

# KaonLT Meeting

May 28-29<sup>th</sup>, 2026

Richard L. Trotta

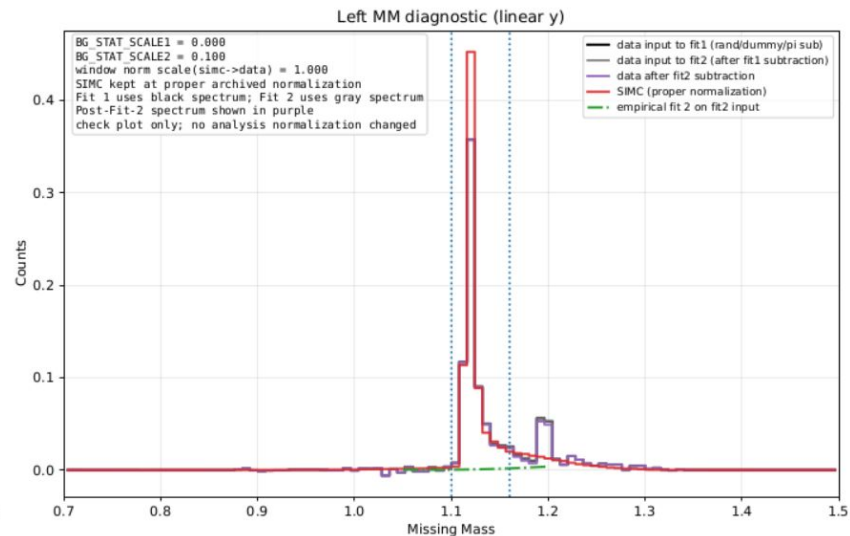
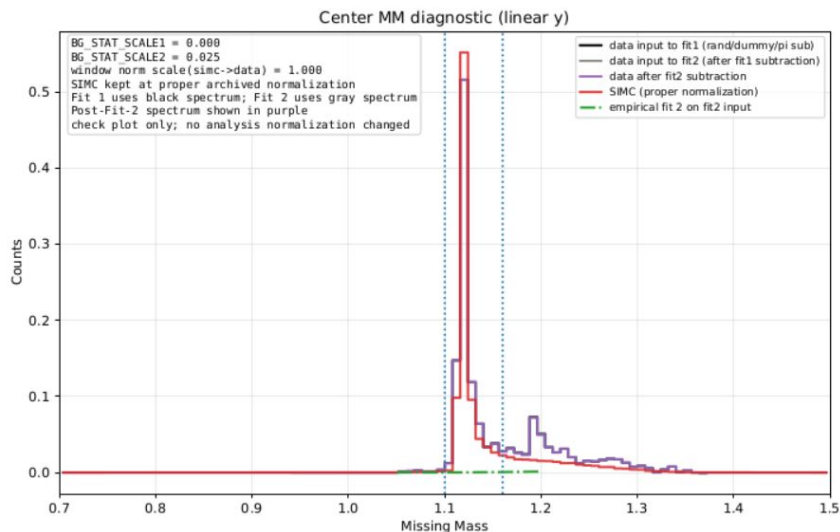
# Q2=3.0, W=2.32

# Iteration 0

```
BG_OPT_METRIC_WEIGHTS = {  
  "kinematic_score": 0.5,  
  "ratio_rms": 0.25,  
  "ratio_mean_dev": 0.15,  
  "ratio_fail_count": 0.05,  
  "valid_ratio_bins": 0.05,  
}
```

rank	sel	bins	fail	mean_dev	rms	kin	valid	score
1	*	3t x 8phi	1	0.0729	0.3112	0.3047	34	0.2313
2		4t x 8phi	0	0.0503	0.4776	0.3541	42	0.3416
3		4t x 9phi	1	0.0656	0.4709	0.4490	45	0.7899
4		3t x 9phi	0	0.0761	0.5761	0.4128	37	0.8110

Low  $\epsilon$



# Q2=3.0, W=2.32

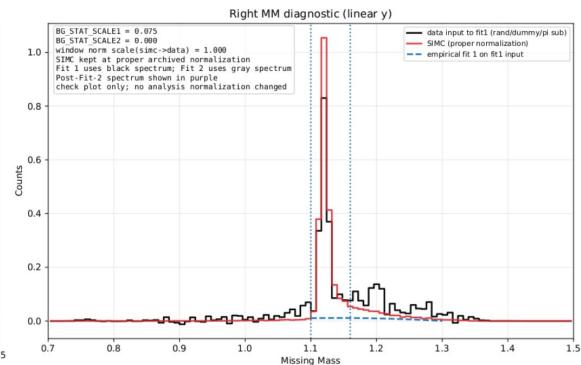
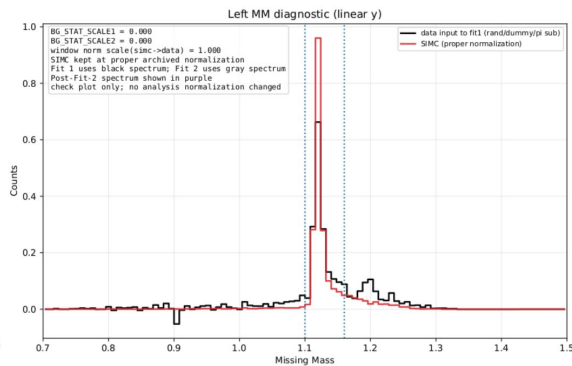
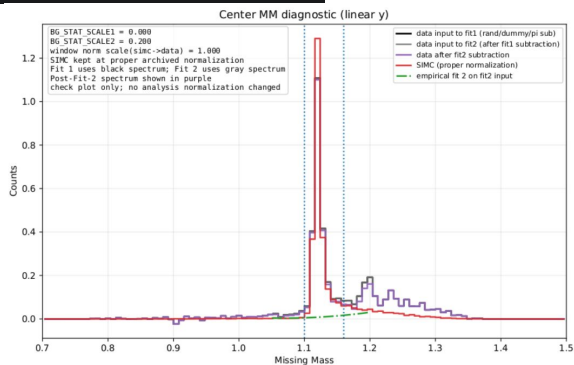
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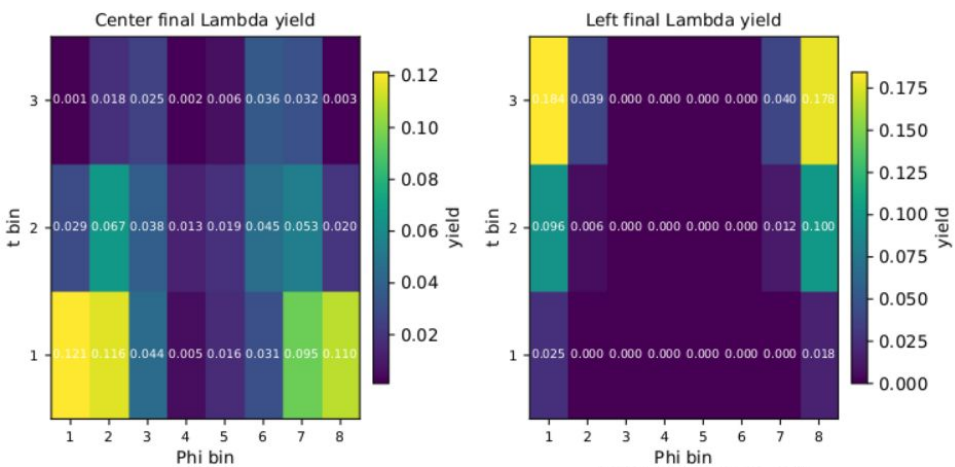
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High  $\epsilon$



