

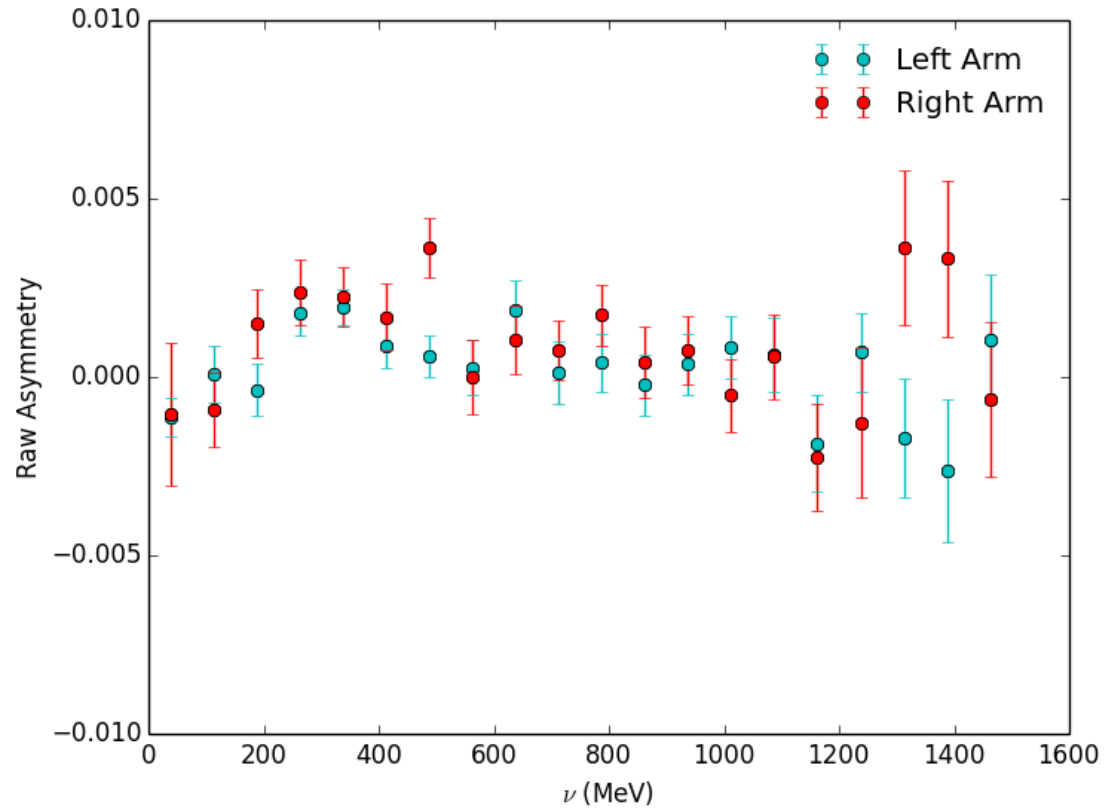
2.5T 2254 MeV Asymmetry Comparison Replay Update

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Relevant rootfiles replayed with smaller dp cut

