

# Binning II

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University of Regina

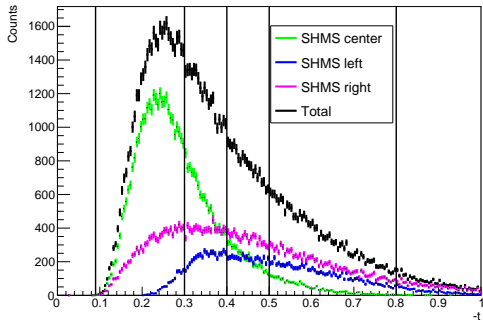
KaonLT Experiment, Jefferson Lab Hall C

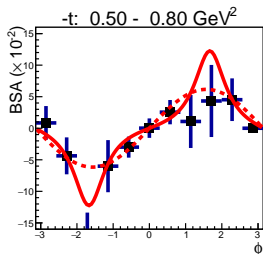
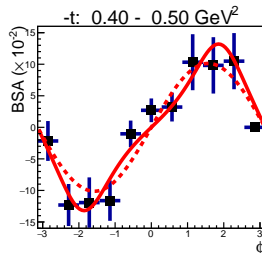
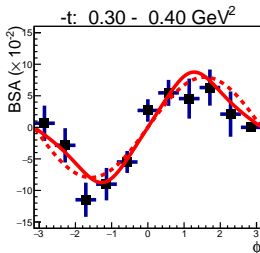
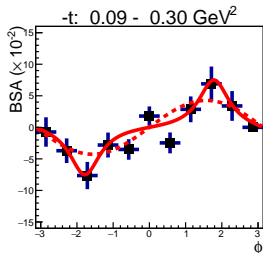


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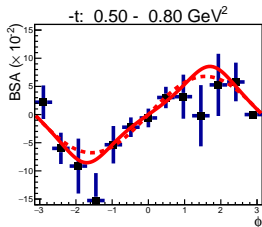
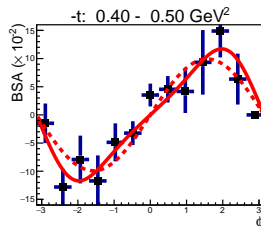
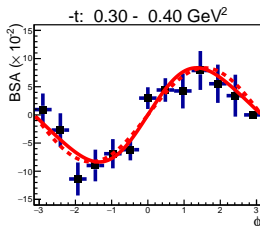
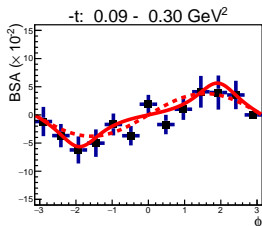


| $-t$ low | $-t$ high | nEvents |
|----------|-----------|---------|
| .09      | .30       | 40057   |
| .30      | .40       | 24218   |
| .40      | .50       | 15967   |
| .50      | .80       | 21079   |





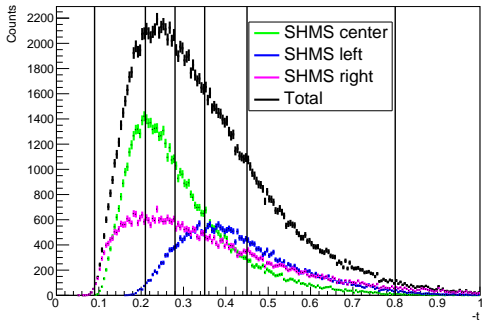
- - -  $A \sin\phi$   
—  $\frac{A \sin\phi}{1 + B \cos\phi + C \cos 2\phi}$   
 $A \propto \frac{\sigma_{LT}}{\sigma_0}$

