

KaonLT Analysis Update (Pi-Delta BSA Analysis)

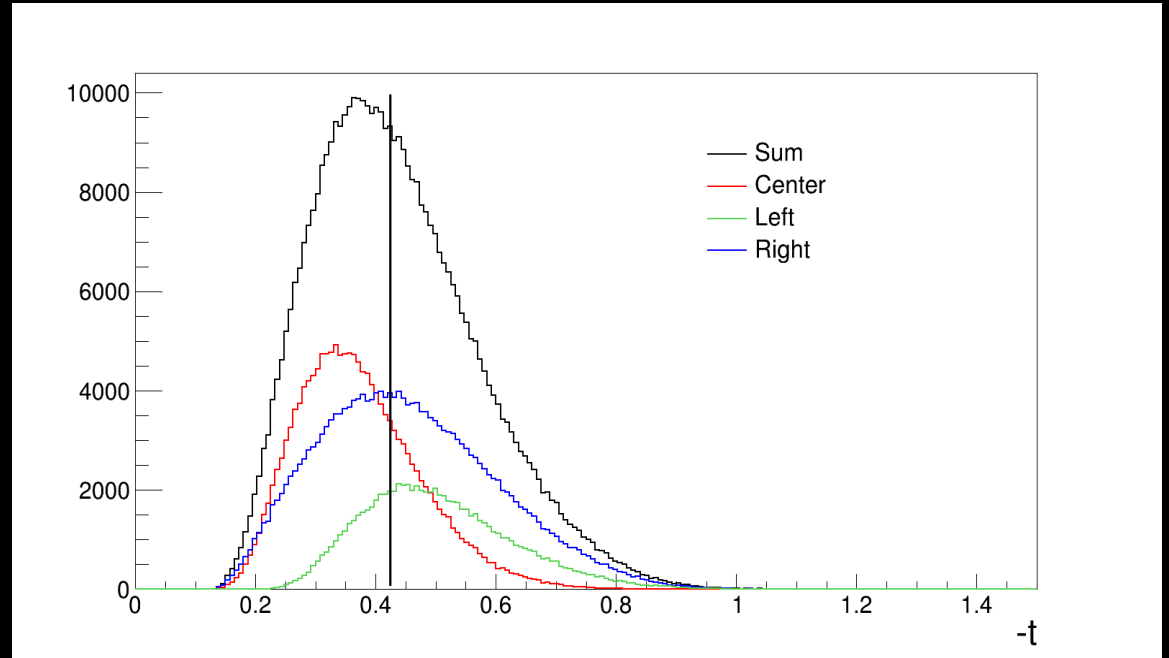
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Apr 04, 2024

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Q2 = 3.0, W = 3.14 (binning)