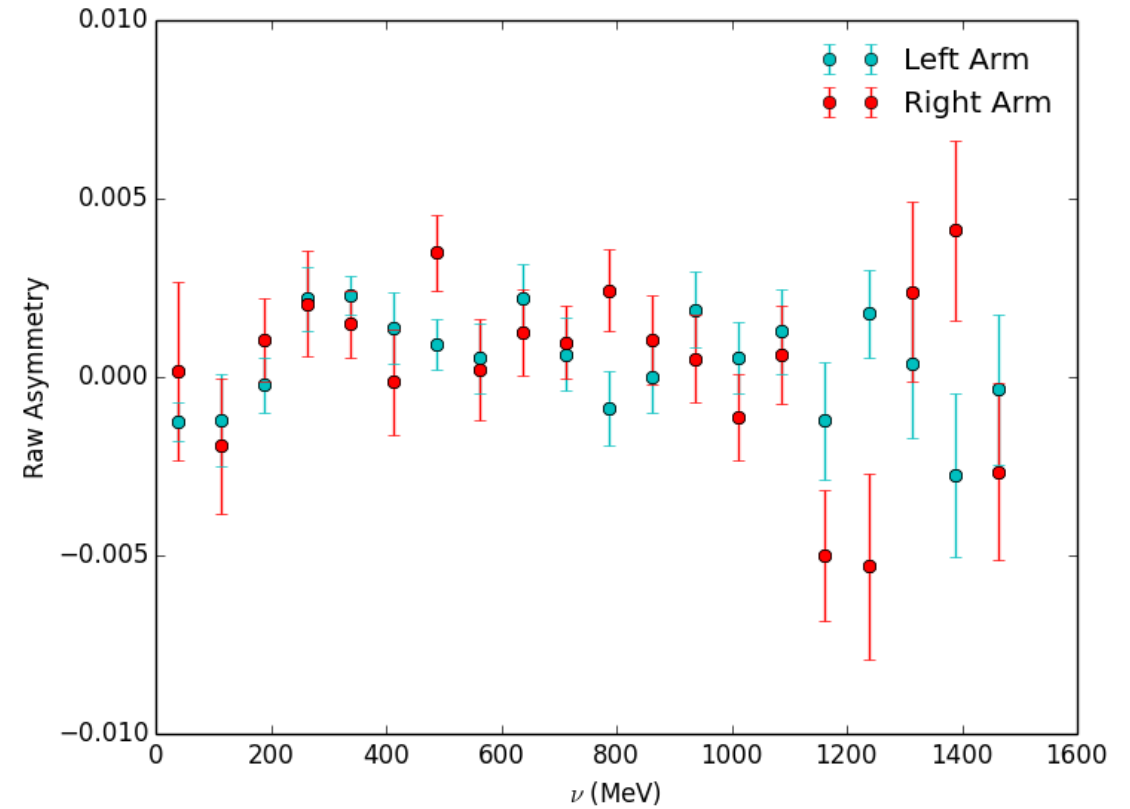
Same cut used as was previously tried on the central momentum of the runs

