Σ Beam Asymmetry Analysis of

$$\gamma p \rightarrow \pi^0 p, \eta p$$

The results intended for presentation at the **DNP** meeting
as well as some analysis details

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Aug 22, 2016   Physics Working Group Meeting
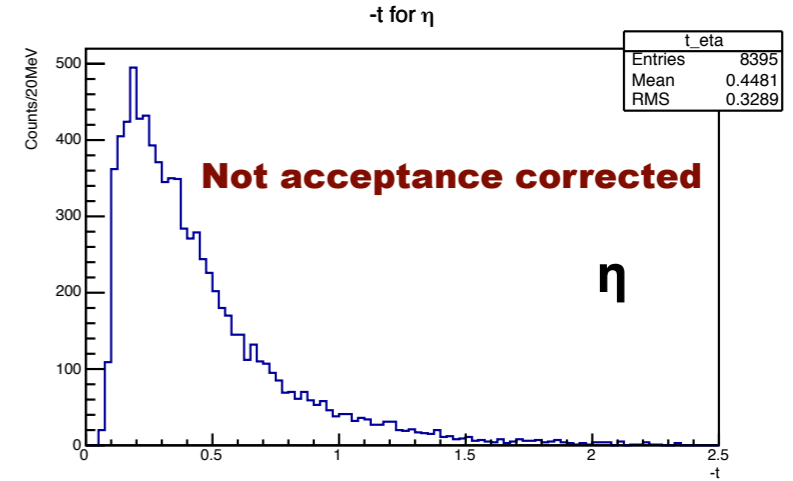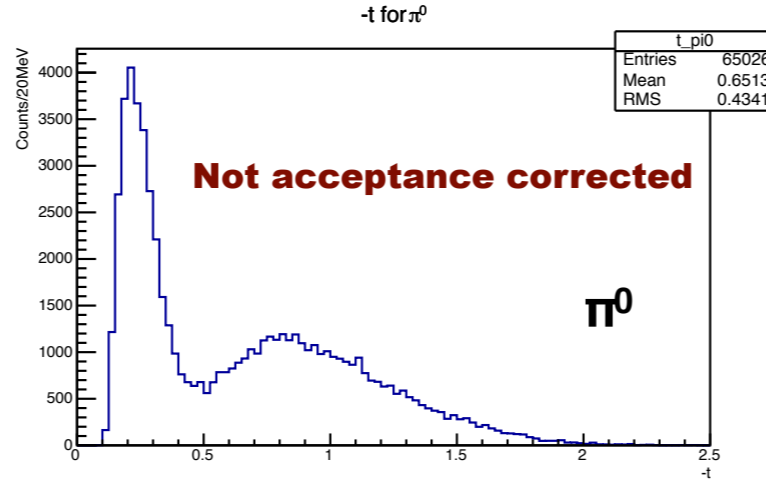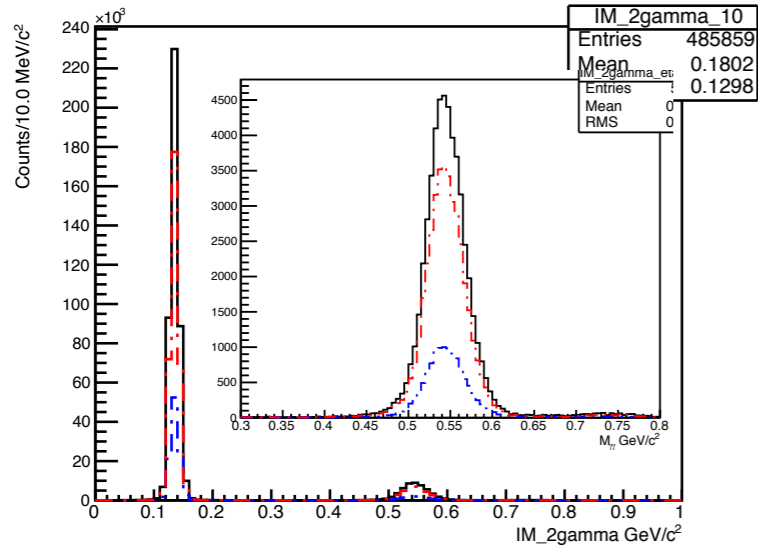
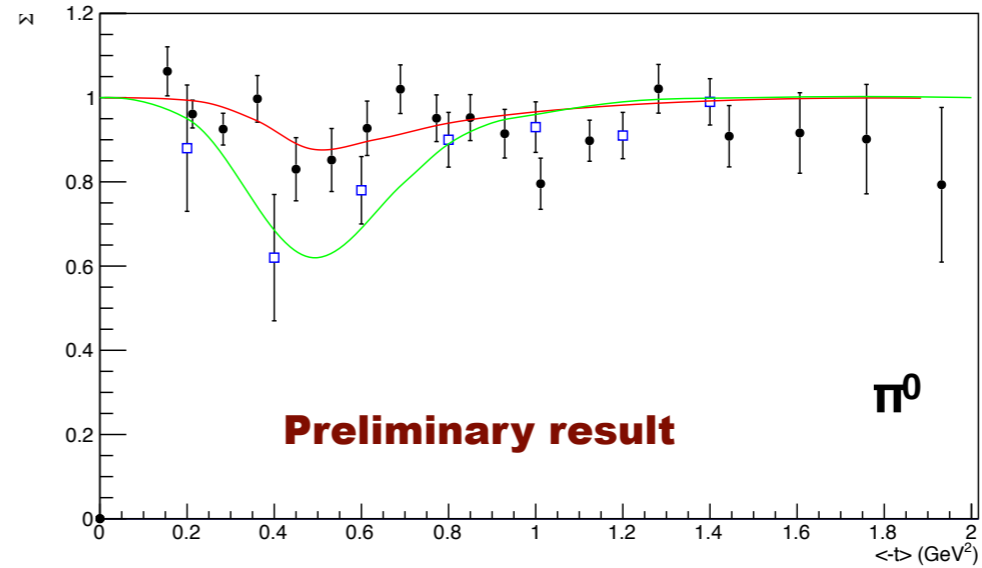武漢大學 WUHAN UNIVERSITY

