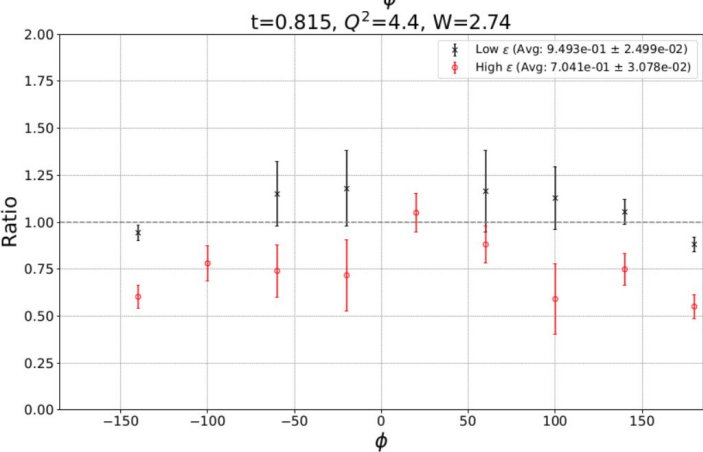
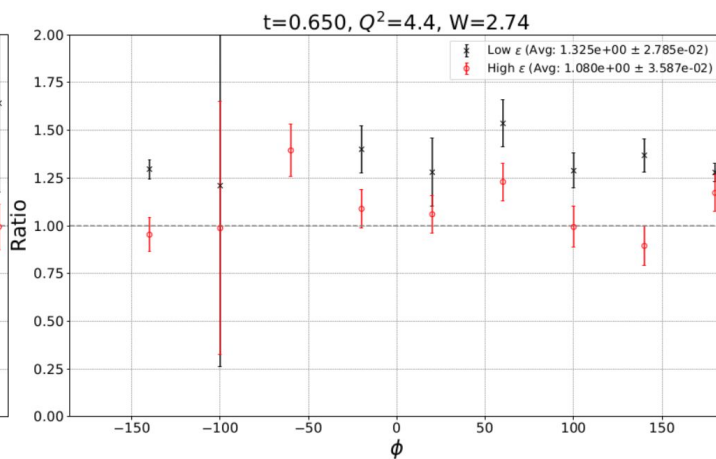
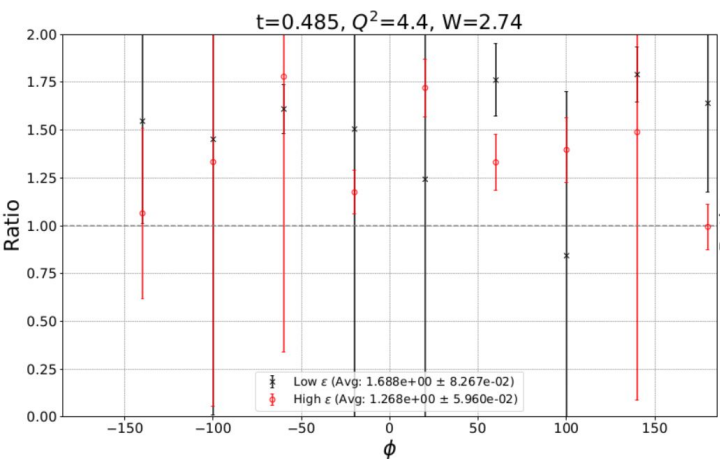