$-0.04 < dp < 0.04$



$\chi^2 = 1.93$

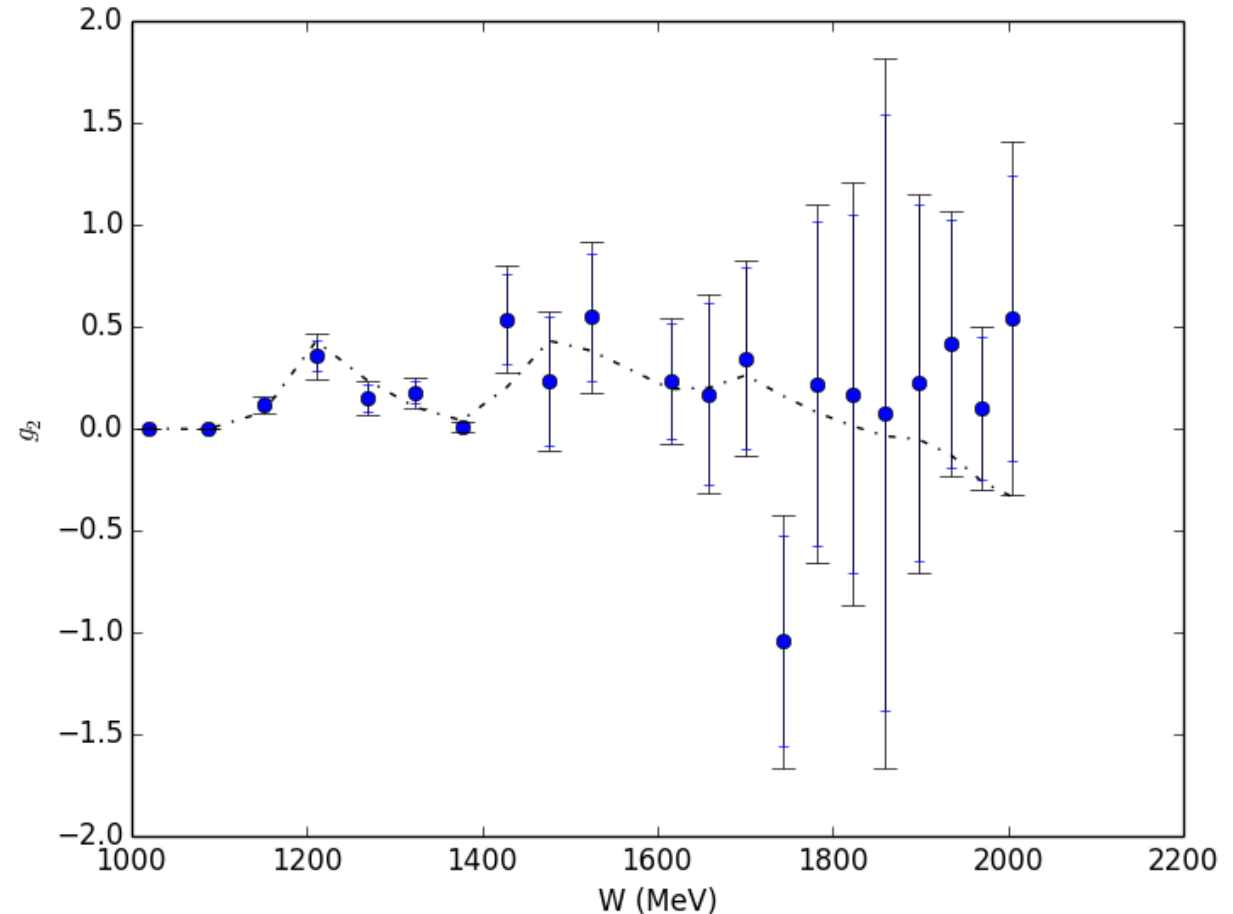
$-0.03 < dp < 0.03$



$\chi^2 = 2.31$

Can the gap be accounted for by a systematic error?

- Using the original root files, generated plots of g_2 and numbers for Gamma 2.