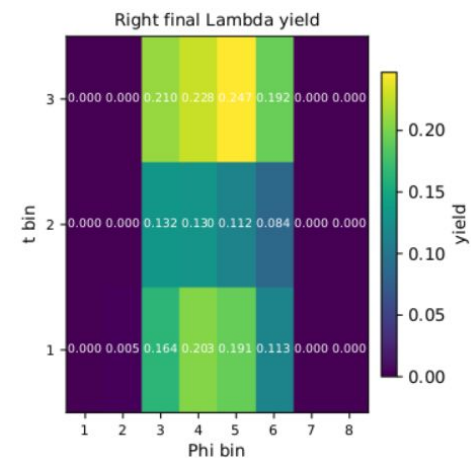
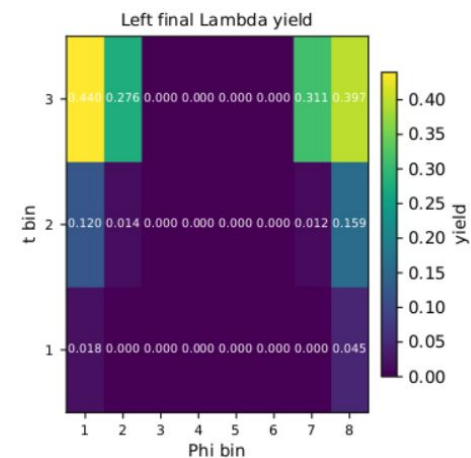
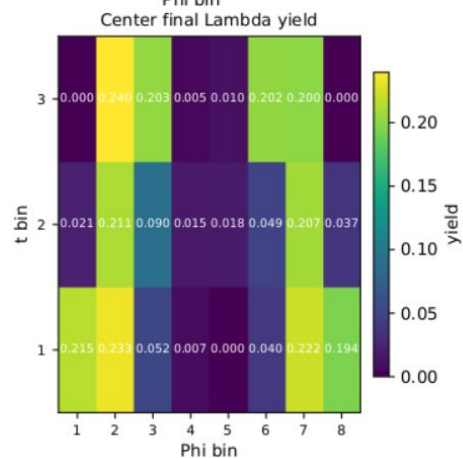
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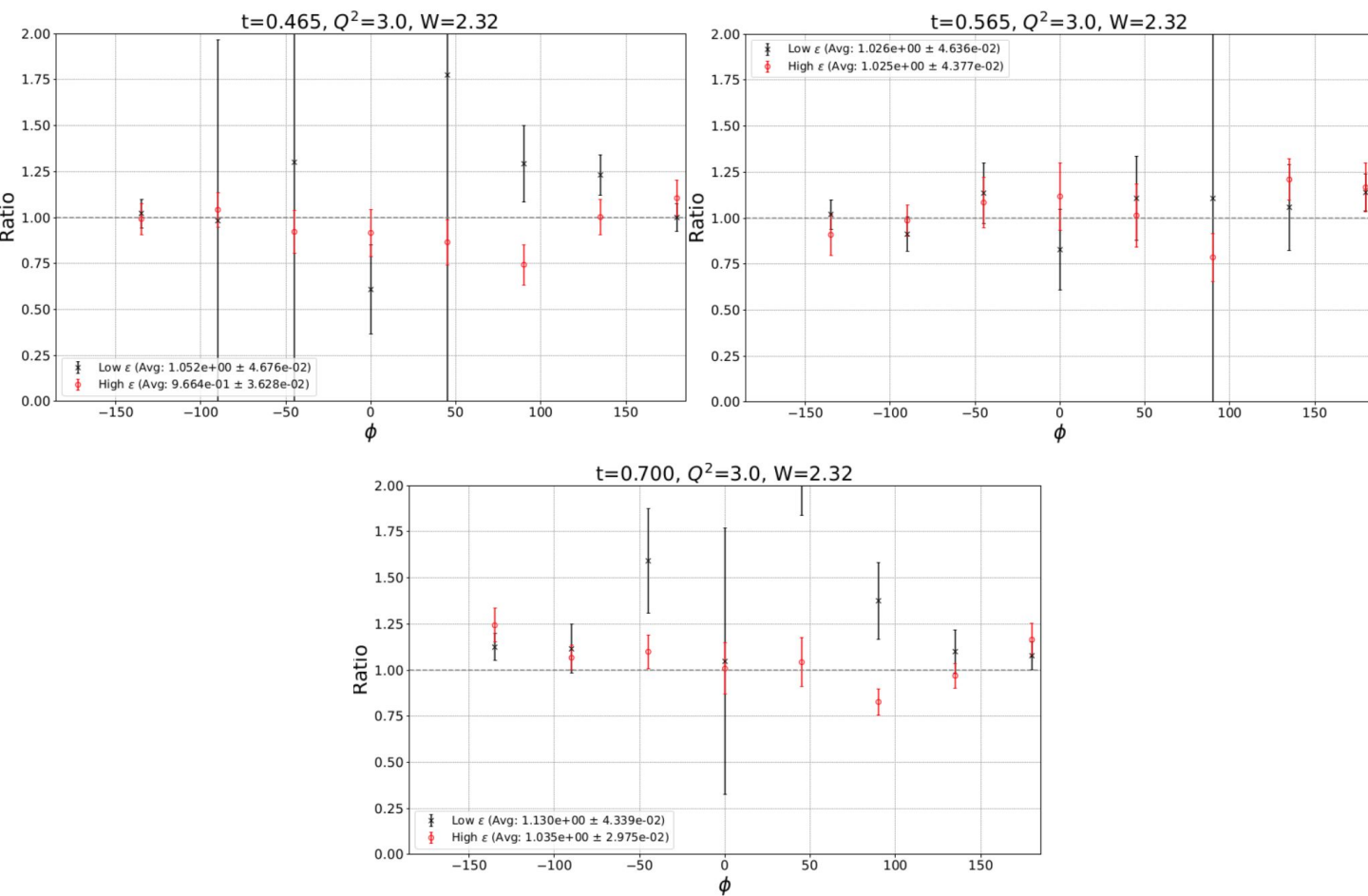
## Low $\epsilon$