# KaonLT Meeting

April 30-May 1<sup>st</sup>, 2026

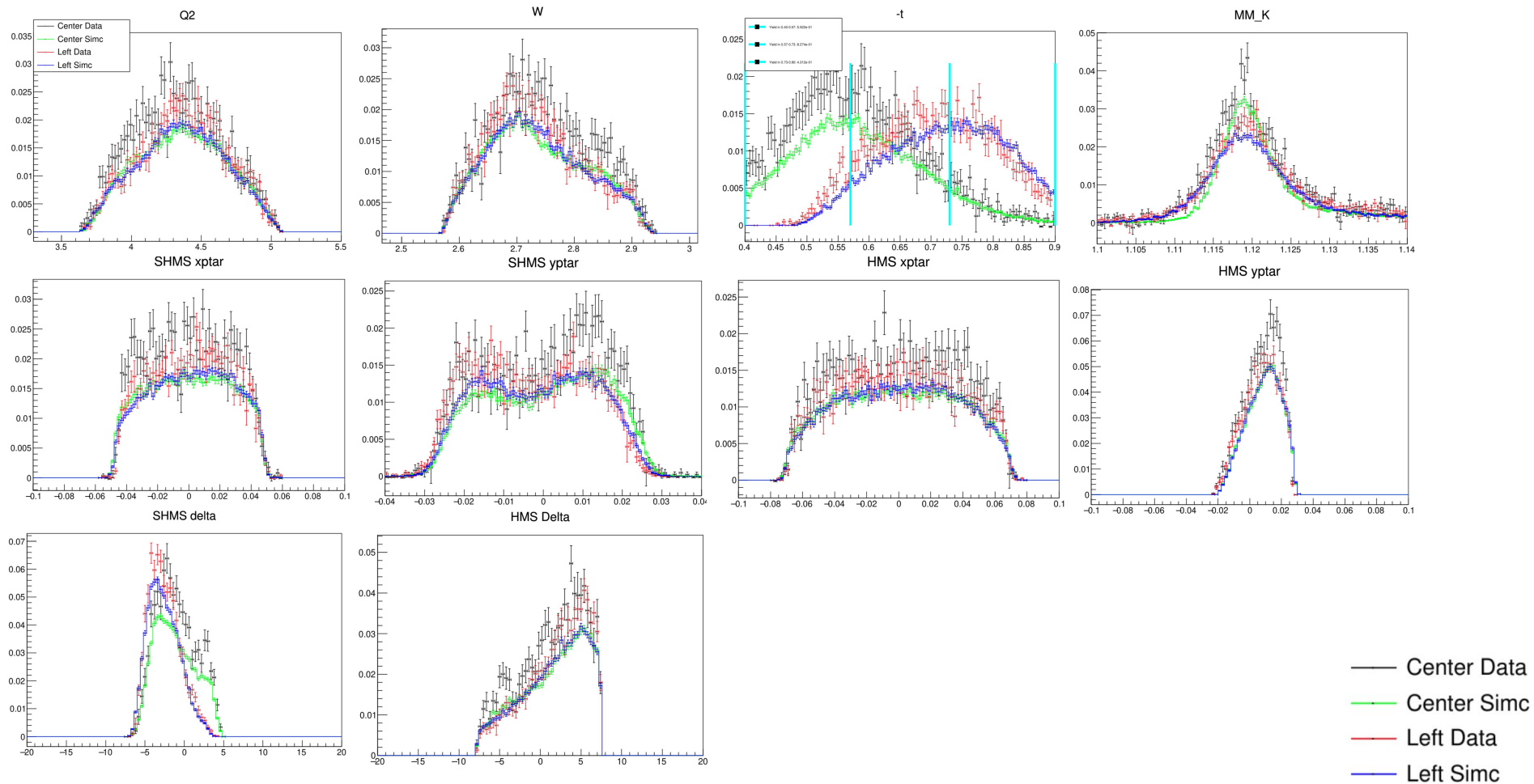
Richard L. Trotta

# Q2=4.4, W=2.74



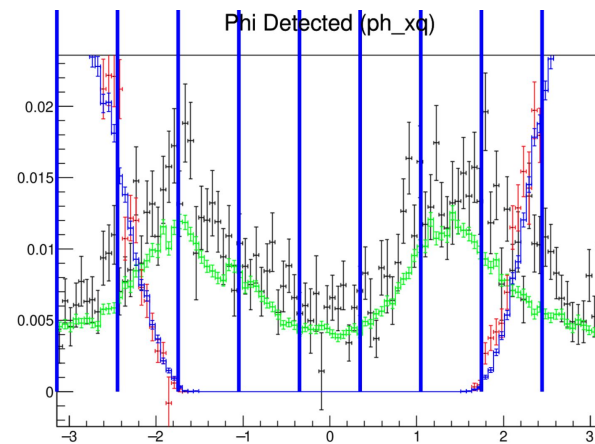
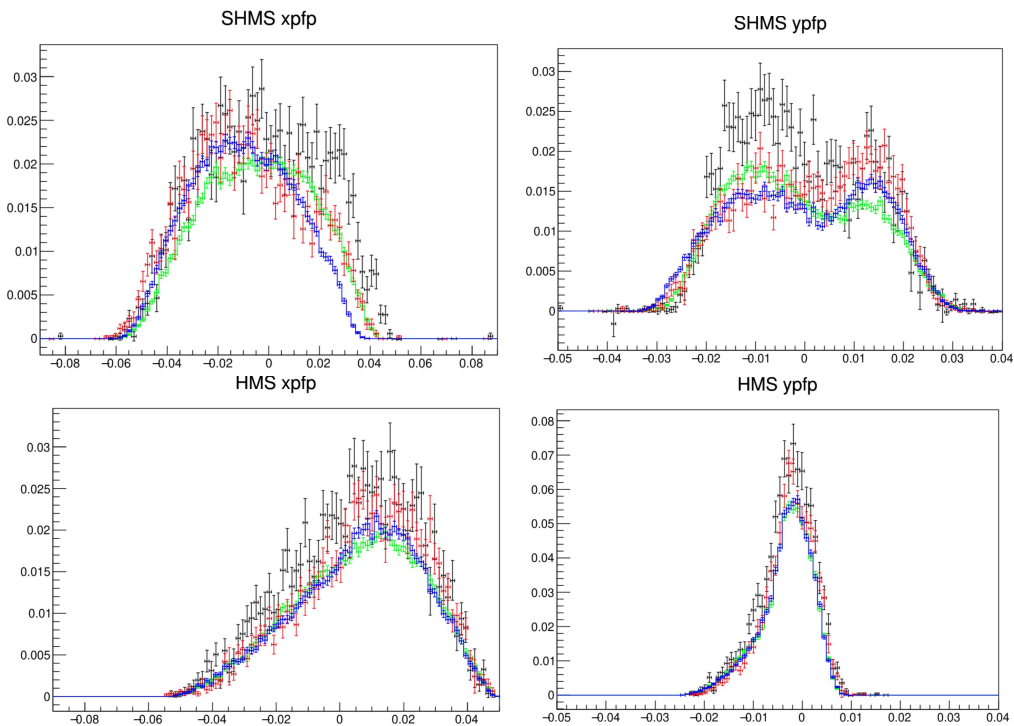
# Q2=4.4, W=2.74

# Iteration 1



# Q2=4.4, W=2.74

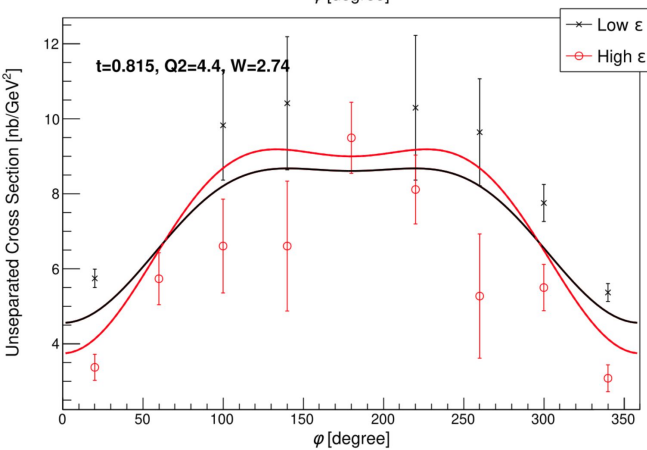
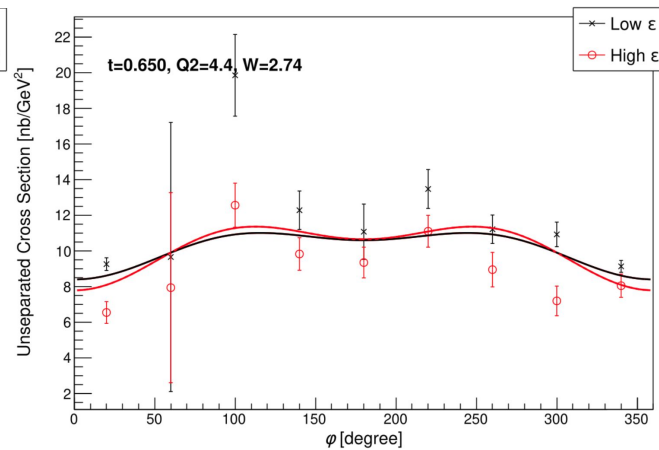
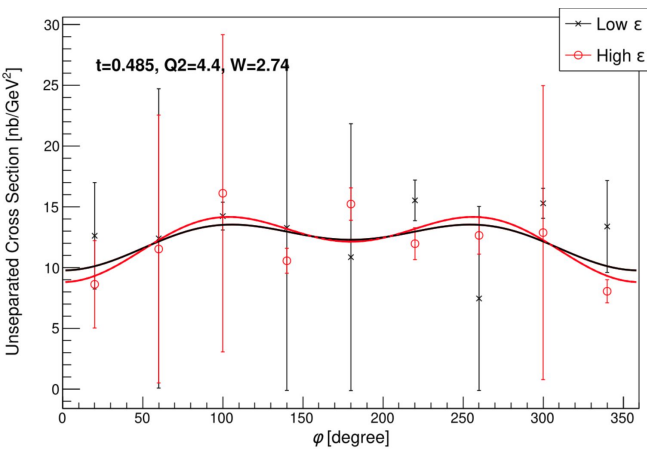
# Iteration 1