- The three points with a discrepancy in the first plot on the previous slide account for a 20.15% change in Gamma 2.



$$\Gamma_2^{\text{combined}} = -0.0237$$

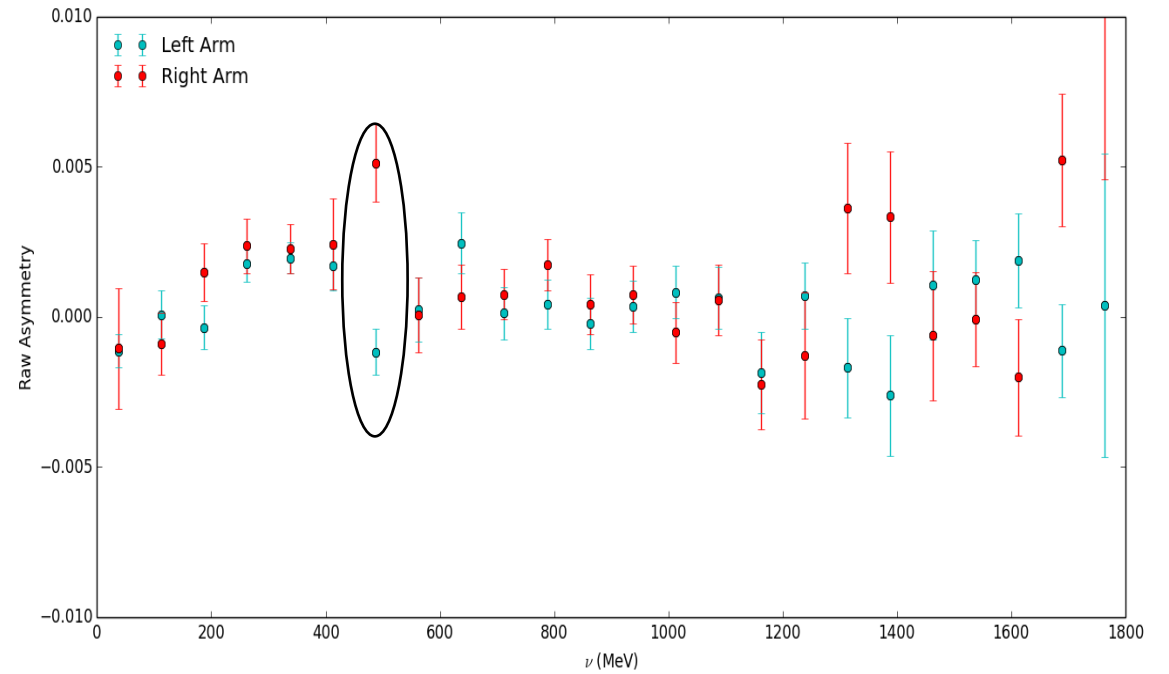
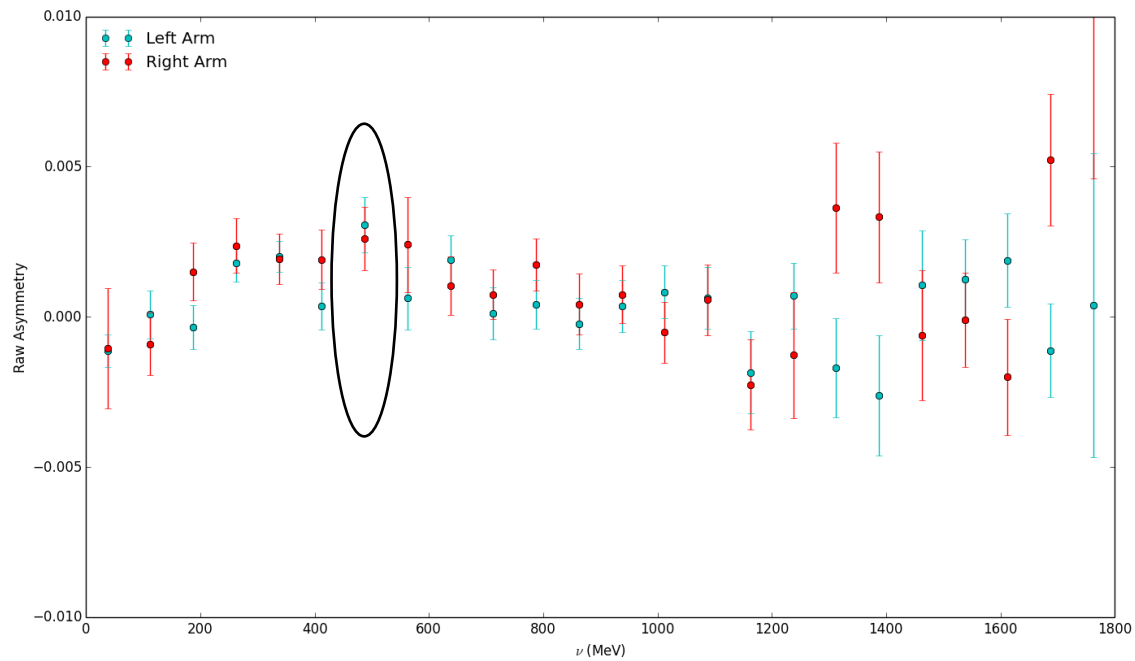
$$\Gamma_2^{\text{left discrepancy}} = -0.0208$$