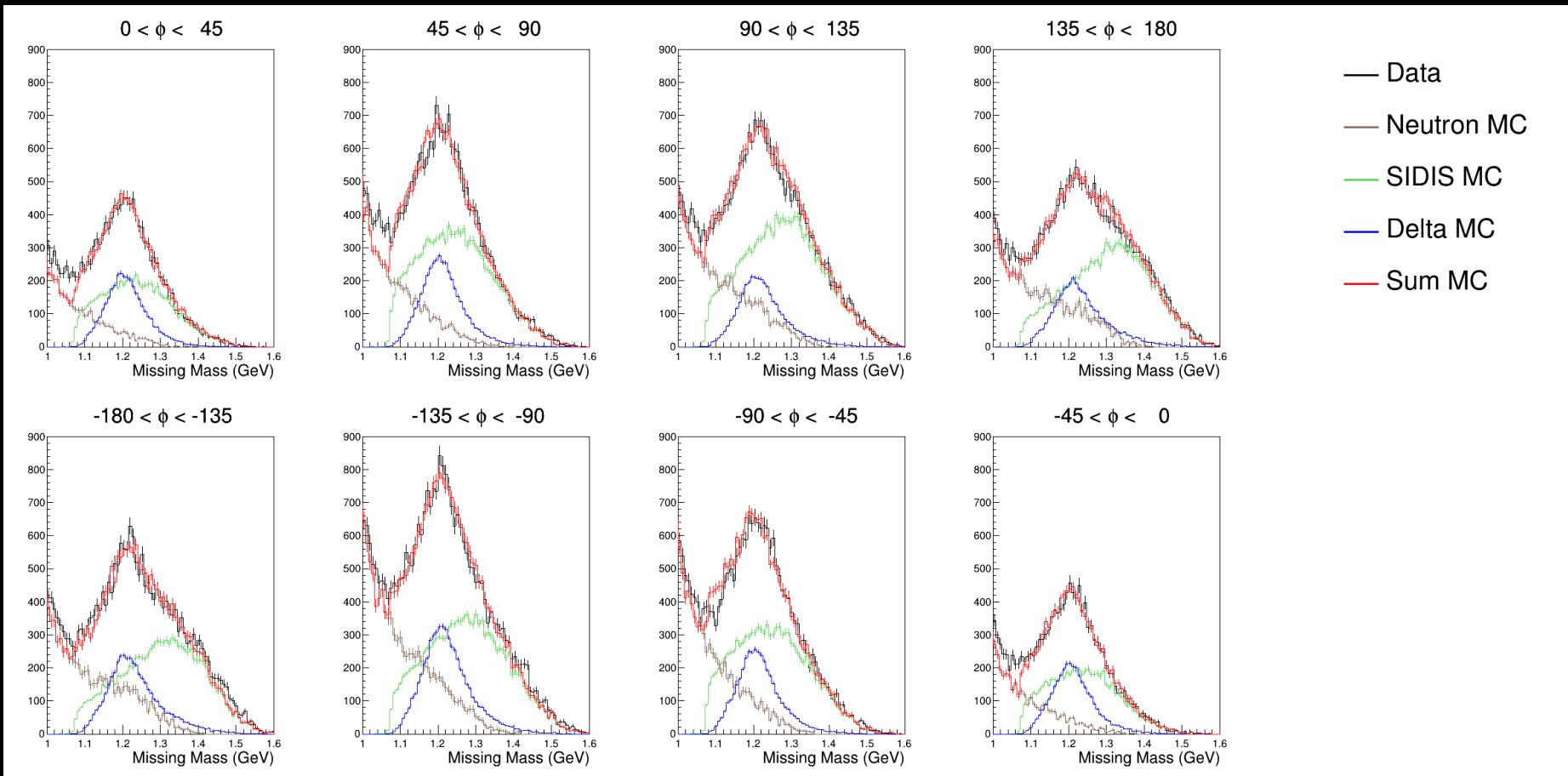
- High statistics setting.
 - 2 t bins
 - 8 ϕ bins
- Bin exclusions
 - Very low or no stats.
 - Fit fails.



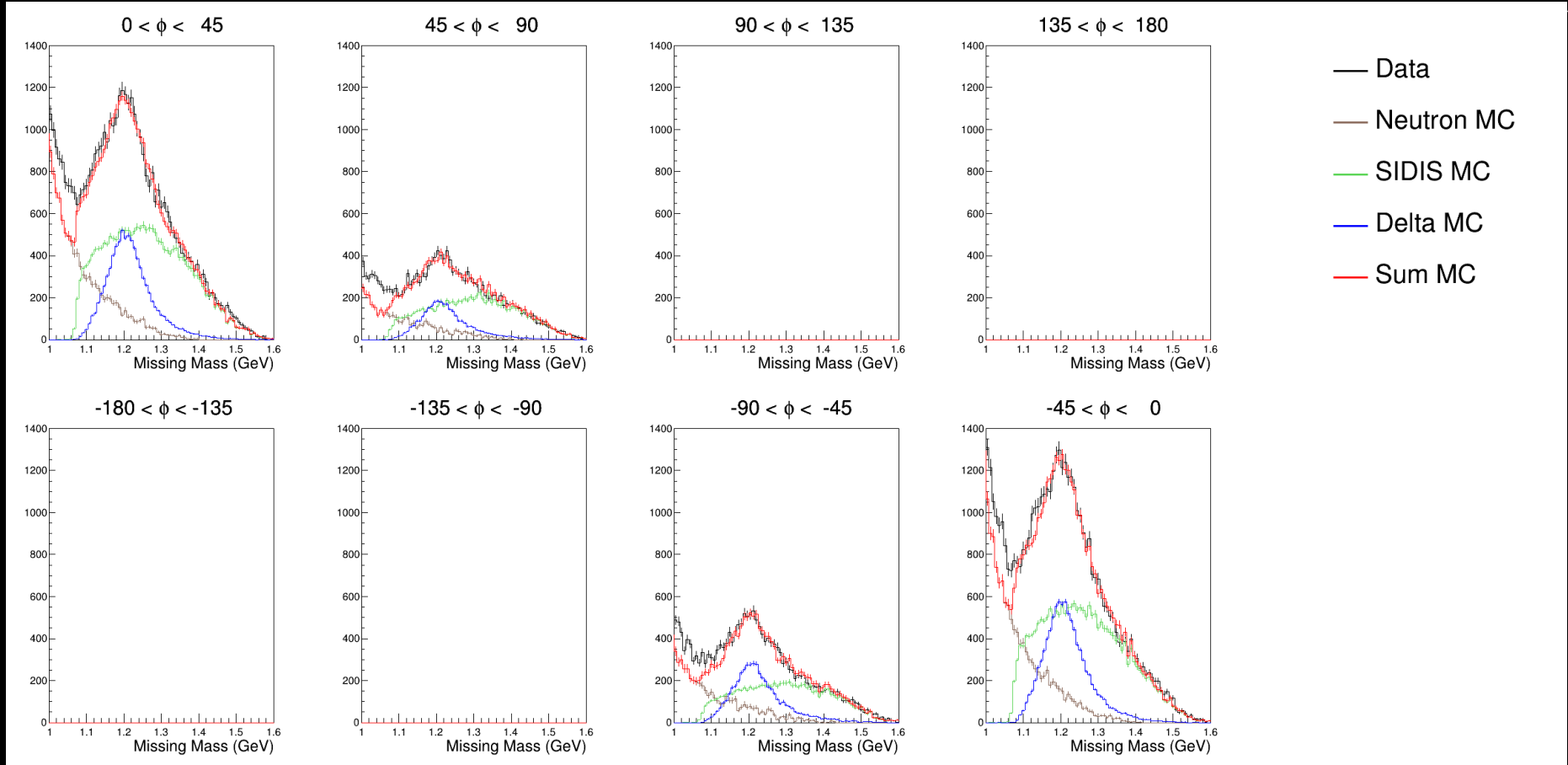
MM Shape Study (Ground Rules)