— Center Data  
— Center Simc  
— Left Data  
— Left Simc

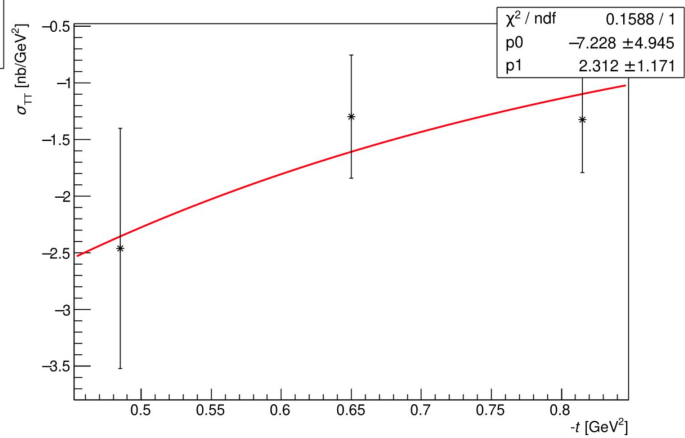
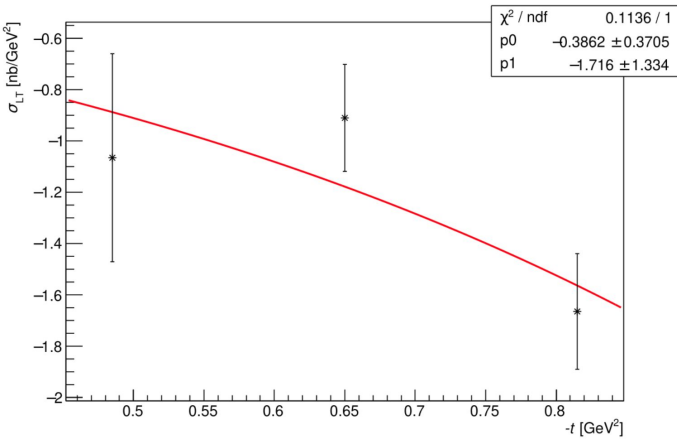
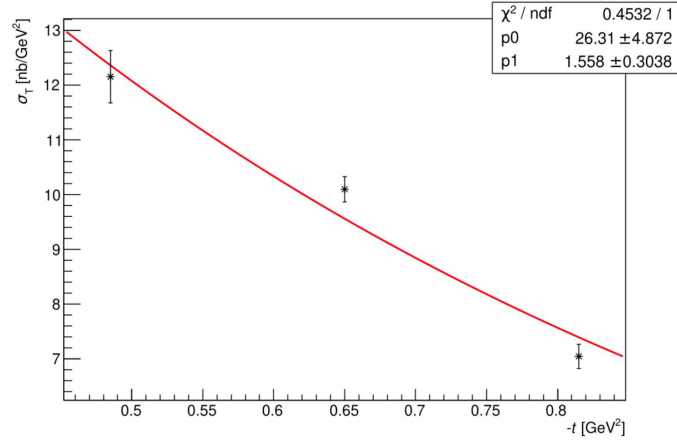
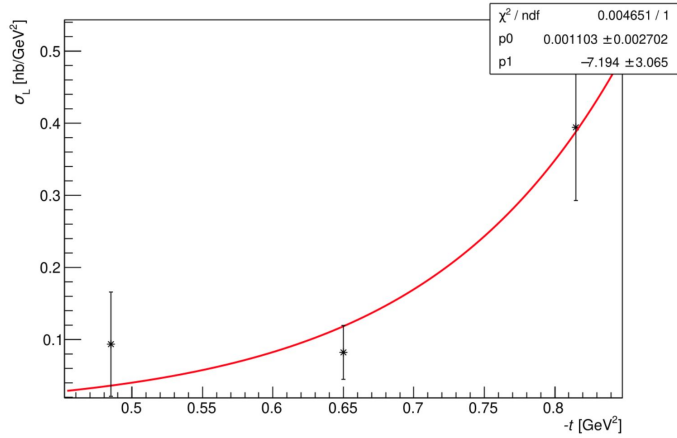
# Q2=4.4, W=2.74