$$\Gamma_2^{\text{right discrepancy}} = -0.0285$$

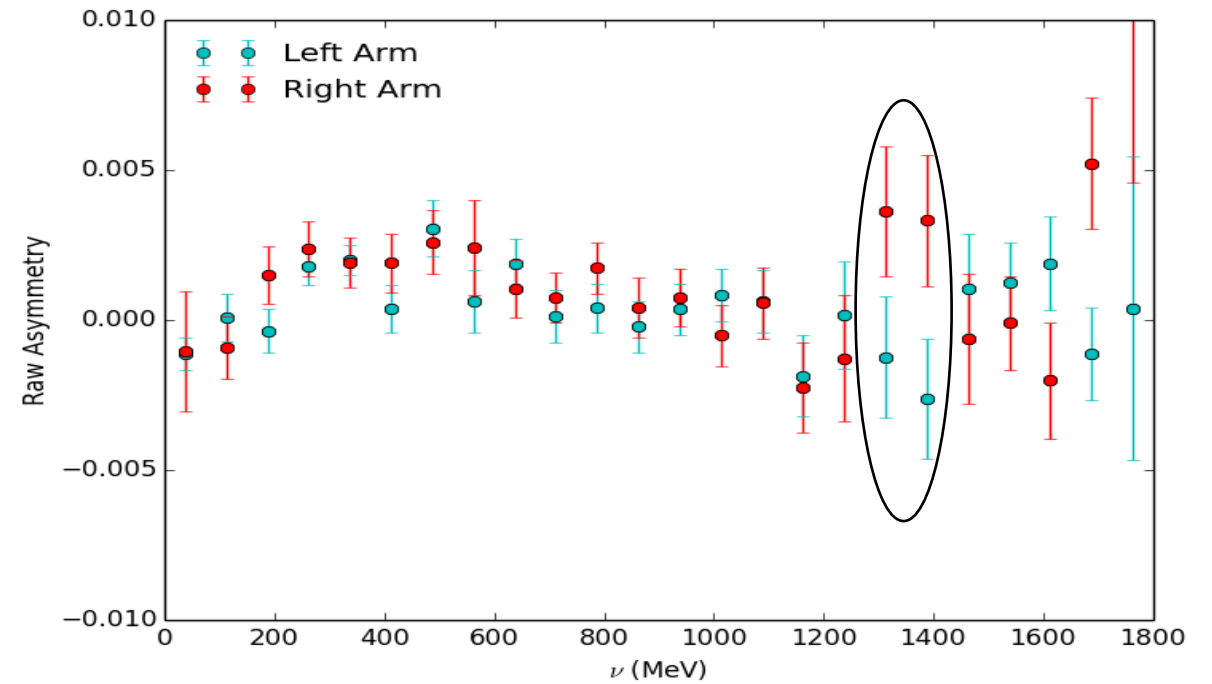
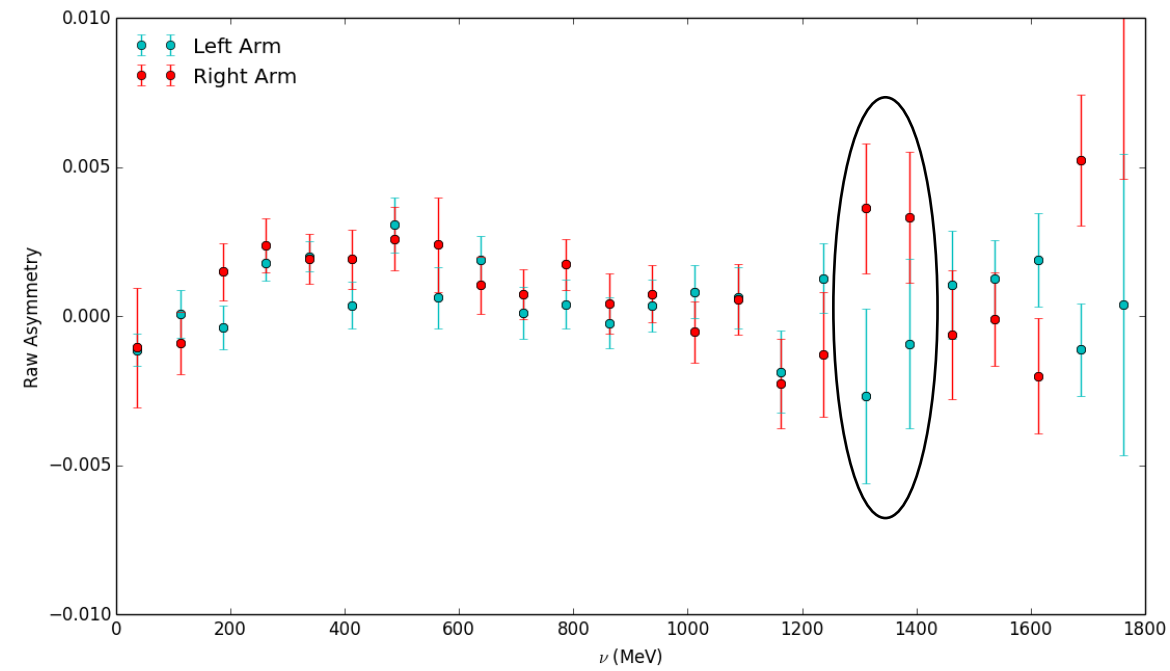
Next Steps

- Put a systematic on γ_2 and allow the discrepancy as is?
- Try additional dp cuts?
- Determine if other change in the time gap for taking runs?
- Replay packing fraction rootfiles with tighter cut on phi and theta to determine effect on 2.5T packing fractions

5 day gap in runs has visible affect on asymmetry



Smaller affect on the higher nu gap



New χ^2 produces results that are potentially too good

- 2.5T Transverse 2.2 GeV
- $\chi^2 = 0.748030901462$
- χ^2 (right arm random fluctuations) = 1.34309168932

- Should be accounting for both uncertainties in random fluctuations as well?