- Fit the Neutron MC with Data Neutron by matching the integrals (0.92-0.96 GeV).
 - MC over predicts the peak (This will be included in systemattc uncertainty)
- Fit the SIDIS MC with Data in region with minimal Delta contribution (1.4-1.5 GeV)
 - This does change if data distribution doesn't extend that far.
- Fit the Delta MC with background subtracted data in the delta peak region.
- The sum of MC is created after all fitting

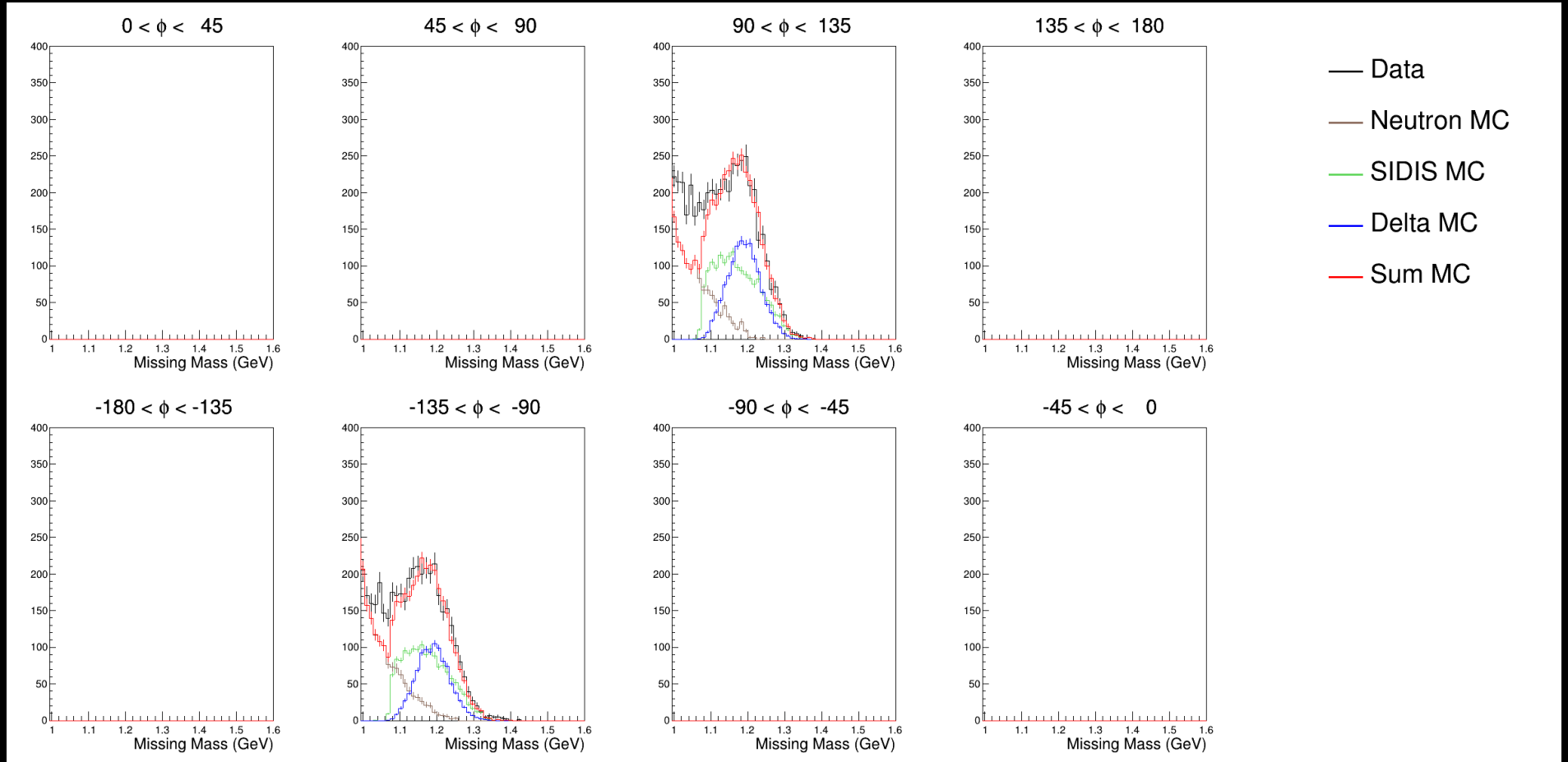
Q2 = 3.0, W = 3.14, Center (low t)



