

Asymmetry Cut Dependence

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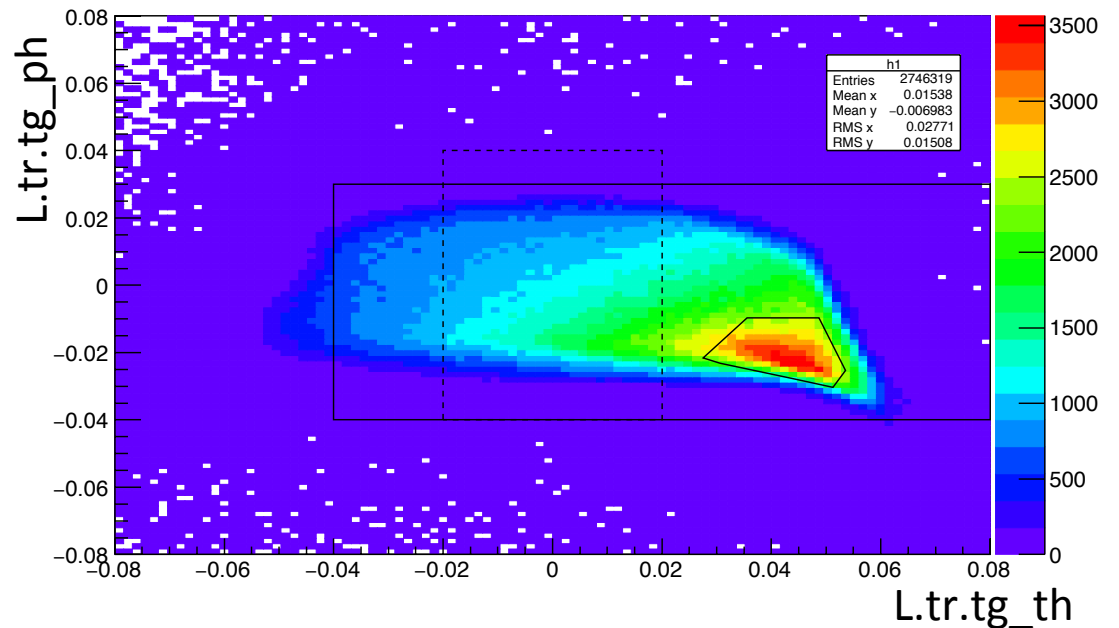
IDEA

- Check dependence of g2p asymmetry on choice of acceptance cuts
- Use three different accpt. cuts:
 - “Loose”, “Tight”, “Hot-Spot”
 - Apply other good electron cuts (single track, PID, etc.)

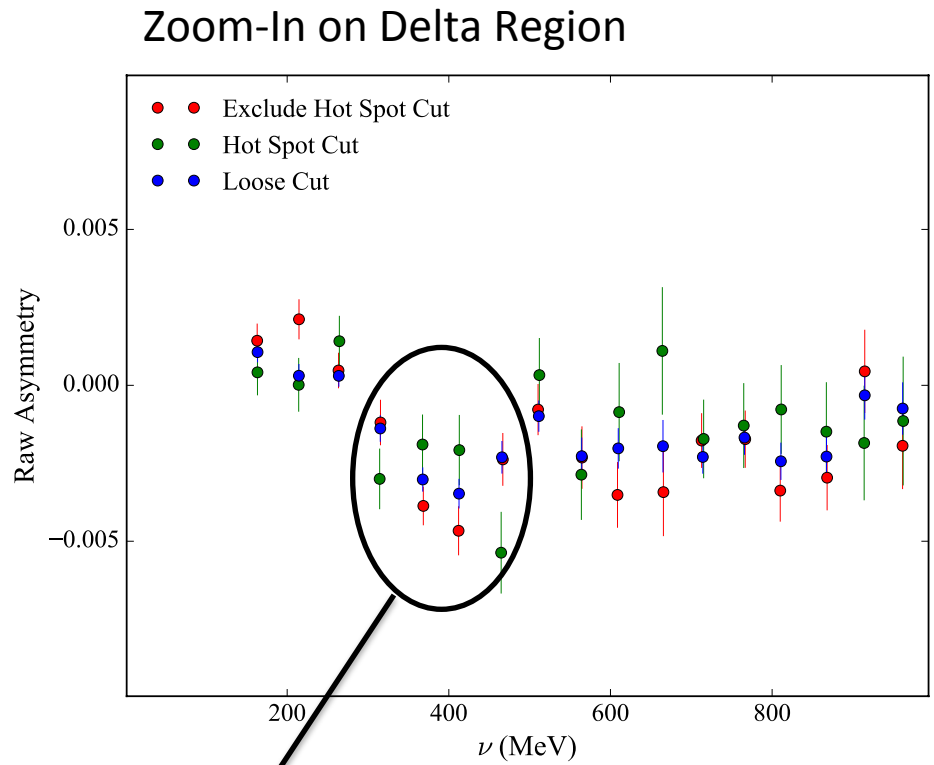
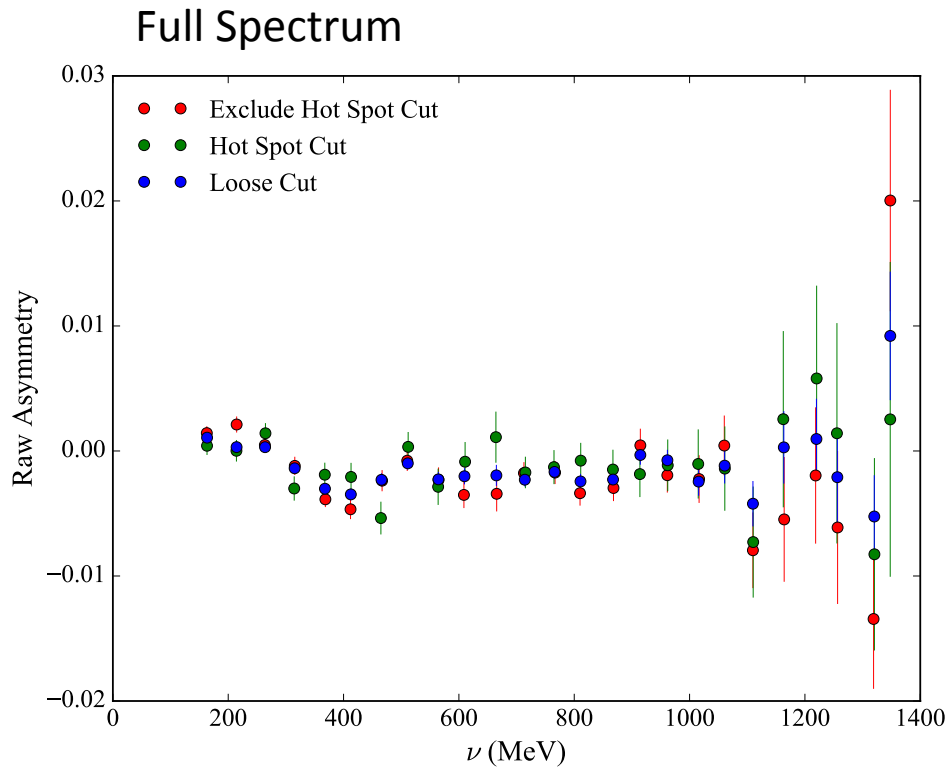
2254 MeV 5T Transverse