Iteration 1



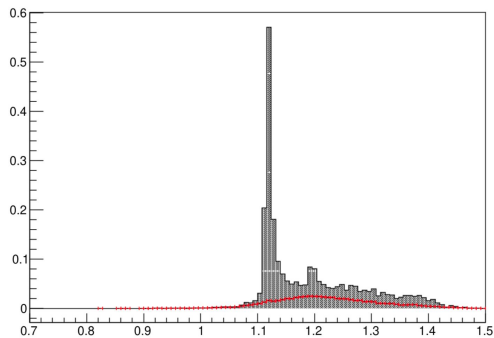
# Q2=4.4, W=2.74

# Iteration 1

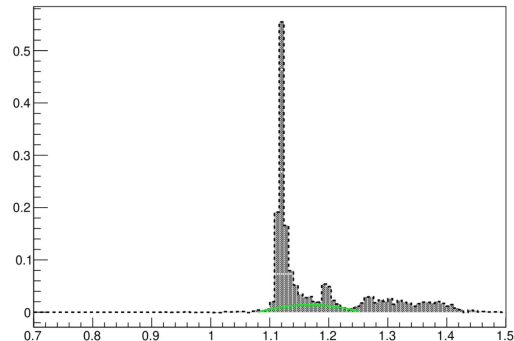


Q2=4.4, W=2.74 Center

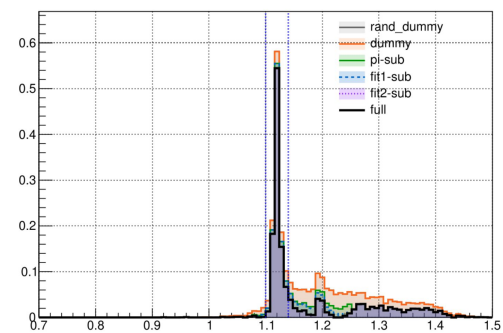
MM\_nosub\_K



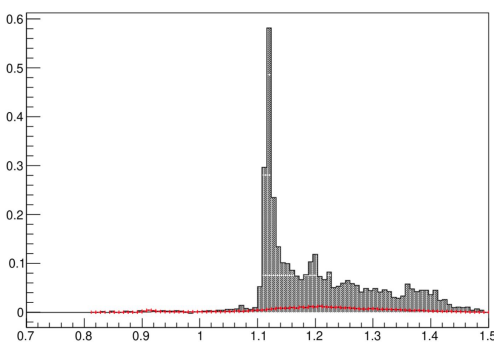
MM\_fitsub\_K



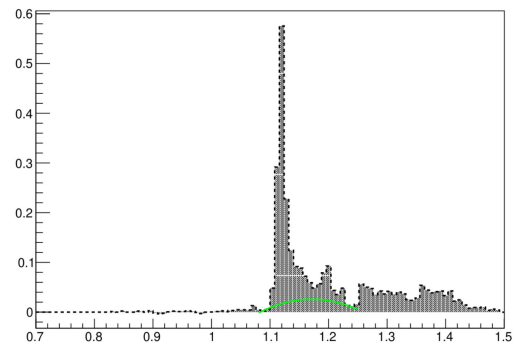
MM\_K

Low  $\varepsilon$ 

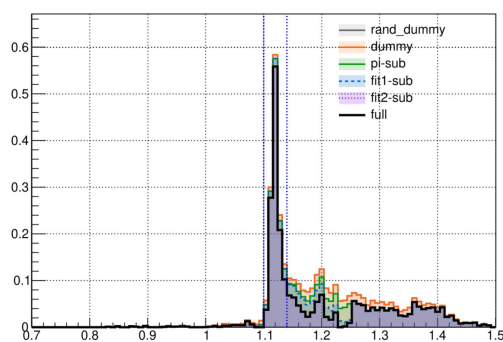
MM\_nosub\_K



MM\_fitsub\_K

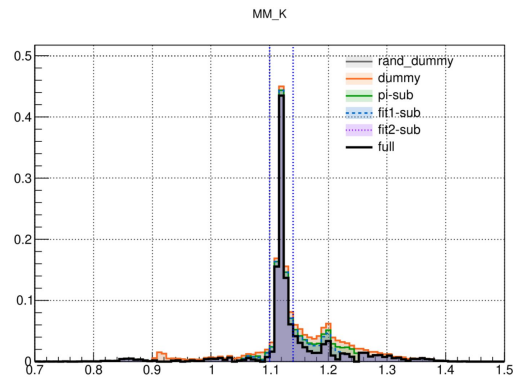
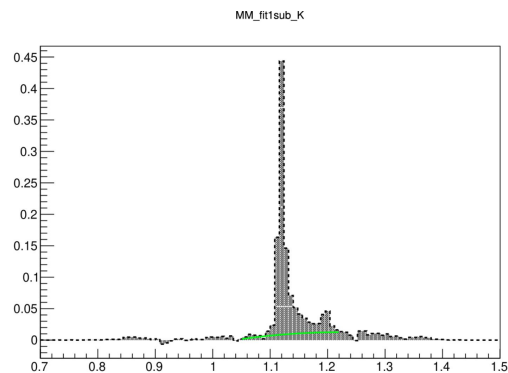
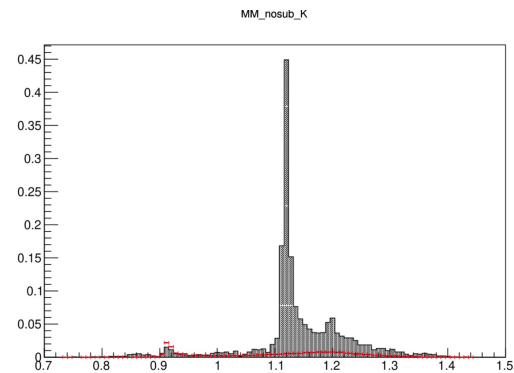


MM\_K

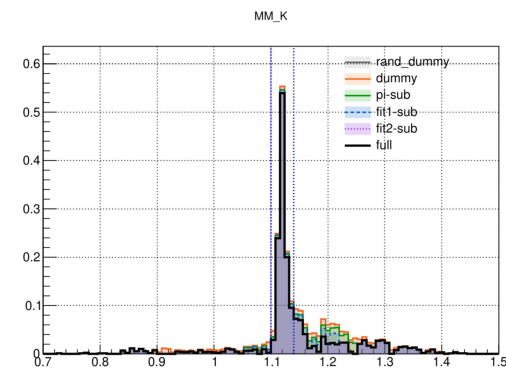
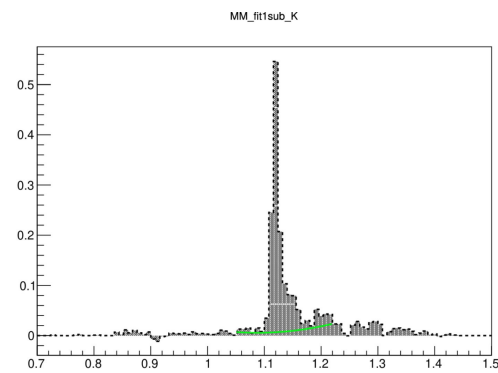
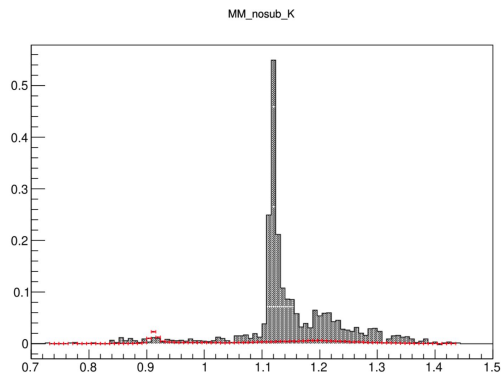
High  $\varepsilon$