Q2 = 3.0, W = 3.14, Right (low t)

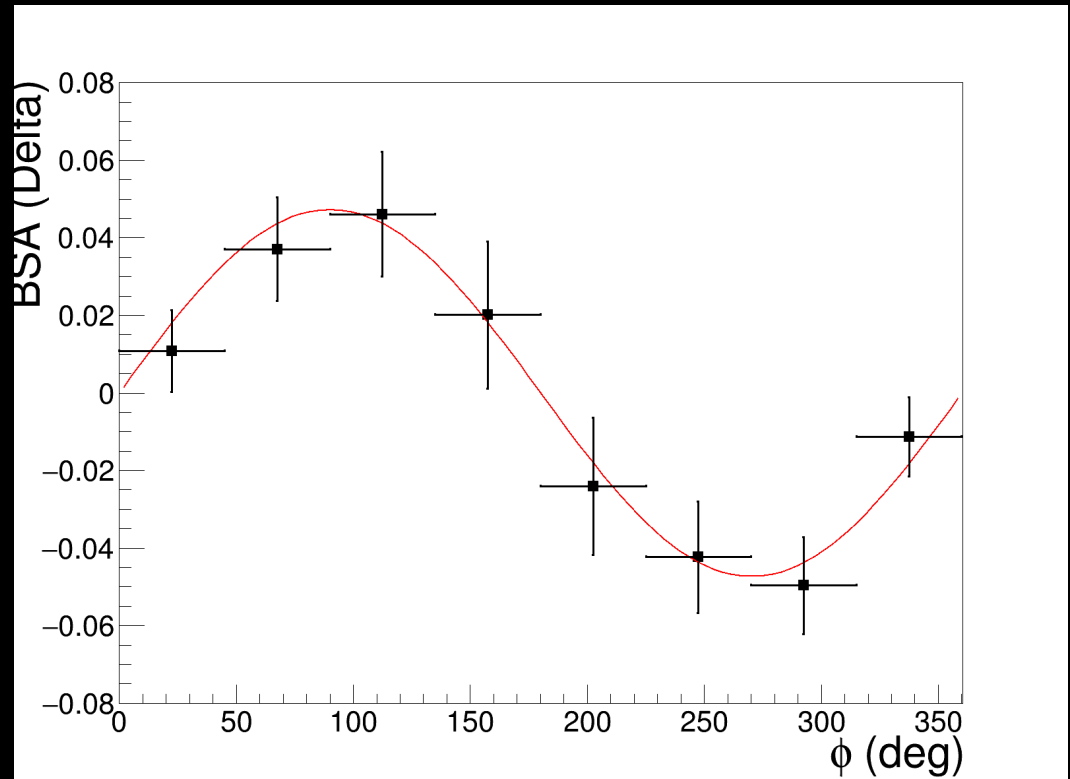


Q2 = 3.0, W = 3.14, Left (low t)



$Q2 = 3.0, W = 3.14$ (low t)

- Asymmetry is calculated by integrating Delta MM (1.12-1,4 GeV).
- A cut dependence for MM will be done for systematic uncertainty.



Summary and Outlook

- Pi-Delta BSA study is starting to give final results.
 - Can do 2 t bins for 2 out 5 kinematics with high statistics.
- Already looking at other kinematic settings.
 - More plots to follow in next 2 weeks.