## High $\epsilon$



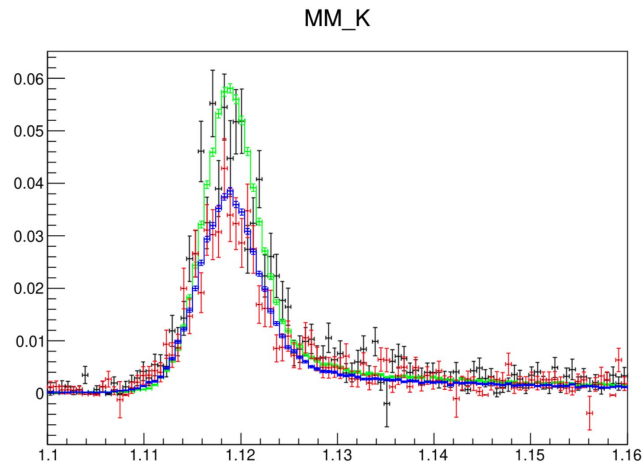
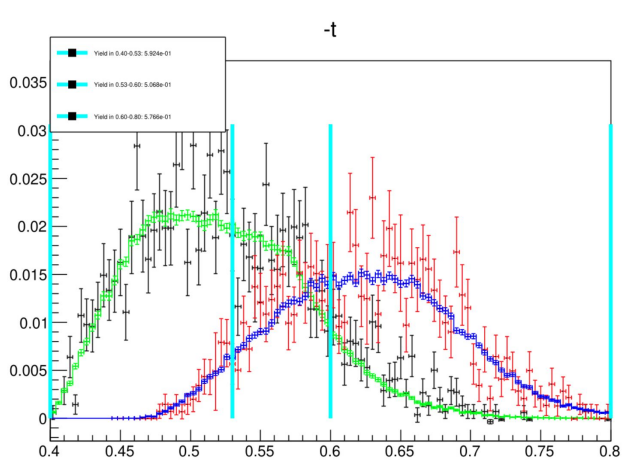
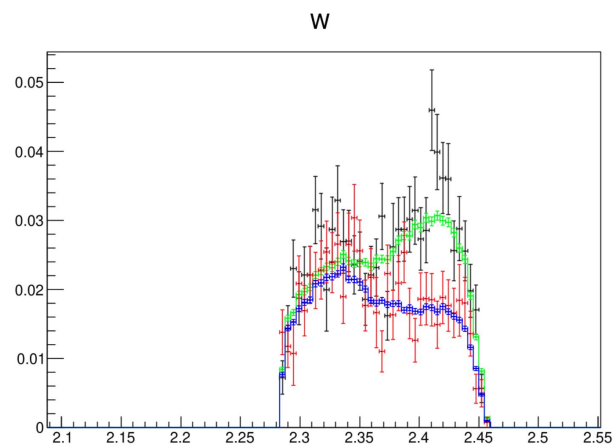
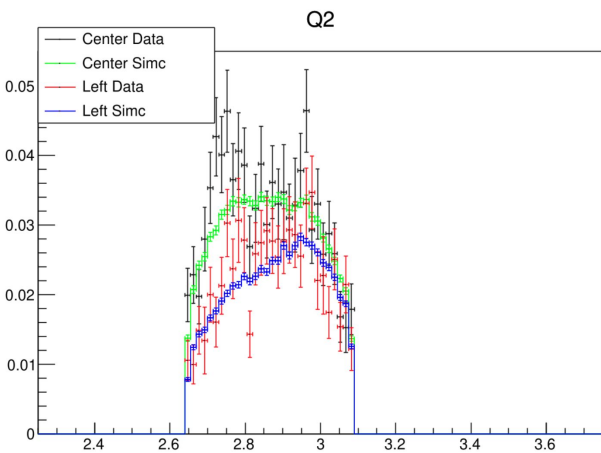
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# Iteration 1



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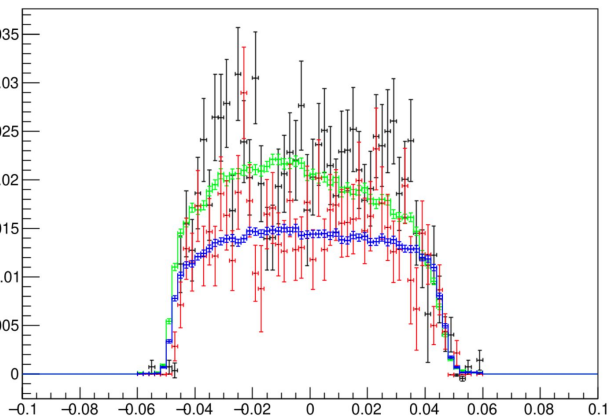
# Iteration 1