# Q2=4.4, W=2.74 Left

Iteration 1



Low  $\epsilon$

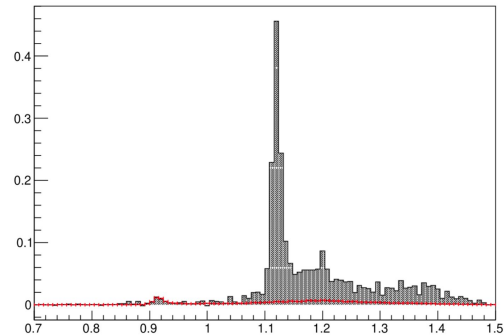


High  $\epsilon$

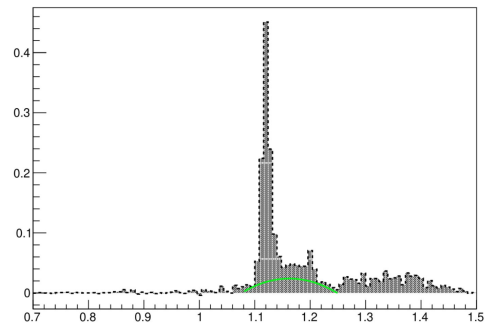
# Q2=4.4, W=2.74 Right

## Iteration 1

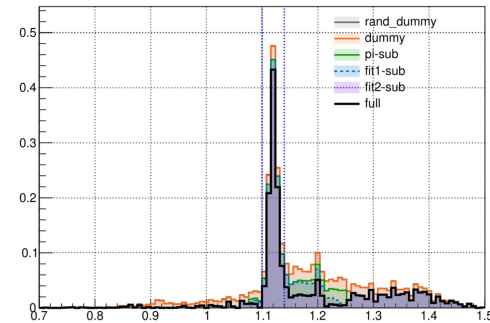
MM\_nosub\_K



MM\_fit1sub\_K



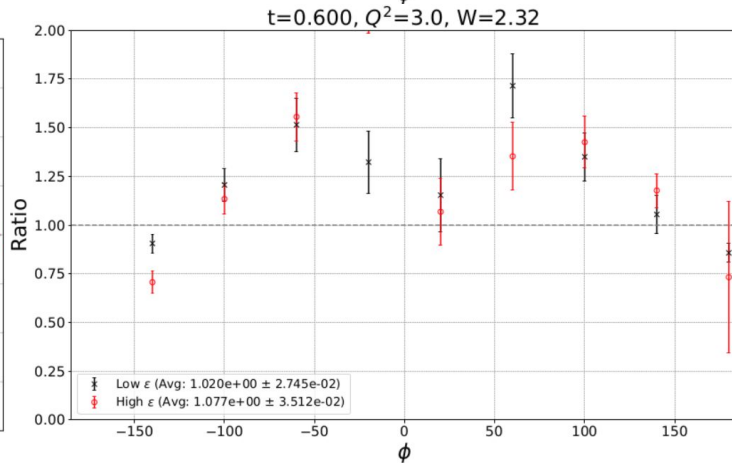
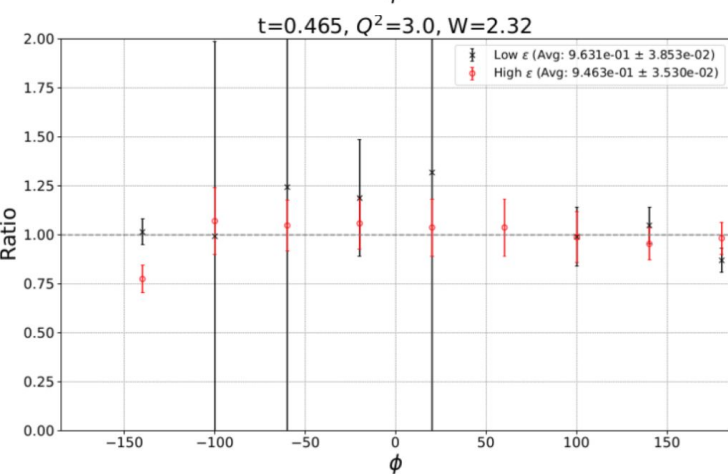
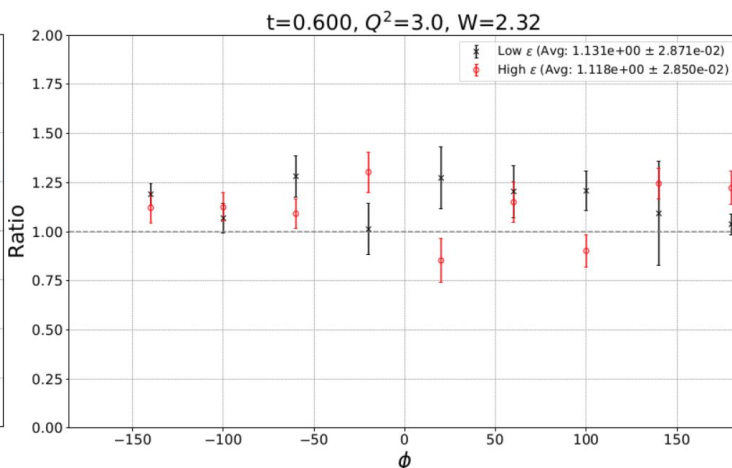
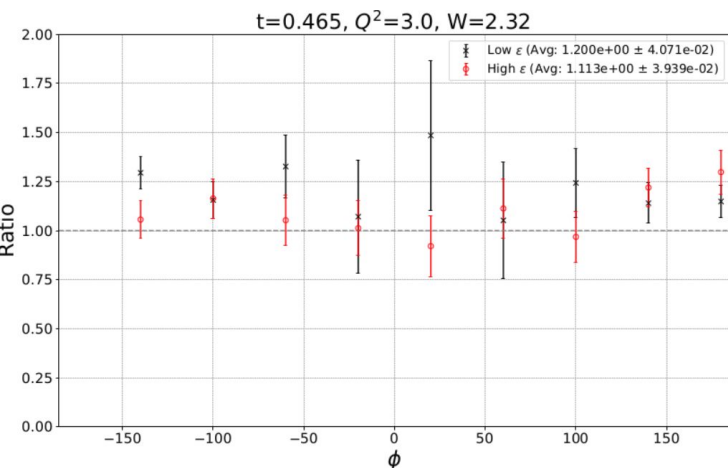
MM\_K



High  $\varepsilon$

# Q2=3.0, W=2.32

Iteration 1



3/25/2026

Kin's improved  
diamond cuts  
broke all my  
empirical fits (its  
too clean now!)

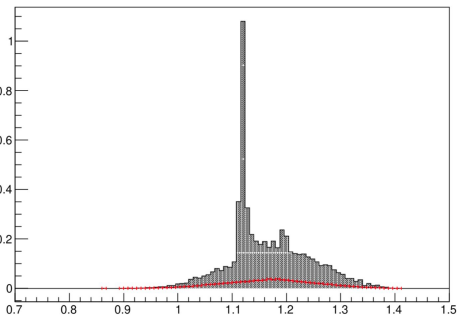
Current

# Q2=3.0, W=2.32 Center

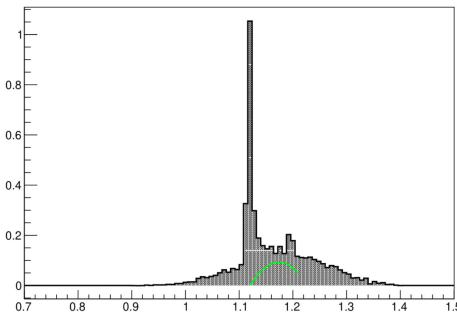
Iteration 1

3/25/2026

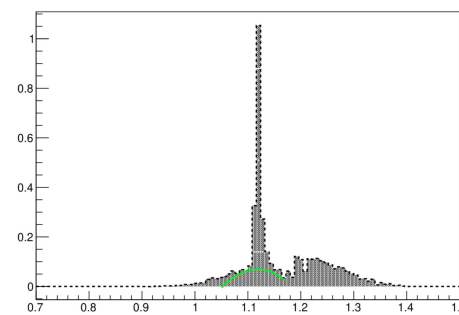
MM\_nosub\_K



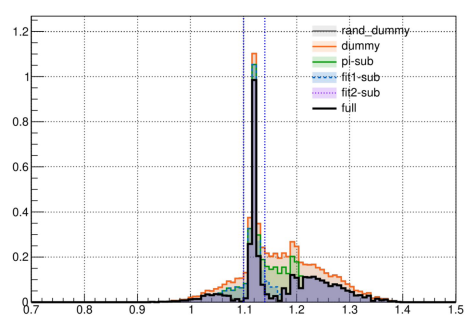
MM\_pisub\_K



MM\_fitsub\_K

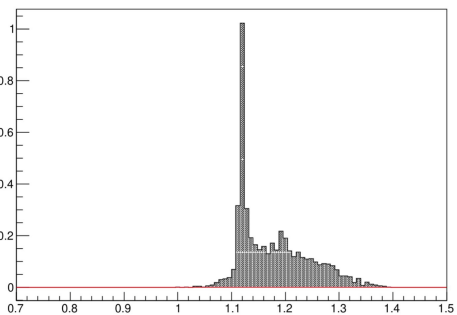


MM\_K

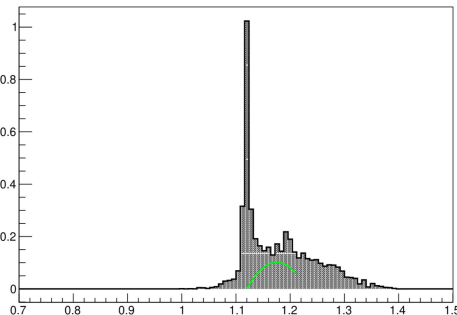


Current

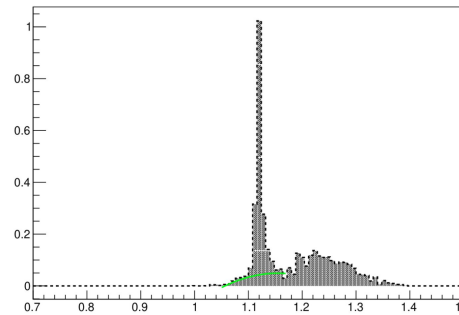
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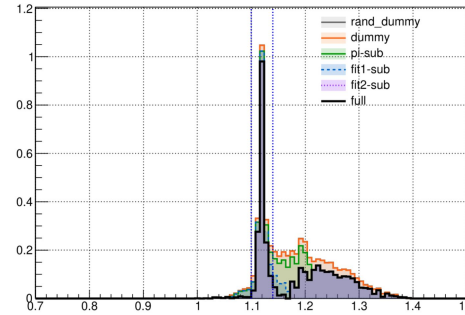
MM\_pisub\_K