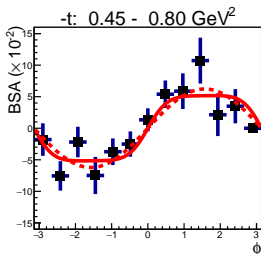
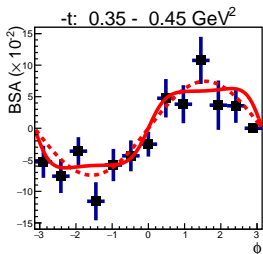
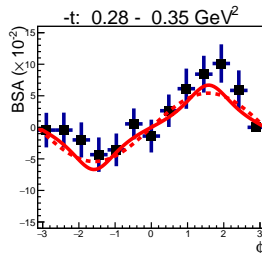
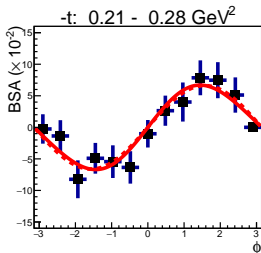
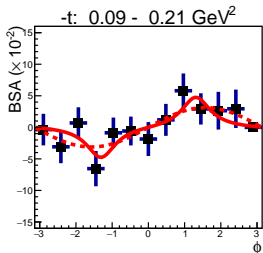


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 $A \propto \frac{\sigma_{LT}}{\sigma_0}$

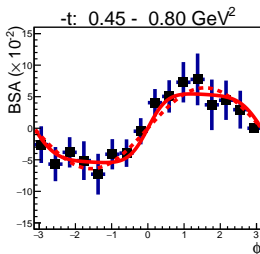
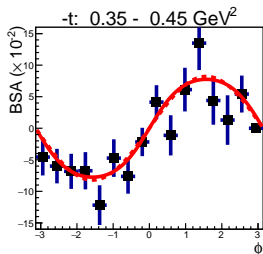
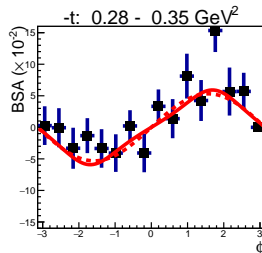
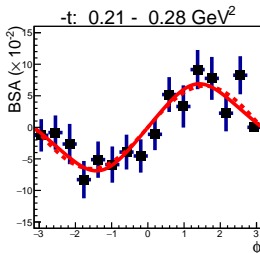
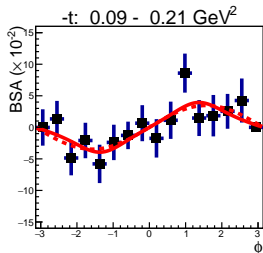


| $-t$ low | $-t$ high | nEvents |
|----------|-----------|---------|
| .09      | .21       | 27135   |
| .21      | .28       | 29370   |
| .28      | .35       | 25921   |
| .35      | .45       | 27393   |
| .45      | .80       | 31107   |





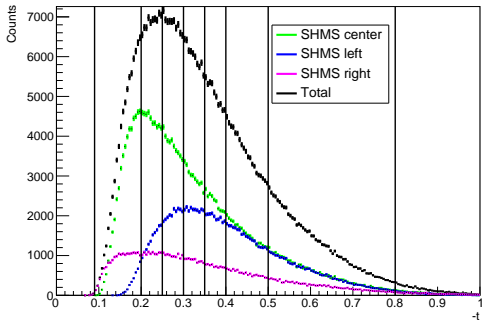
---  $A \sin \phi$   
—  $\frac{A \sin \phi}{1 + B \cos \phi + C \cos 2 \phi}$   
 $A \propto \frac{\sigma_{LT}}{\sigma_0}$



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—  $\frac{A \sin \phi}{1 + B \cos \phi + C \cos 2 \phi}$ 
  