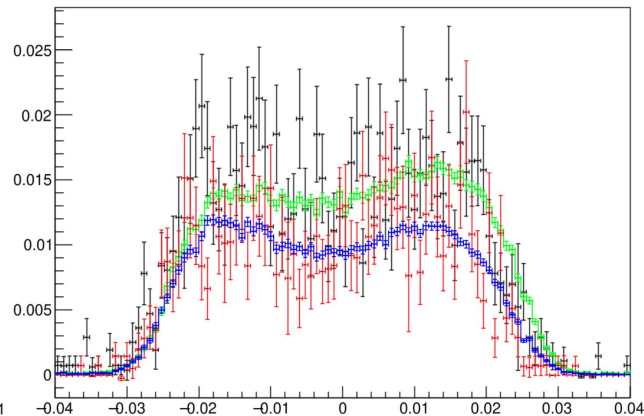
# Q2=3.0, W=2.32

# Iteration 1

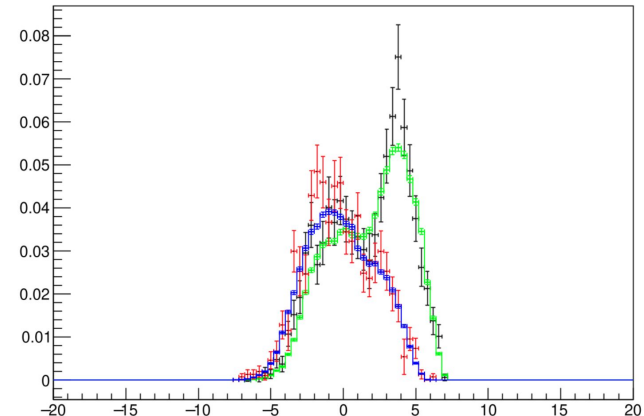
SHMS xptar



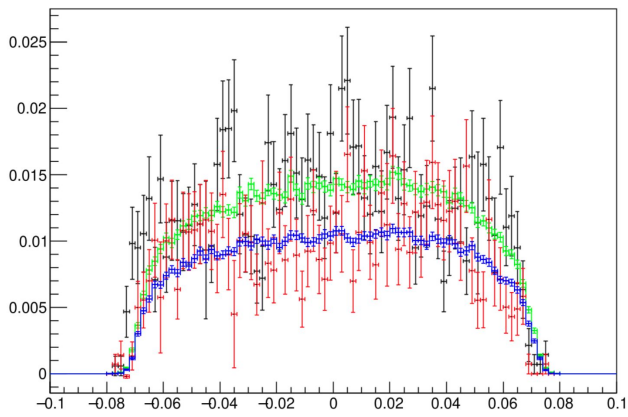
SHMS yptar



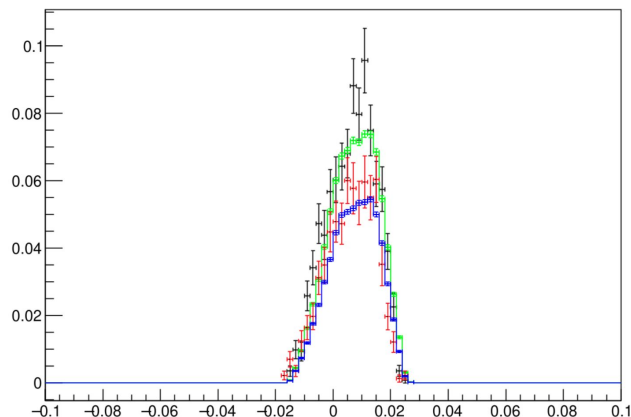
SHMS delta



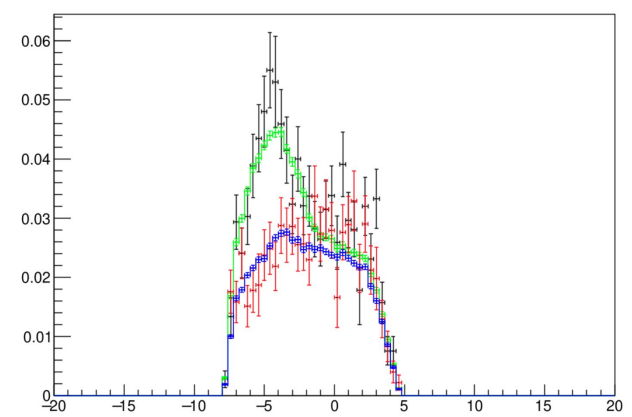
HMS xptar



HMS yptar

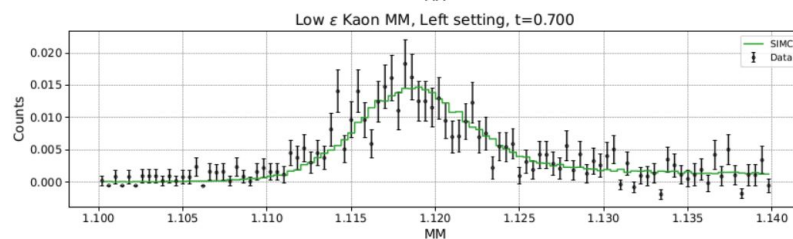
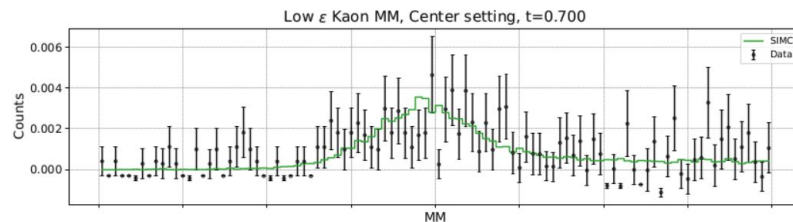
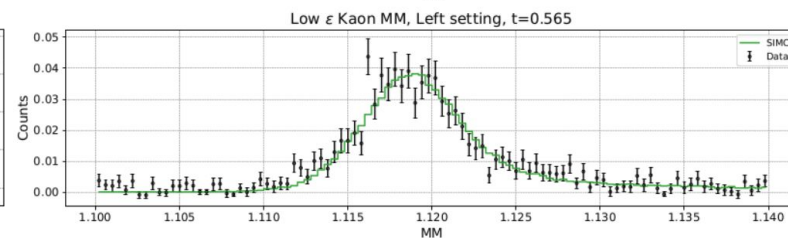
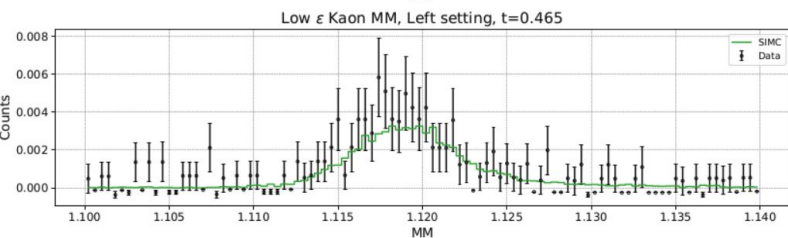
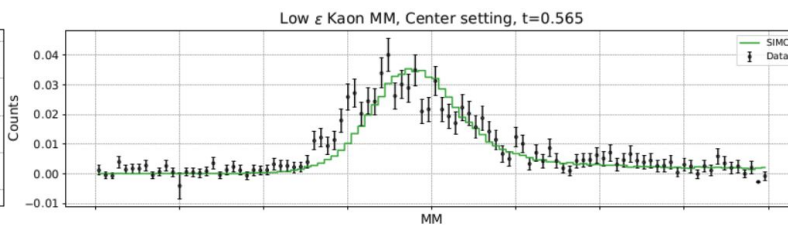
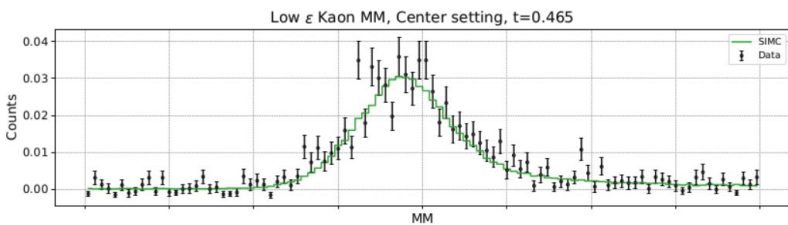


HMS Delta



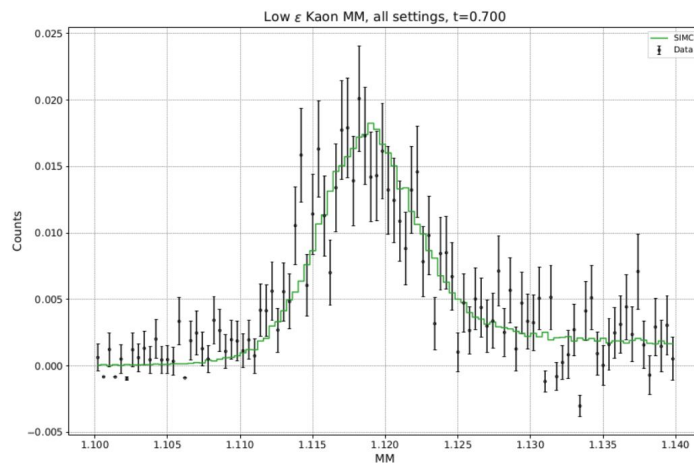
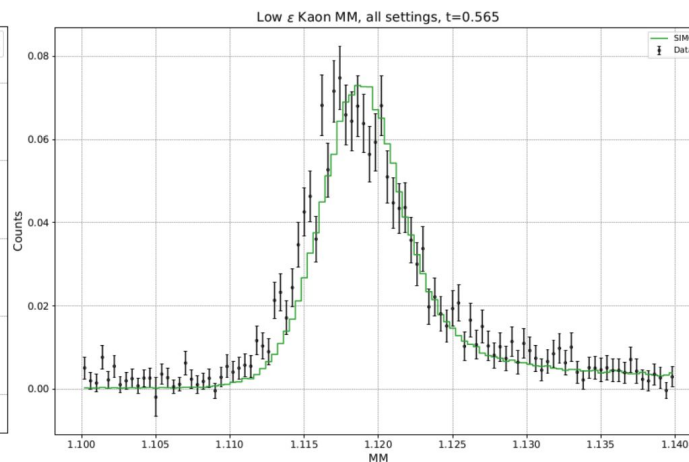
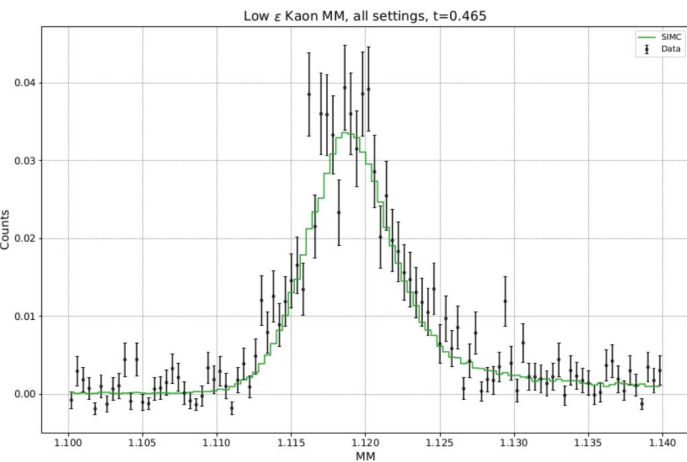
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# Iteration 1