MM\_fitsub\_K

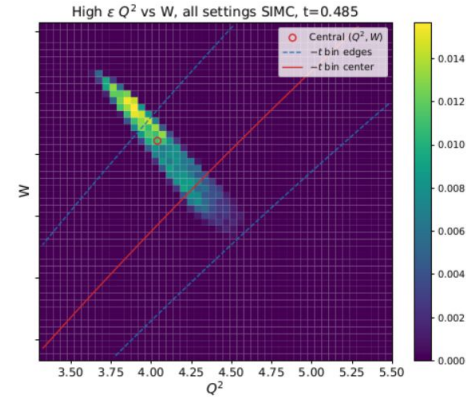
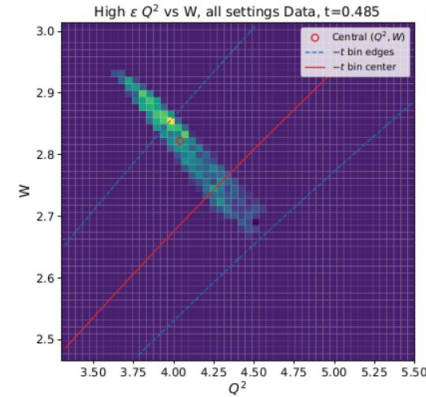


MM\_K

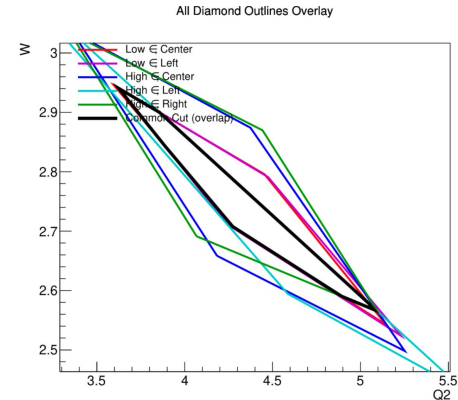
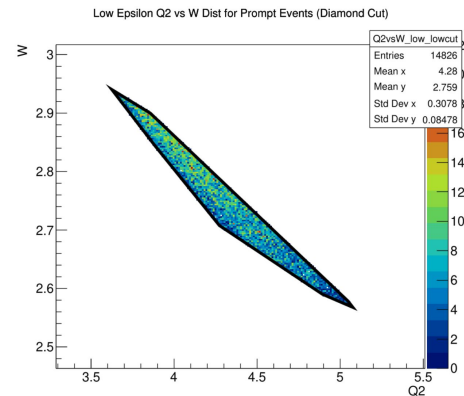
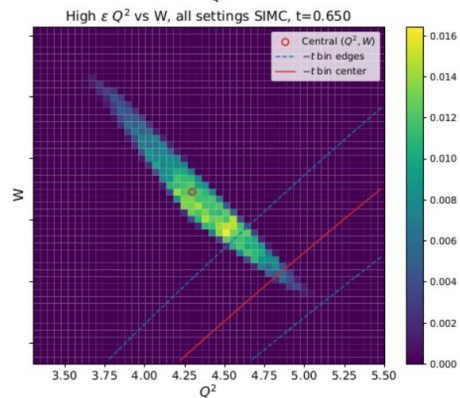
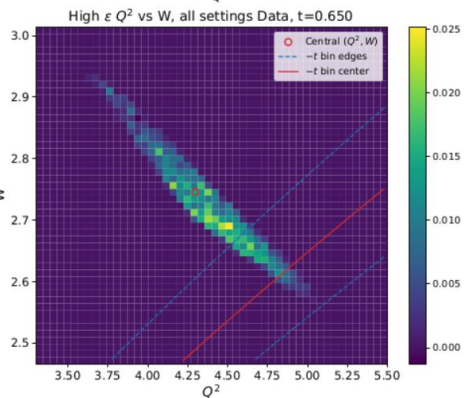
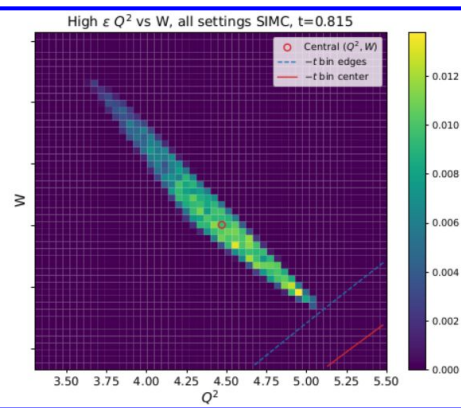
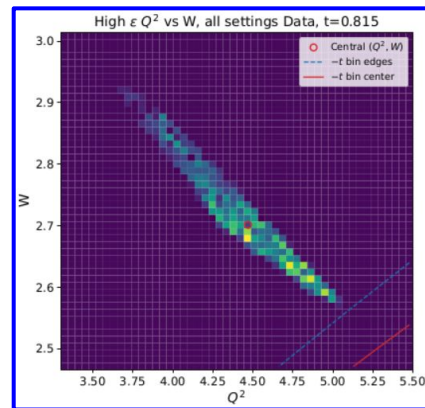
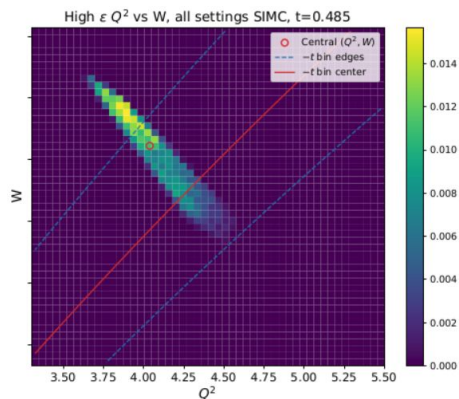
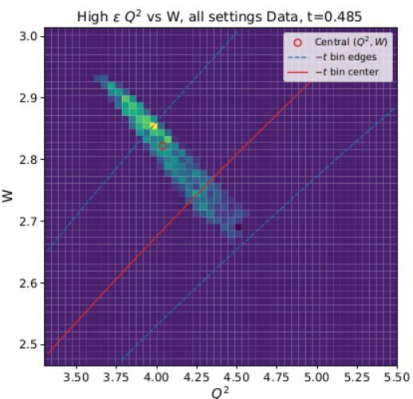