 $A \propto \frac{\sigma_{LT}}{\sigma_0}$

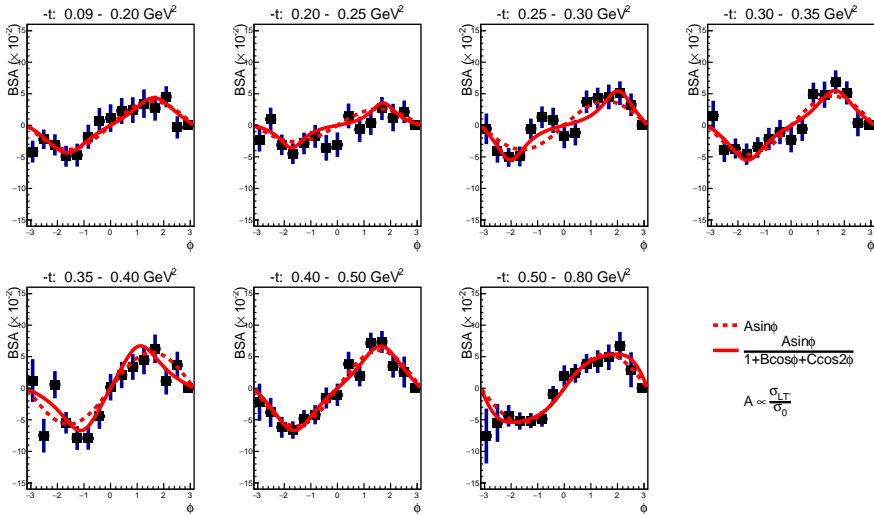


| $-t$ low | $-t$ high | nEvents |
|----------|-----------|---------|
| .09      | .20       | 68447   |
| .20      | .25       | 68206   |
| .25      | .30       | 68805   |
| .30      | .35       | 61558   |
| .35      | .40       | 51356   |
| .40      | .50       | 73545   |
| .50      | .80       | 76728   |