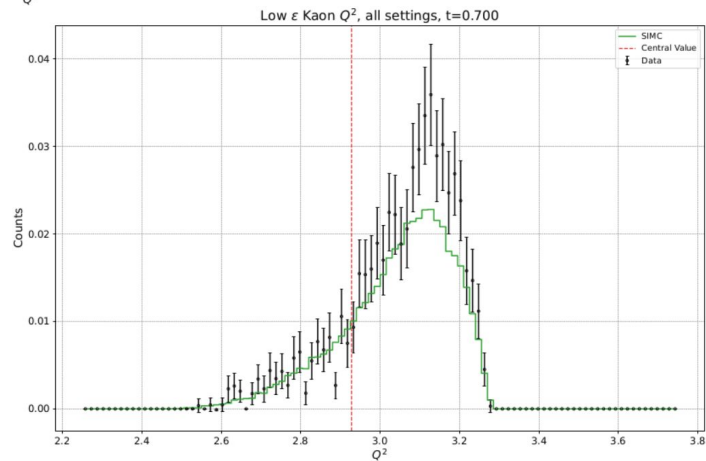
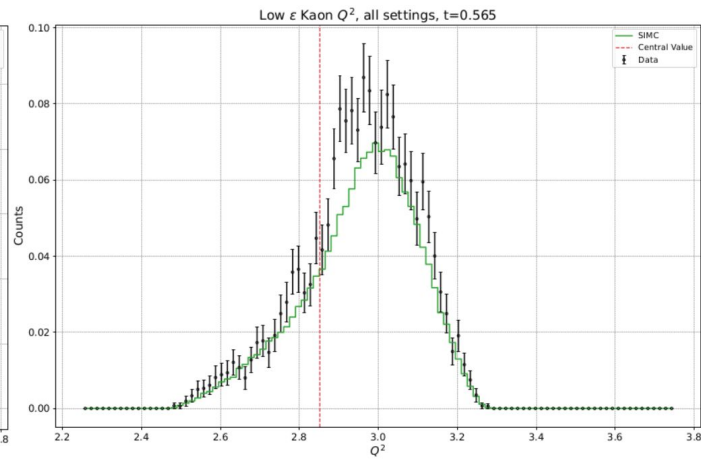
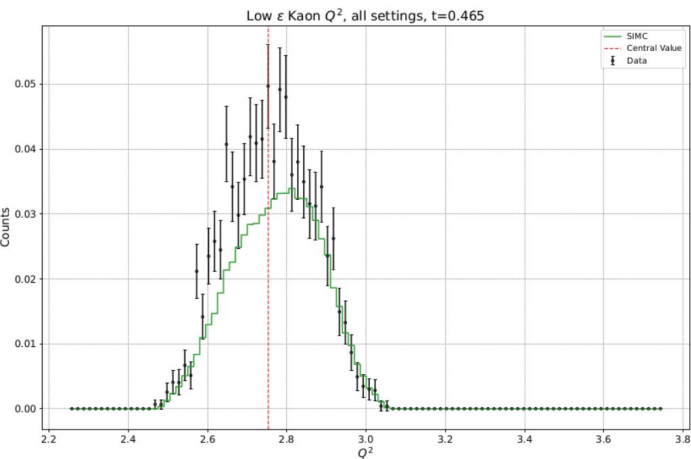
# Q2=3.0, W=2.32