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Outline of the presentation at the DNP meeting

- **Outline (1 page)**

- **motivation and beam polarization (1 page, cite Matt, Vincent and Richard's presentation)**

- **Pre-selection conditions and Selection conditions (1 page)**

- **The Invariant mass of two photons distributions and Mandelstam -t distributions (1 page)**

- **The log-scaled Invariant mass of two photons distributions with Background study (1 page)**

- **Beam Asymmetry for π0 photoproduction corrected for randoms dilution (1 page)**

- **Beam Asymmetry for η photoproduction corrected for randoms dilution (1 page)**

- **Beam Asymmetry for η photoproduction corrected for background from γp→pω (1 page)**

- **Preliminary Σ vs <-t> for π0 photoproduction (1 page)**

- **Preliminary Σ vs <-t> for η photoproduction (1 page)**

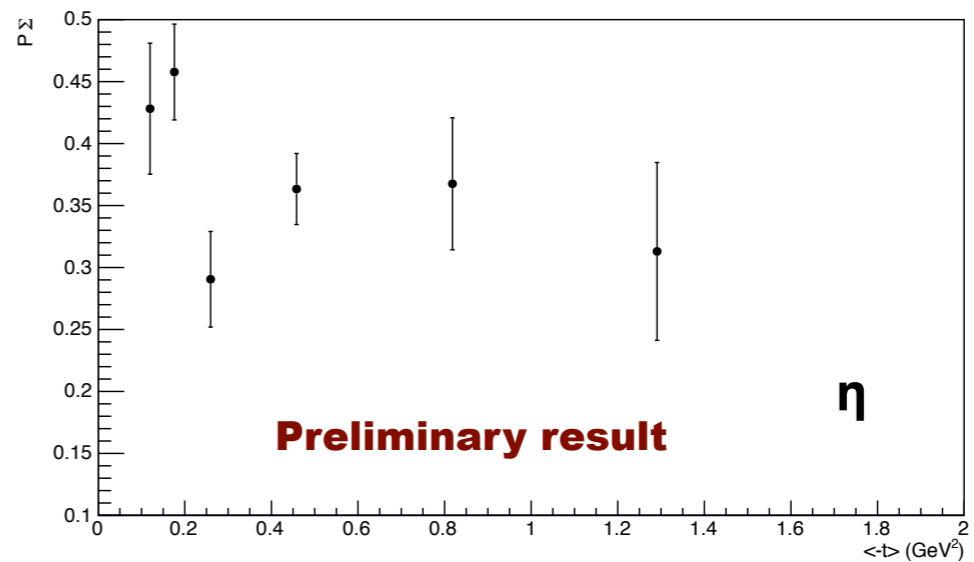- **Systematic error study (2-3 pages)** （**in progress**）

