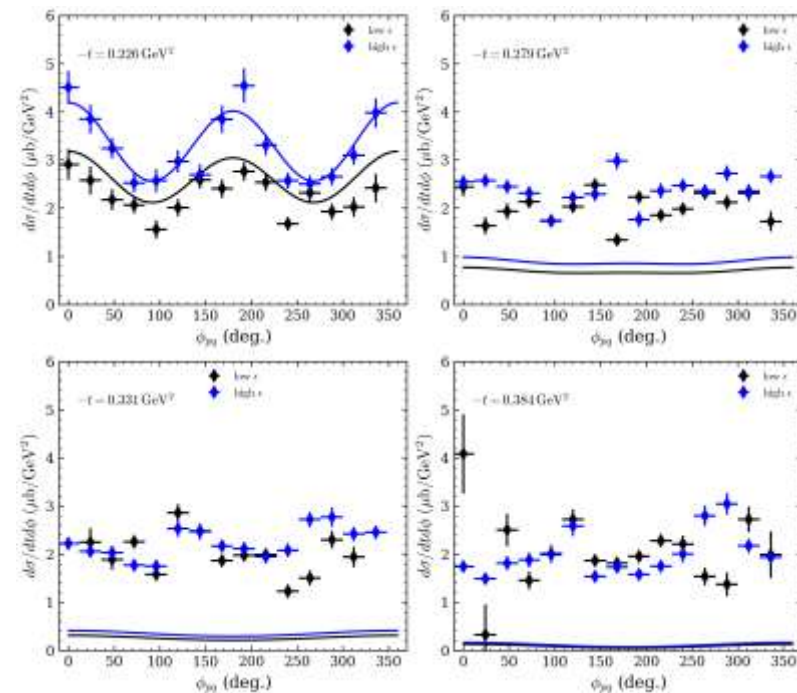
Iter 00



Iter 03

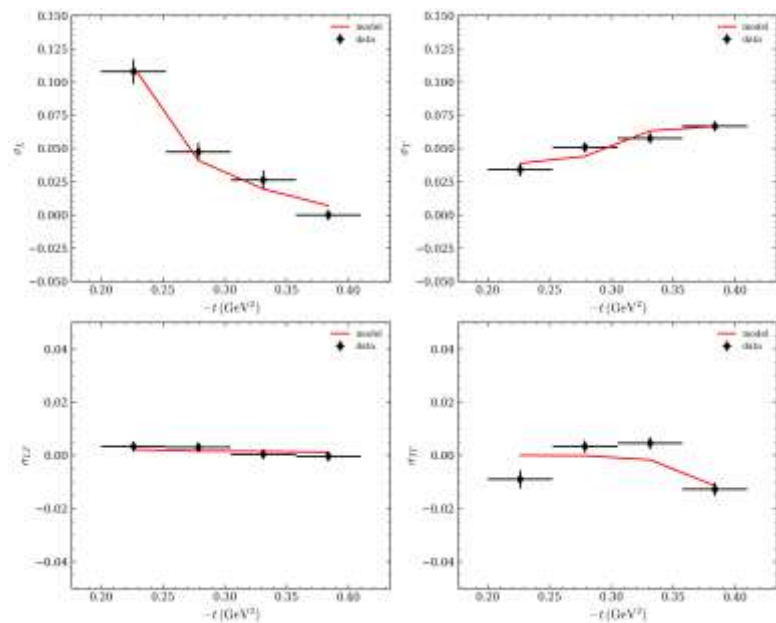


Iter 04

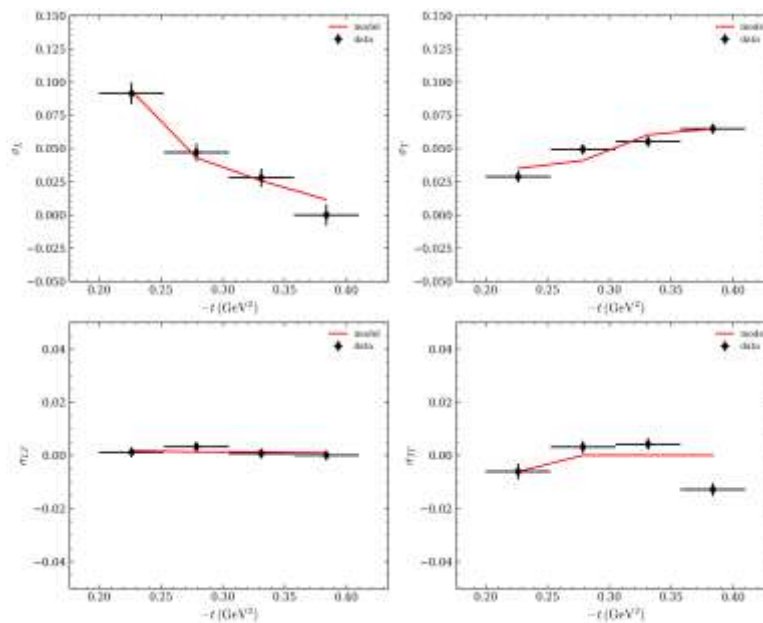


seperated xsect

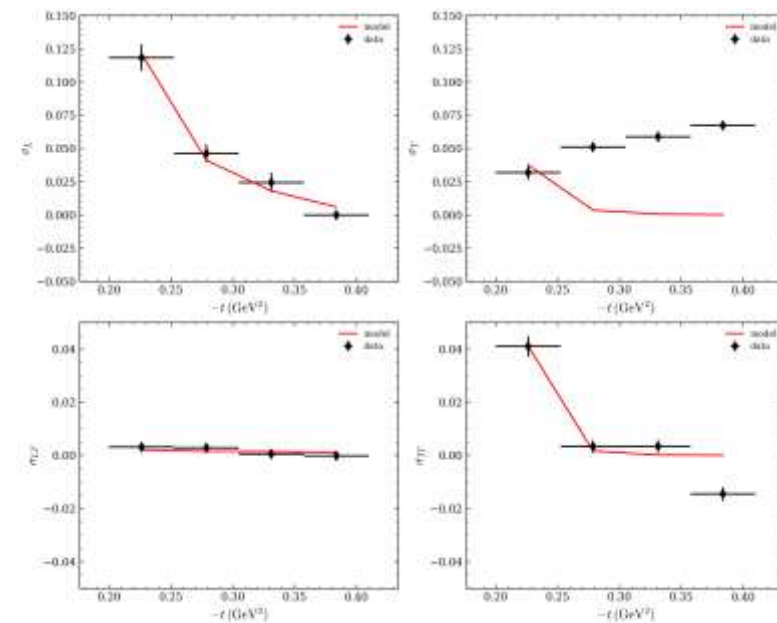
Iter 00



Iter 03



Iter 04



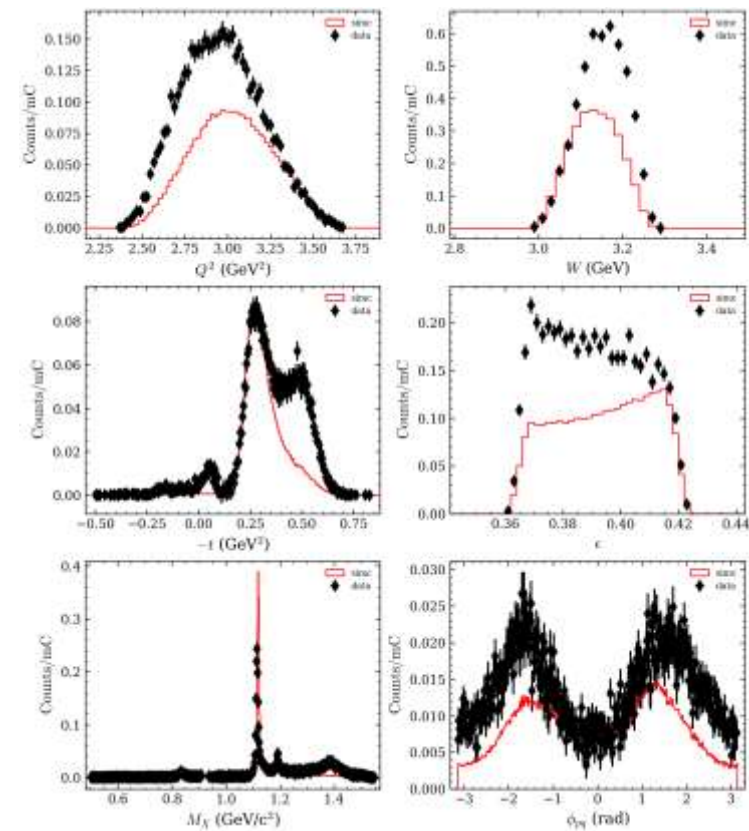
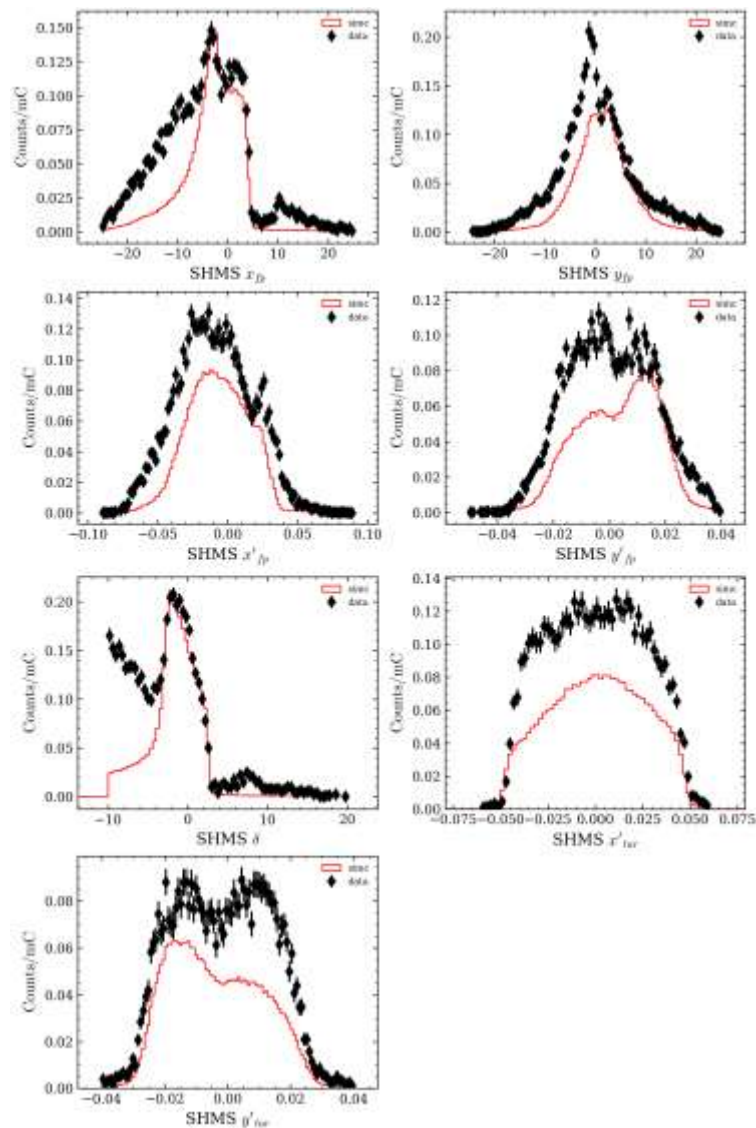