L.tr.tg_ph[0]:L.tr.tg_th[0]

- Compare raw asymmetries
 - Corrected for:
 - Target Pol/Beam Pol and
 - Half Wave plate
- Use same cuts for all p0's
 - Hot spot stays put
 - Except for minor diff. at elastic



Raw Asymmetries



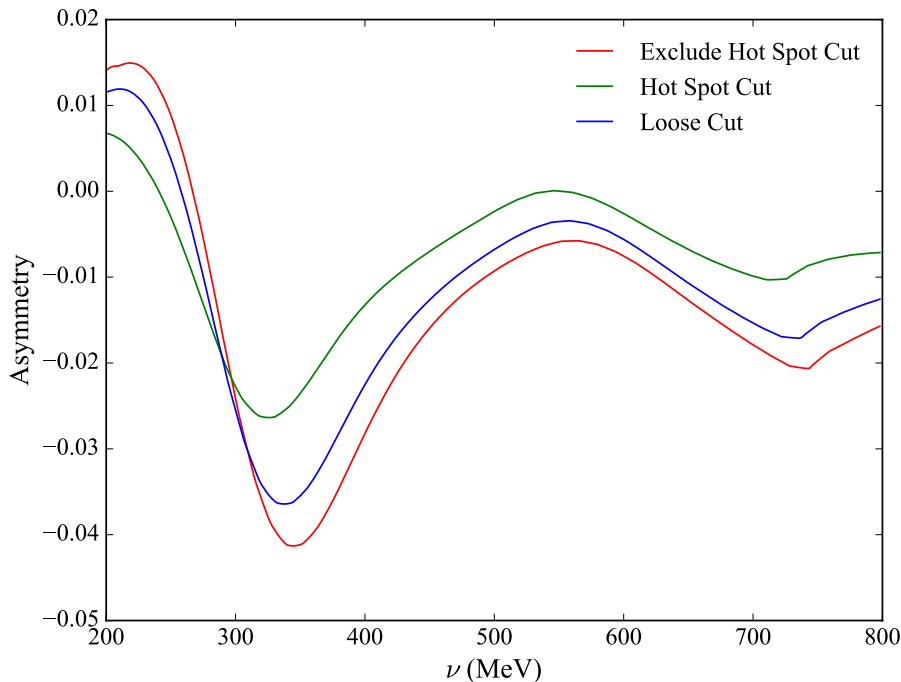
Definite difference in delta-asymmetry

Model Physics Asymmetries

- Run models at mean reconstructed scattering angle from data
 - Run 5980: Tight = 8.245, Hot = 6.021, Loose = 7.508

So these angles already have some physics weighting, but that should be OK for this purpose

Hall B for polarized/ Bosted for unpolarized



Models fully radiated (uses RADCOR formulism for polarized XS)

Models show same trend as the data: Smaller asymmetry for smaller angle

Going Forward

- Do the cuts also effect dilution?
- Depending on final asymmetry acceptance cut will most likely have to apply some kind of bin-centering correction
- What is a good acceptance cut? Include or exclude hot-spot?