- **Summary (1 page)**
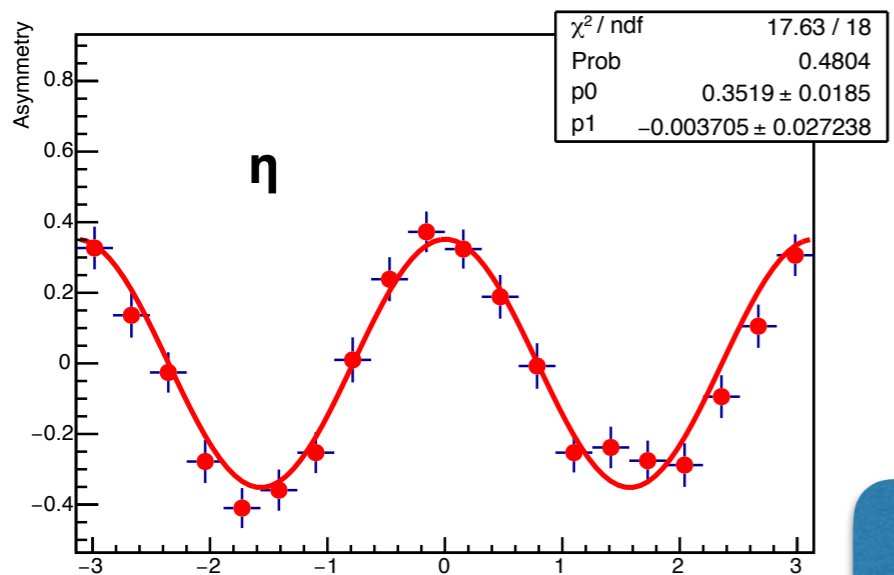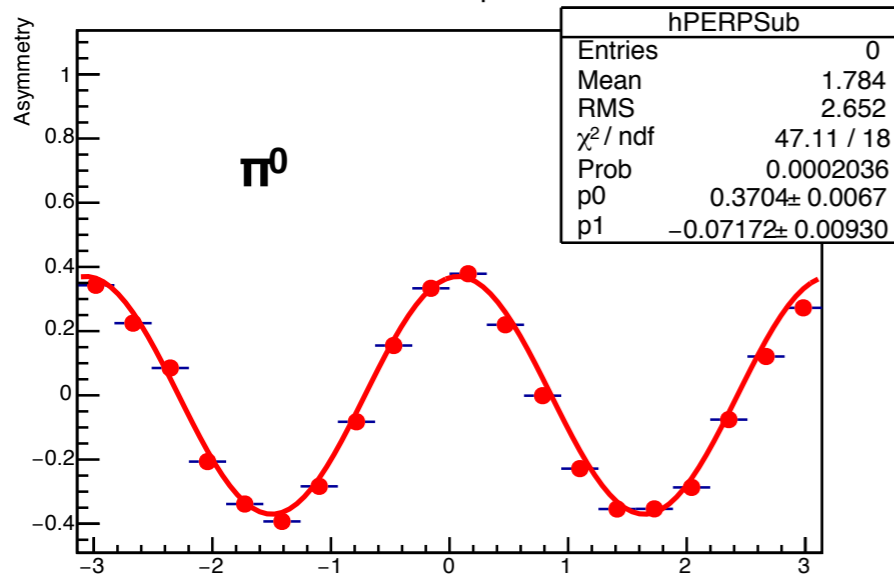
Invariant mass of 2 gamma with cuts 0-6 for eta (MMXp)

-t for π^0

Not acceptance corrected

π^0

-t for η

Not acceptance corrected

η

Phi_Proton_pi0_sub

π^0

η

The Σ of π^0 photoproduction for total

Preliminary result

π^0

The PΣ of η^0 photoproduction for total

Preliminary result

η

More detailed information can be found at
http://argus.phys.uregina.ca/cgi-bin/private/DocDB/
ShowDocument?docid=2982

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Acknowledgements: Justin Stevens, Dave Mack, Simon Taylor, Liping Gan, and Eugene Chudakov

Thanks !