# Iteration 1



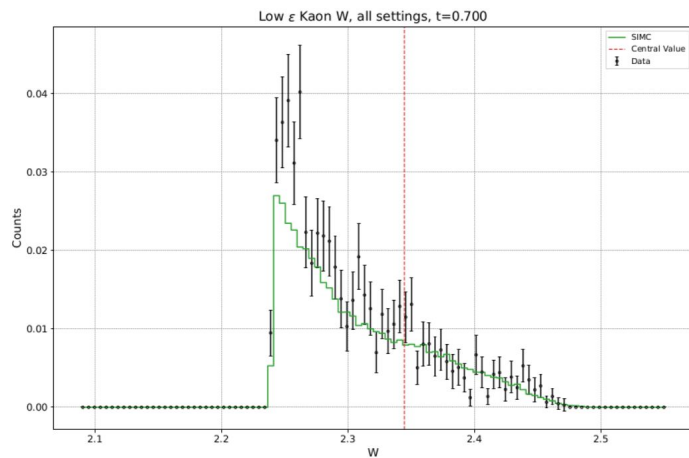
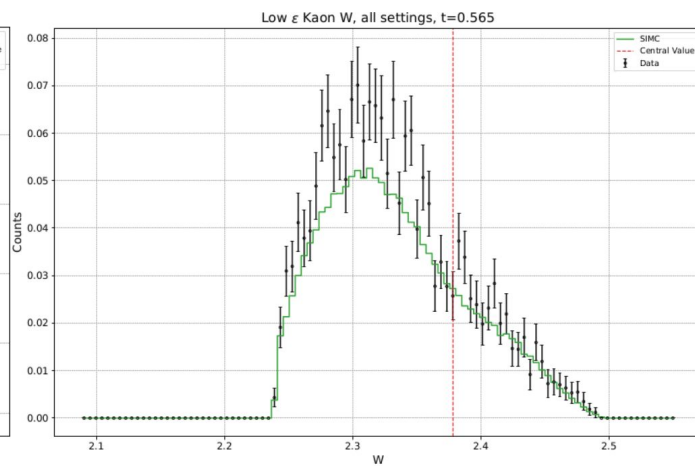
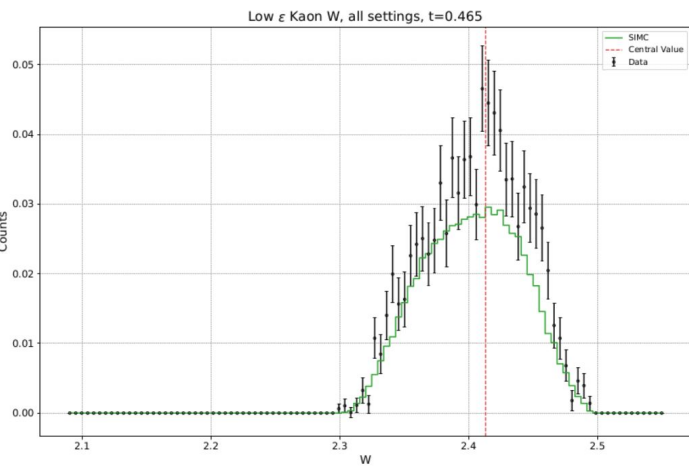
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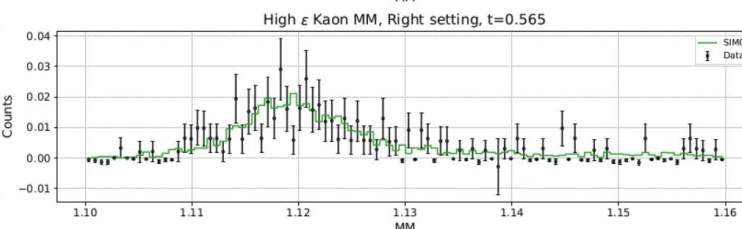
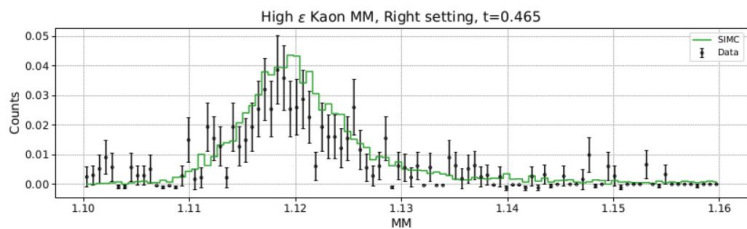
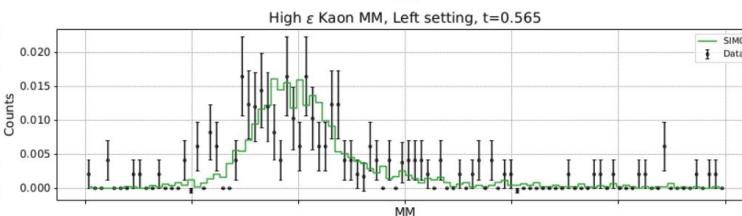
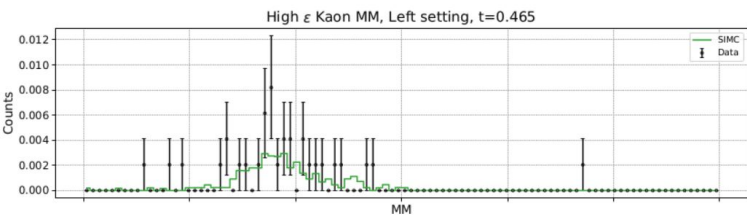
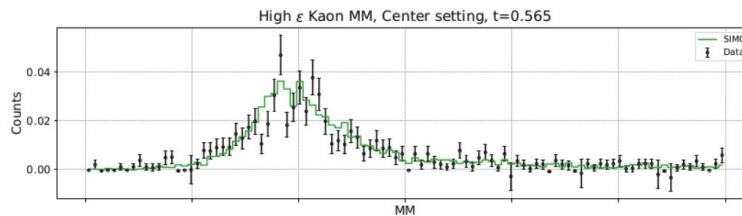
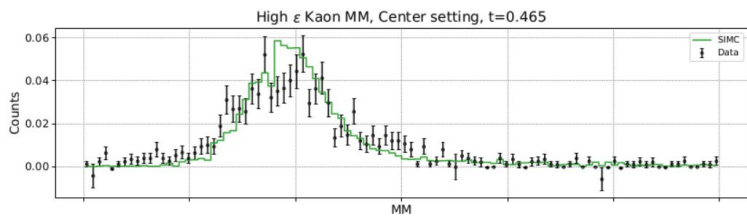
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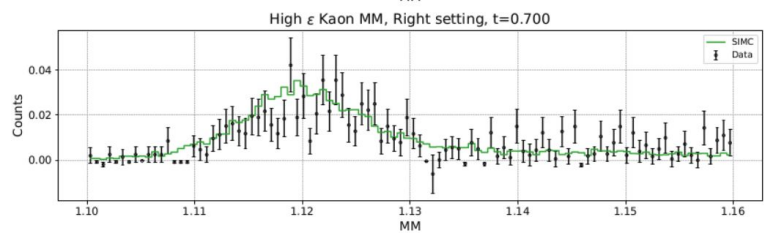
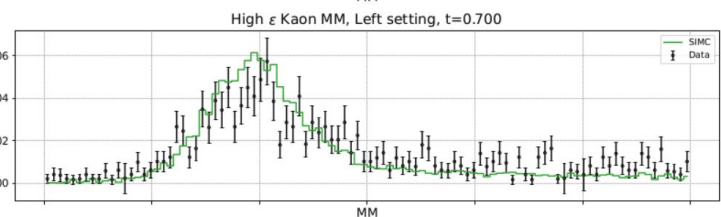
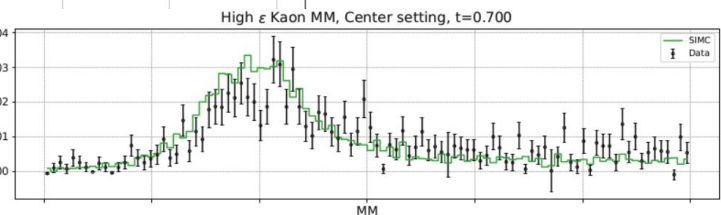