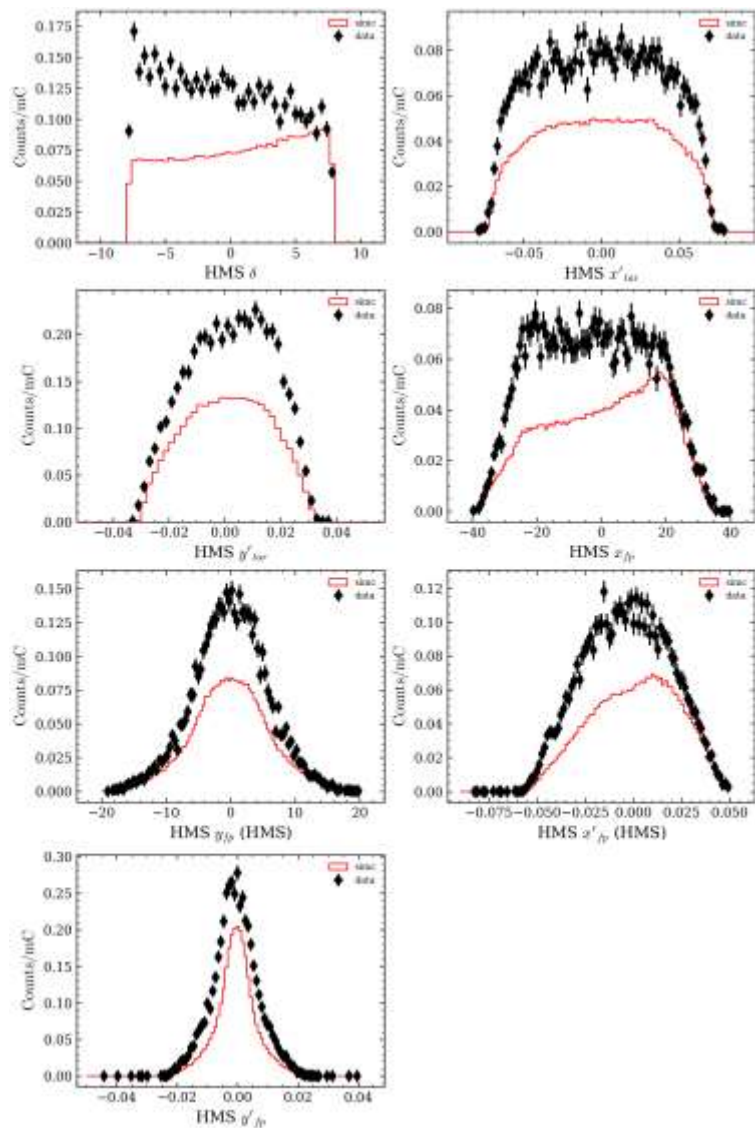
Start iteration 00 – check histograms

Center, Low ϵ

HMS

SHMS

kinematics



To be done

$$2\pi \frac{d\sigma}{dtd\phi} = \varepsilon \frac{d\sigma_L}{dt} + \frac{d\sigma_T}{dt} + \sqrt{2\varepsilon(\varepsilon+1)} \frac{d\sigma_{LT}}{dt} \cos\phi + \varepsilon \frac{d\sigma_{TT}}{dt} \cos 2\phi$$

- Difference in fitting procedure:
 - fitted directly σ_{TT}, σ_{LT}
 - Richard fits $\sigma_{TT} = \rho_{TT} \sqrt{\sigma_T \sigma_L}$ then reconstruct σ_{TT}
- Rosenblug formula : bin width not taken into account in the fit
- Missing mass cut for comparing distributions