# Forward Kinematic Limit

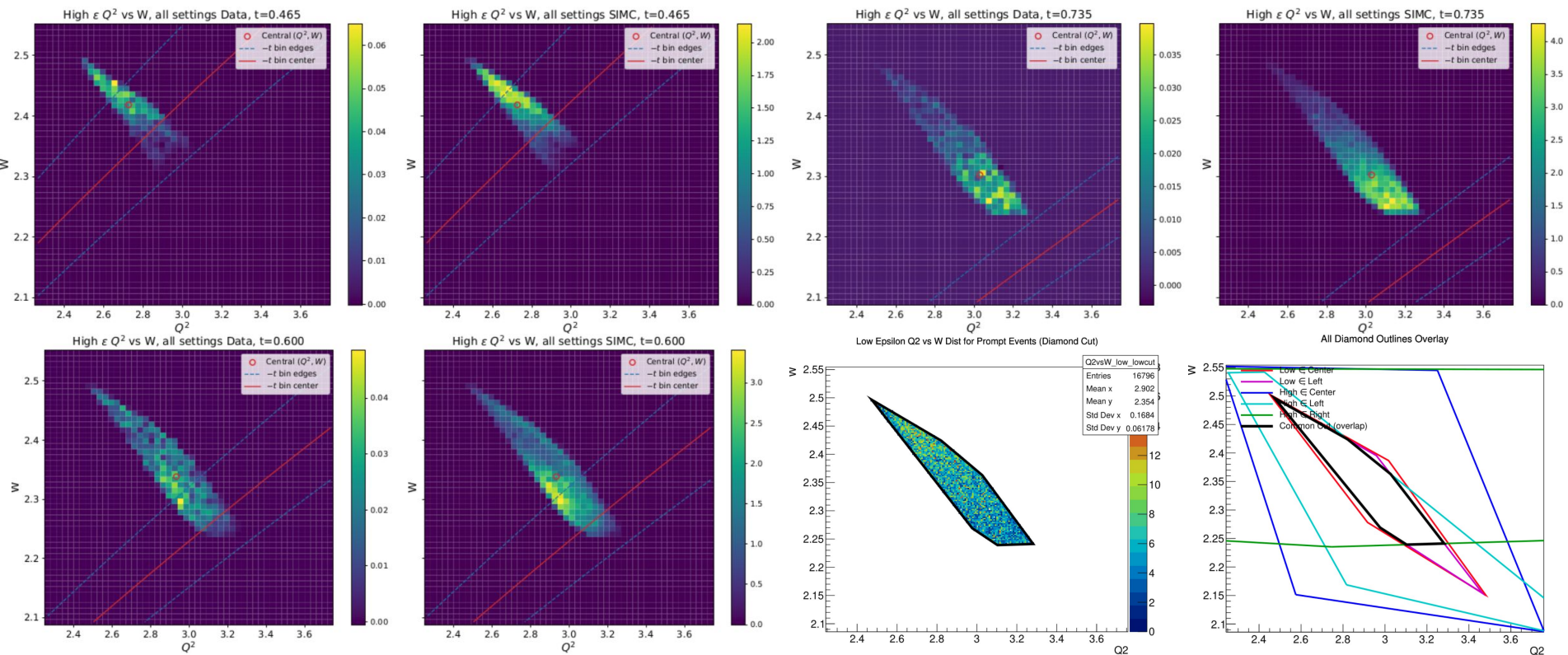
- Each panel shows the accepted  $Q^2$ -vs- $W$  phase space for one selected  $t$ -bin
  - The diamond is the actual event population in that  $t$ -bin after cuts
- The diagonal guide lines are not event boundaries.
- The diagonal lines show where the chosen  $-t$  bin edge or center would occur for forward CM production (*i.e.*,  $\theta=0$ )
- Comparing the diamond to the lines tells us how far the accepted events are from the forward kinematic limit



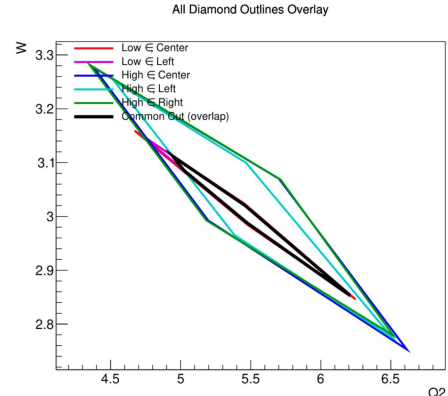
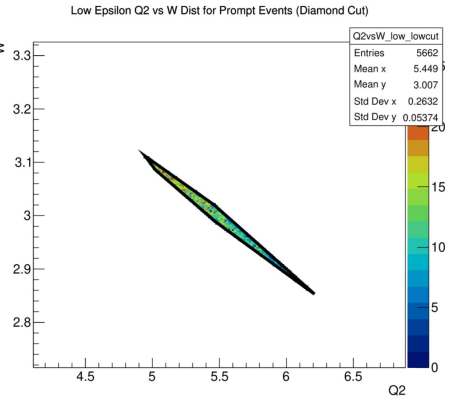
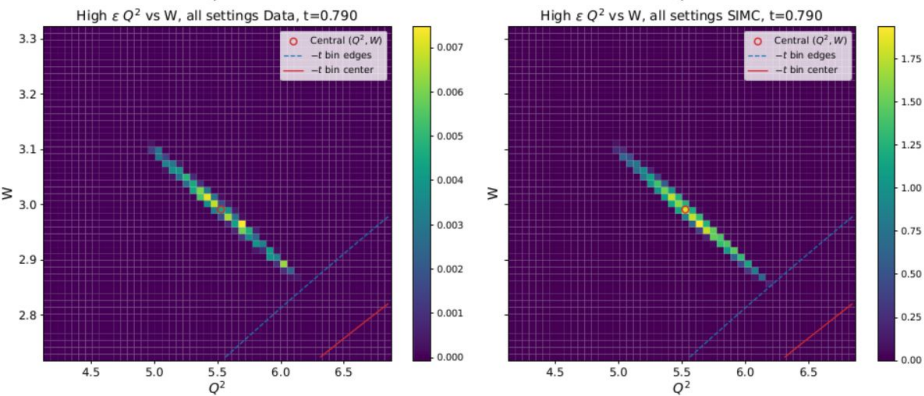
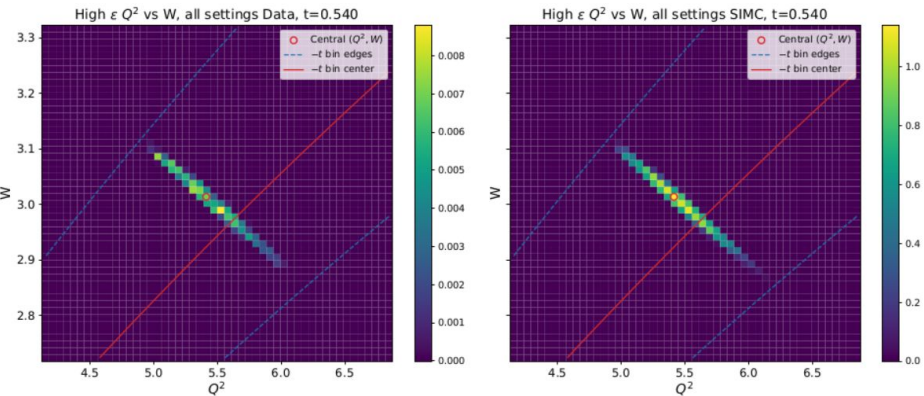
# Q2=4.4, W=2.74