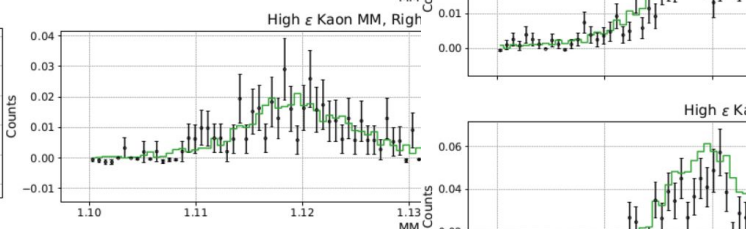
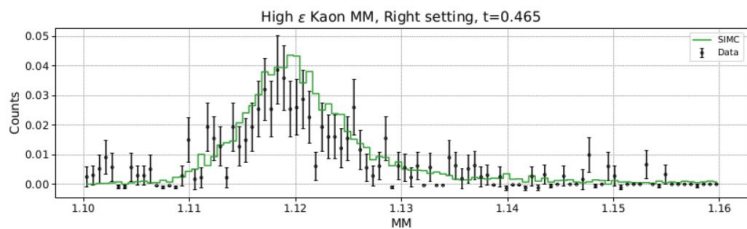
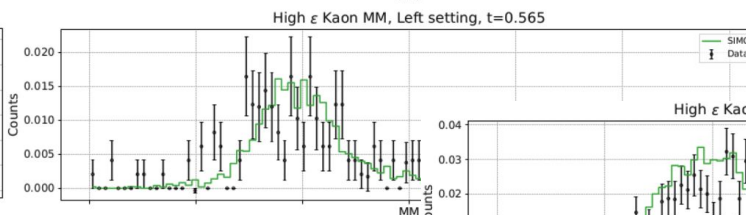
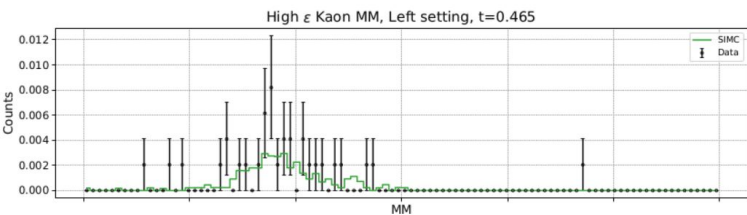
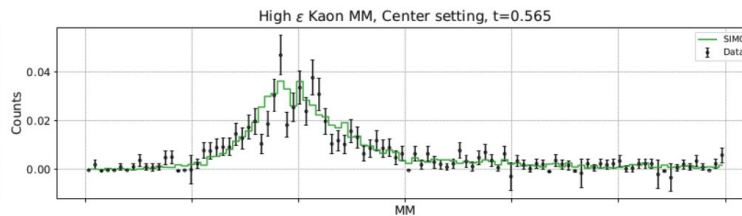
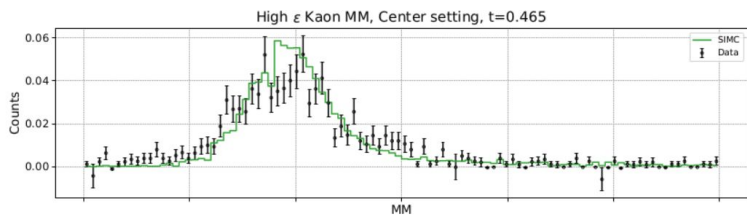
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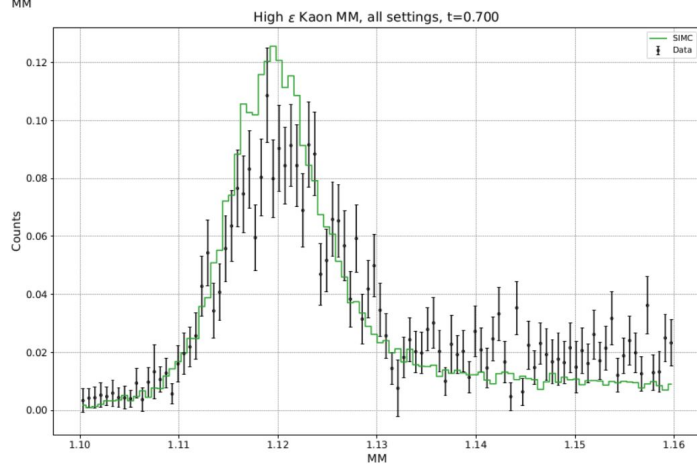
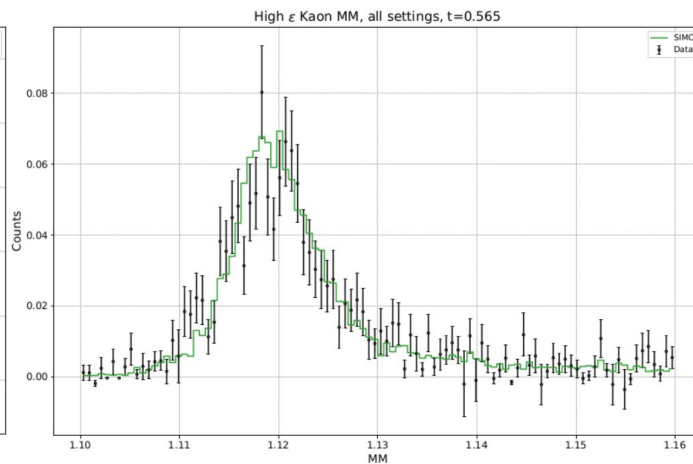
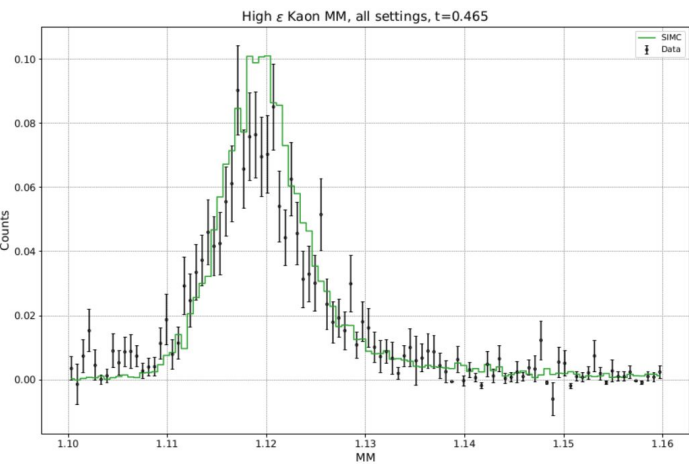
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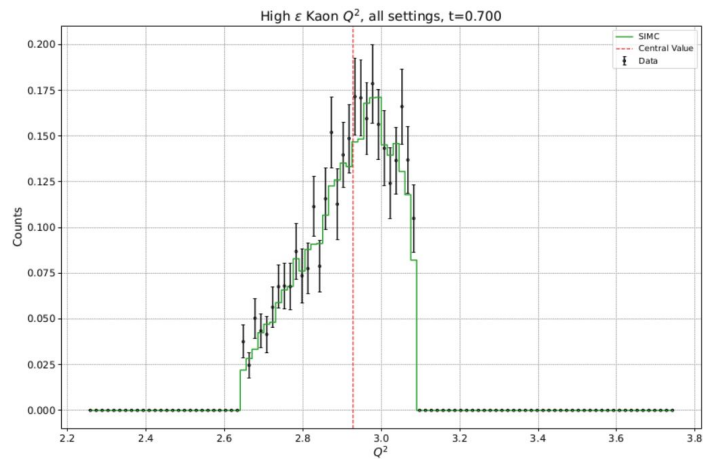
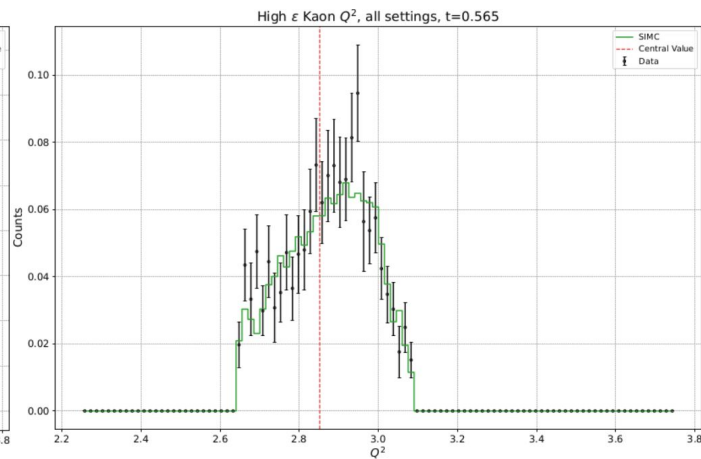
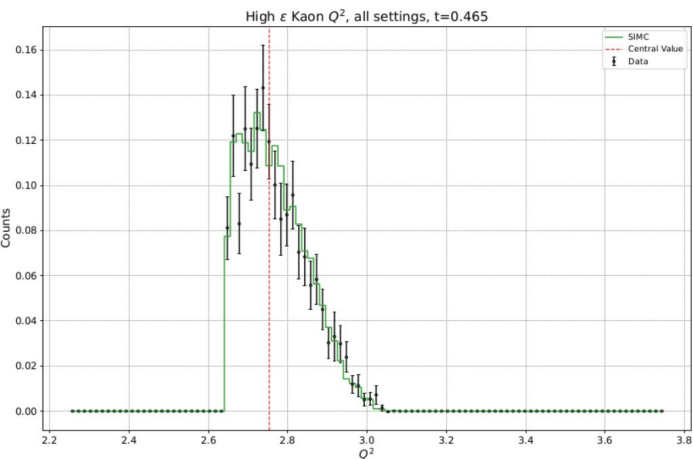
