

# BigBite Analysis

## Preliminary 5.89 GeV Asymmetries

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# Outline

- 1 Total Asymmetry Stability Check
- 2 5.89 GeV Preliminary Asymmetries
- 3 What's Next

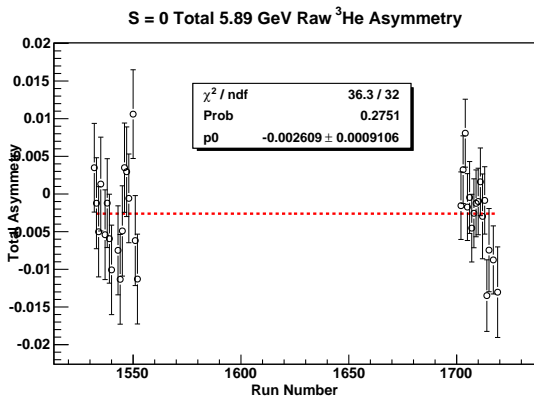
$S = 0^\circ$ 

Figure: Total Asymmetry for target spin of  $0^\circ$  as a function of run number

$$S = 90^\circ$$

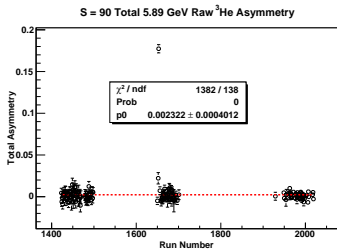


Figure: Total Asymmetry for target spin of  $90^\circ$  as a function of run number. There is one run that is an outlier, run 1653.

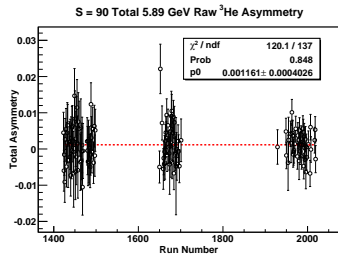


Figure: Total Asymmetry for target spin of  $90^\circ$  as a function of run number. Run 1653 has been removed from analysis.

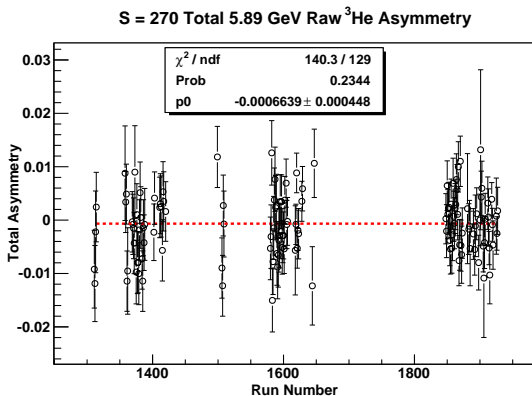
$S = 270^\circ$ 

Figure: Total Asymmetry for target spin of  $270^\circ$  as a function of run number

# Asymmetry Stability Summary

- Found out-lier run 1653
- Run 1530 is actually a  $^3\text{He}$  reference cell run
- Wave-plate value assignment seems to be correct

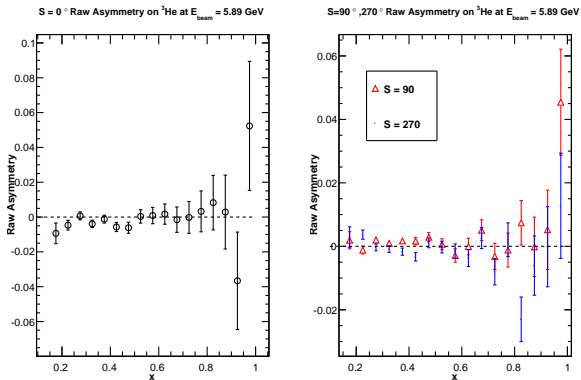
5.89 GeV Raw Asymmetries on  $^3\text{He}$ 

Figure: Raw Asymmetries on  $^3\text{He}$  at beam energy of 5.89 GeV for all three target spin directions.

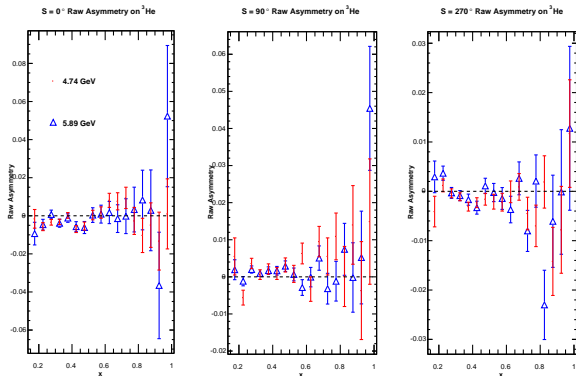
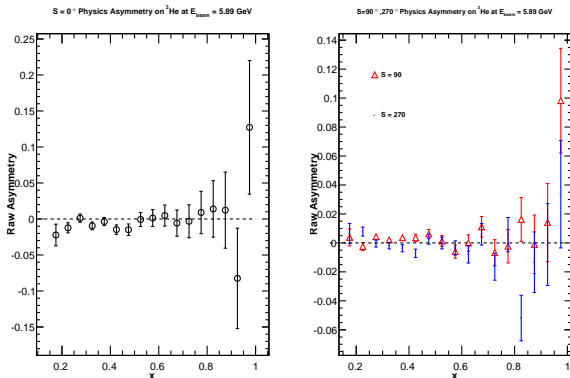
4.74 and 5.89 GeV Raw Asymmetries on  $^3\text{He}$ 

Figure: Raw Asymmetries on  $^3\text{He}$  at beam energy of 5.89 GeV for all three target spin directions.



5.89 GeV Preliminary Physics Asymmetries on  $^3\text{He}$ 

**Figure:** Physics Asymmetries on  $^3\text{He}$  at beam energy of 5.89 GeV for all three target spin directions. These asymmetries are only corrected for beam and target polarizations. The target polarizations were done by Yawie and are for the pumping chamber. Error bars are statistical only.

# 5.89 GeV Preliminary Long. and Transverse Asymmetries on $^3\text{He}$

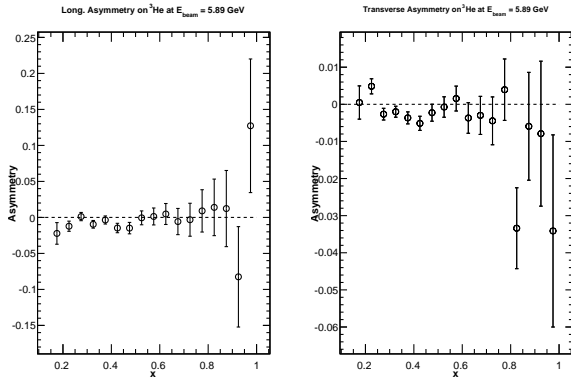


Figure: Long. and transverse Asymmetries on  $^3\text{He}$  at beam energy of 5.89 GeV. These asymmetries are only corrected for beam and target polarizations. The target polarizations were done by Yawie and are for the pumping chamber. Error bars are statistical only.

# What's Next

- Look more into in-plane angle shift
- Finish cut stability checks (S=270 kinematic set left)
- Compute 5-pass N2 dilution (**ps?** and **live time?**)
- Look at 4-pass N2 dilution with live time corrections applied
- Look at 5-pass kinematic factors
- Look at raw pion asymmetries
- Get EPR Polarizations and uncertainties