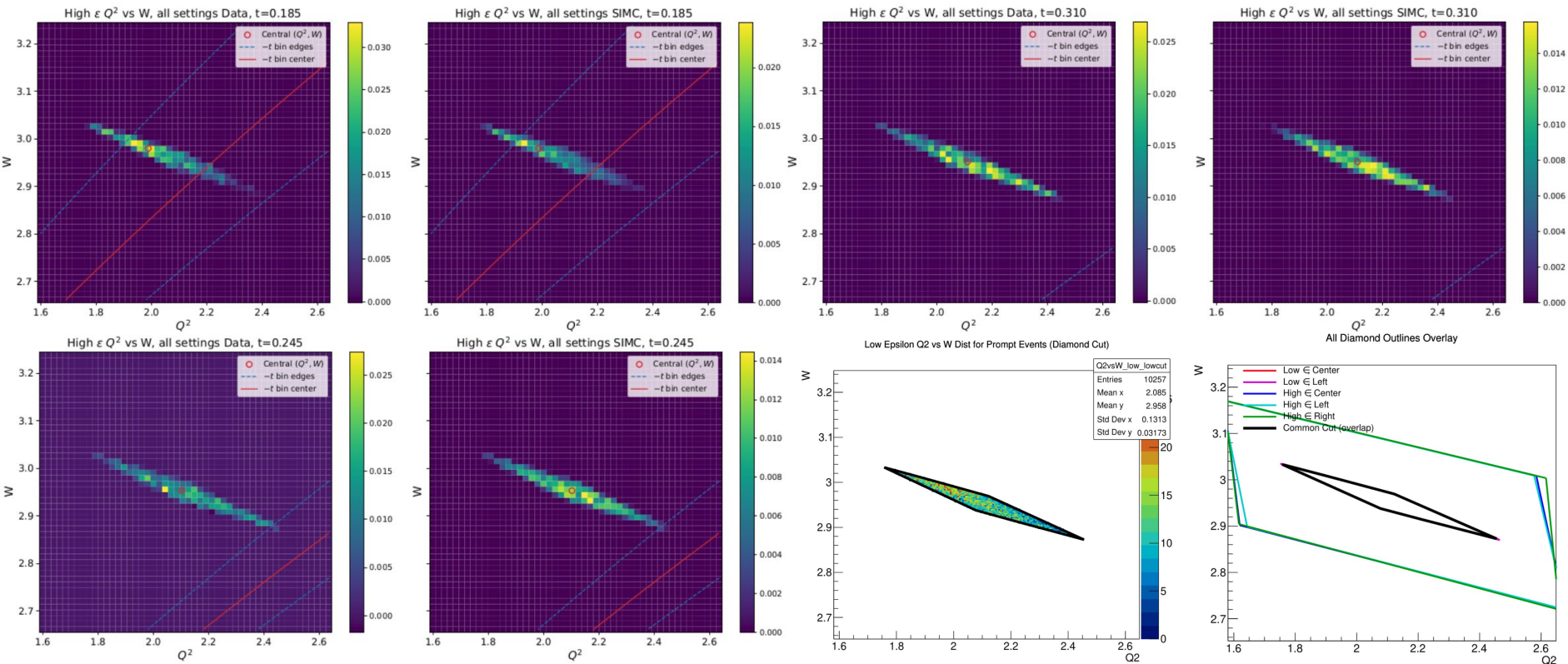
# Q2=3.0, W=2.32



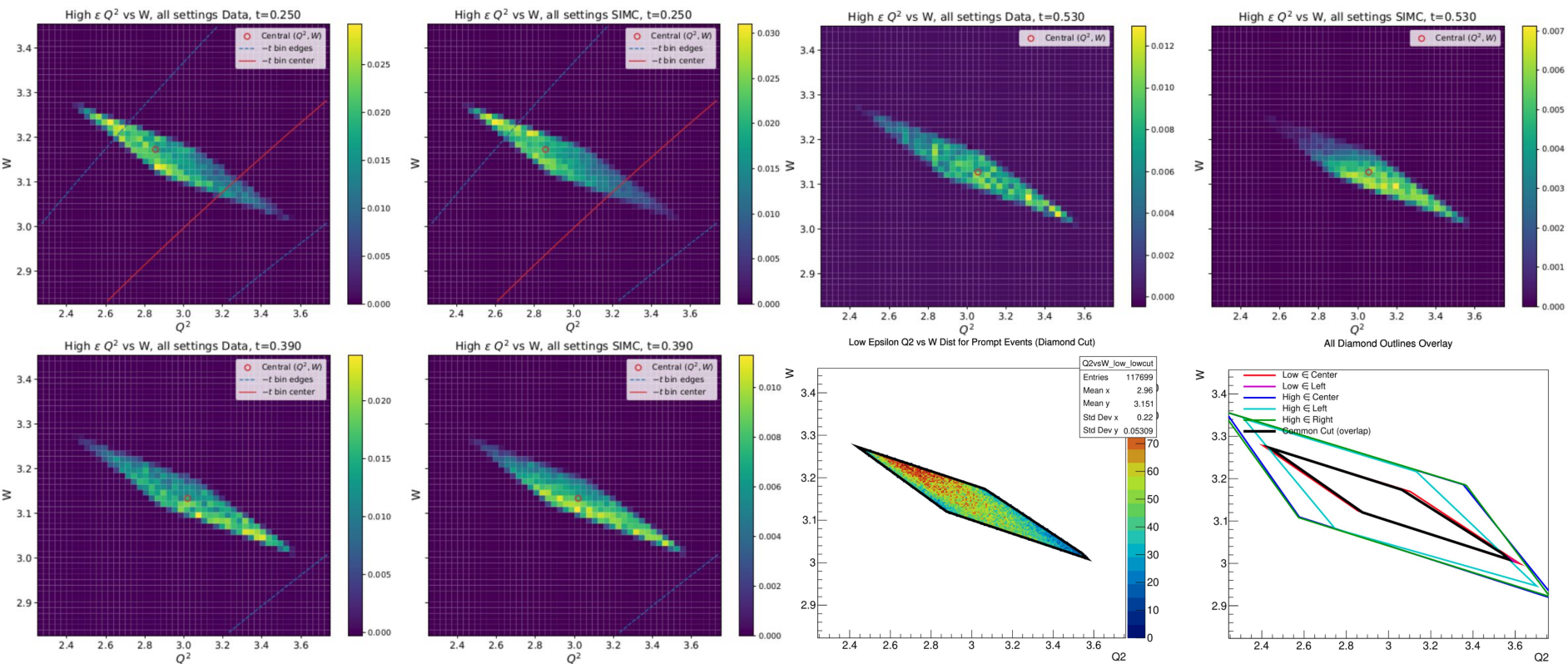
# Q2=5.5, W=3.02



# Q2=2.115, W=2.95



# Q2=3.0, W=3.14



EXTRA