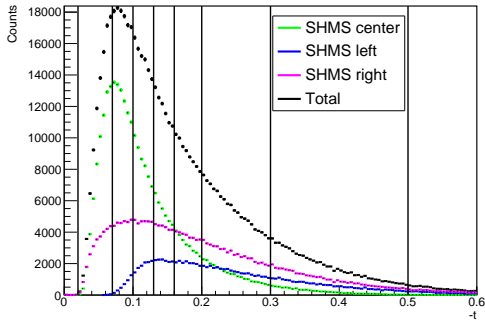


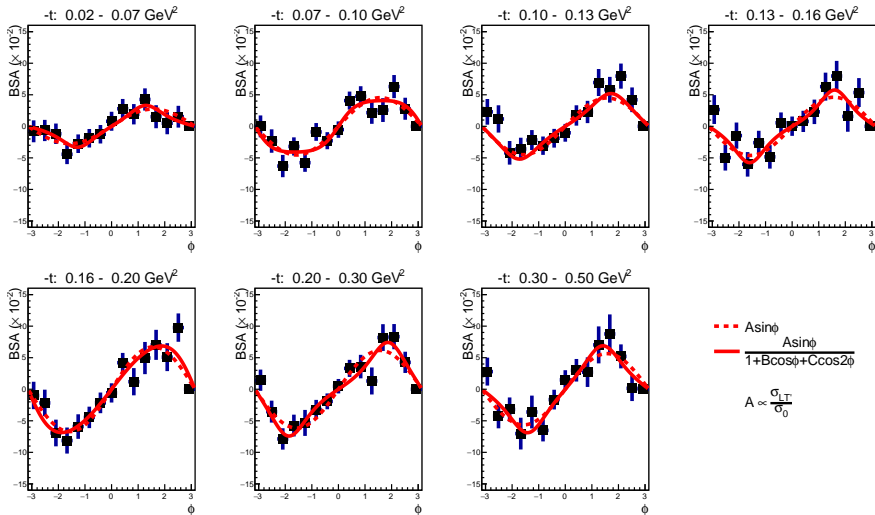
# Asymmetry 3, $W=2.32$



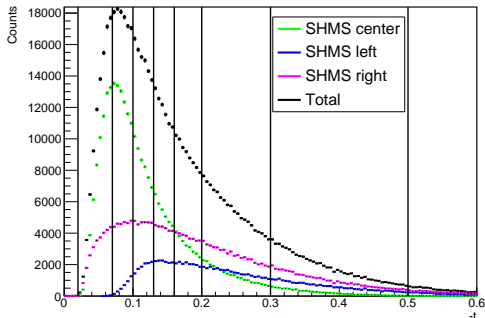


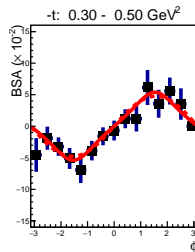
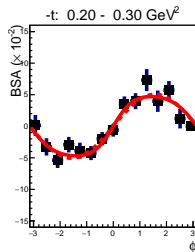
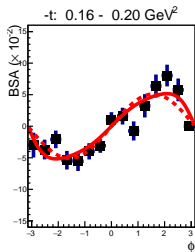
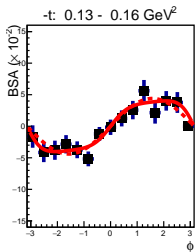
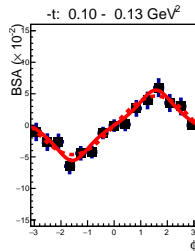
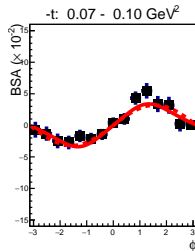
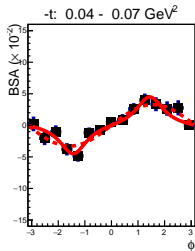
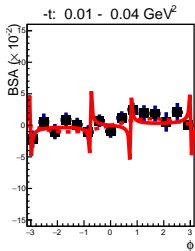
| $-t$ low | $-t$ high | nEvents |
|----------|-----------|---------|
| .02      | .07       | 79026   |
| .07      | .10       | 107049  |
| .10      | .13       | 93599   |
| .13      | .16       | 74210   |
| .16      | .20       | 75046   |
| .20      | .30       | 112835  |
| .30      | .50       | 73737   |



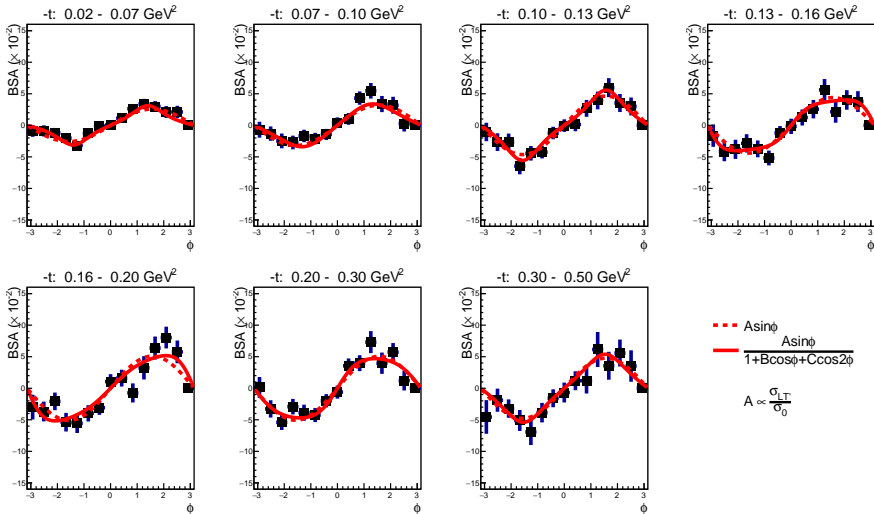


| $-t$ low | $-t$ high | nEvents |
|----------|-----------|---------|
| .01      | .04       | 111764  |
| .04      | .07       | 262033  |
| .07      | .10       | 235520  |
| .10      | .13       | 182392  |
| .13      | .16       | 135612  |
| .16      | .20       | 128410  |
| .20      | .30       | 168712  |
| .30      | .50       | 87300   |





# Asymmetry 2.1 - Combine bins 1+2





- Mean kinematics per bin:  $t$ ,  $Q^2$ ,  $W$ ,  $x_B$ ,  $\epsilon$
- Extract LT': weighted average?
- Theory curves: update with new kinematics? Not easy with VR model down