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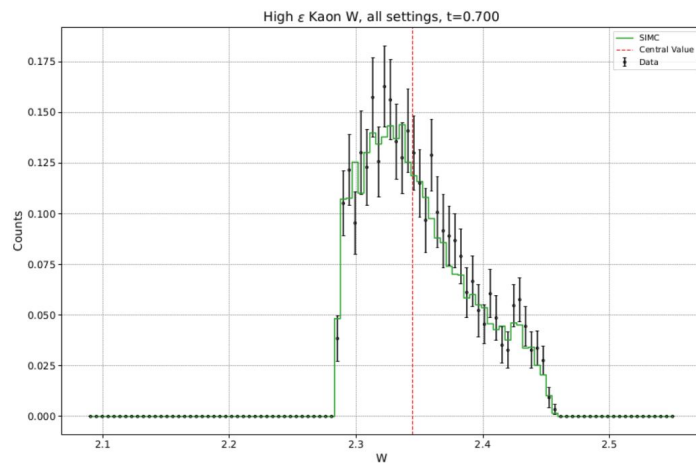
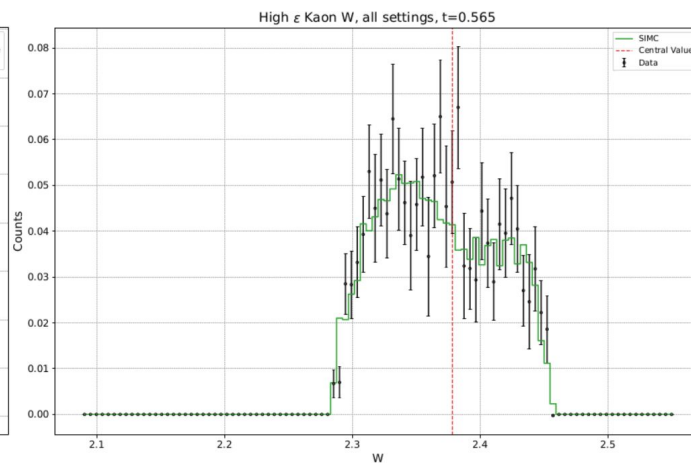
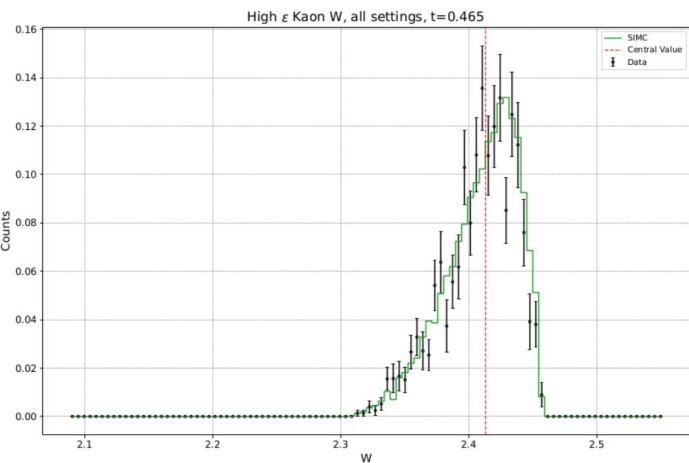
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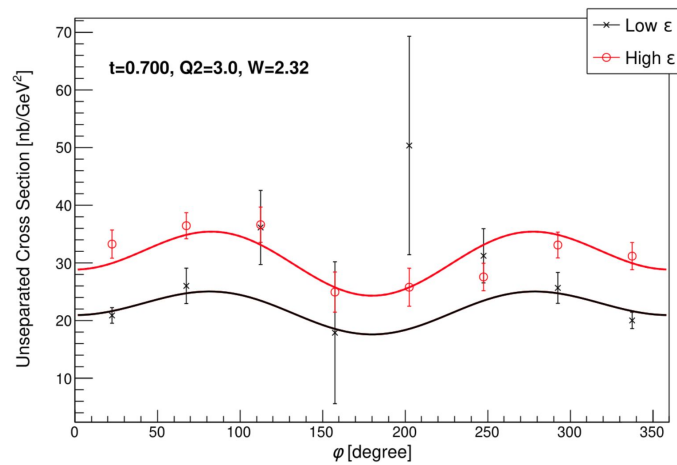
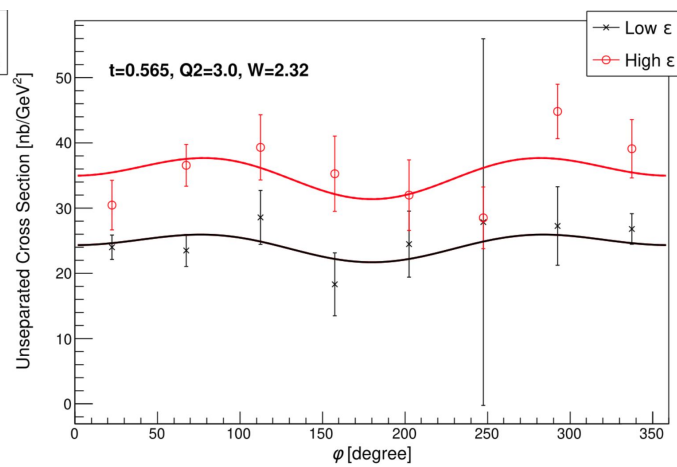
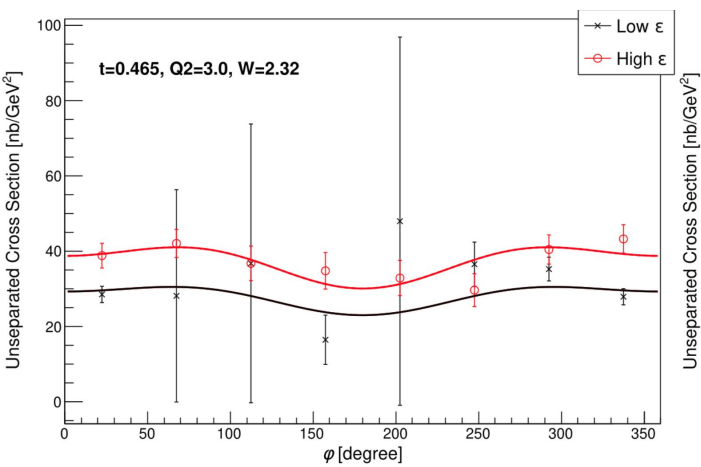
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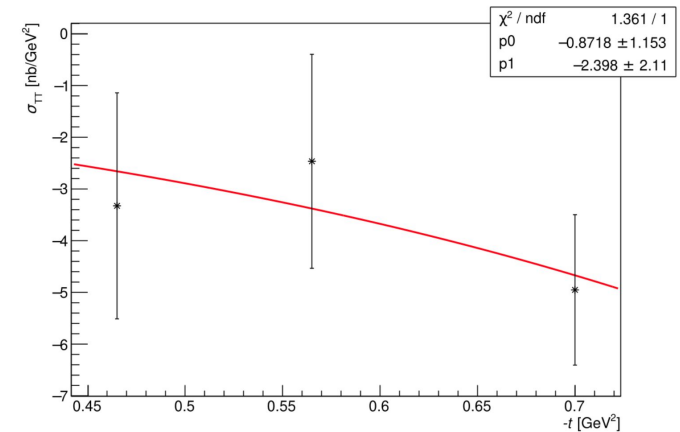
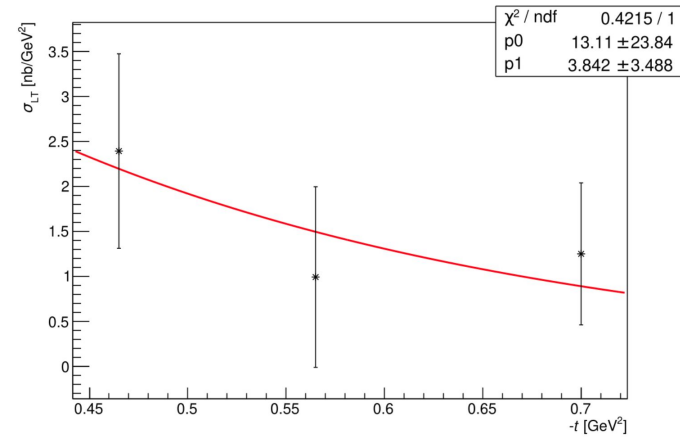
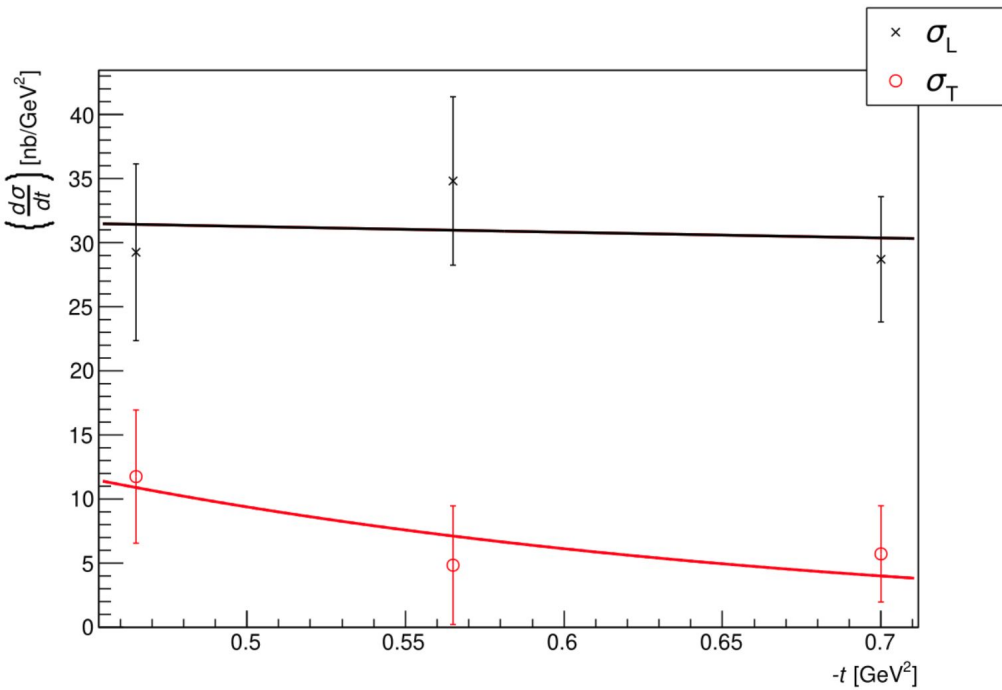
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# Iteration 1



EXTRA