

Start of Cross-check

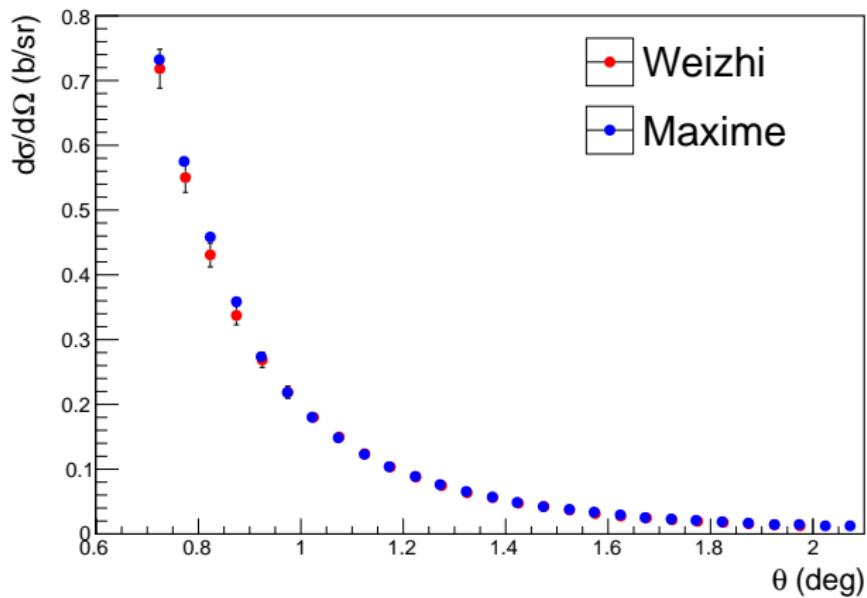
Maxime Levillain

May 12, 2017



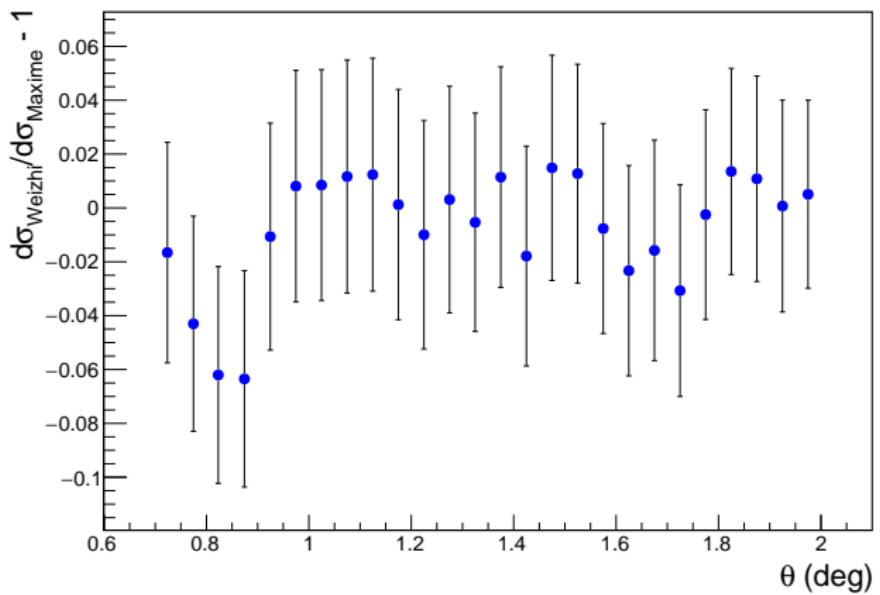
Cross-section Comparison

ep elastic scattering cross section



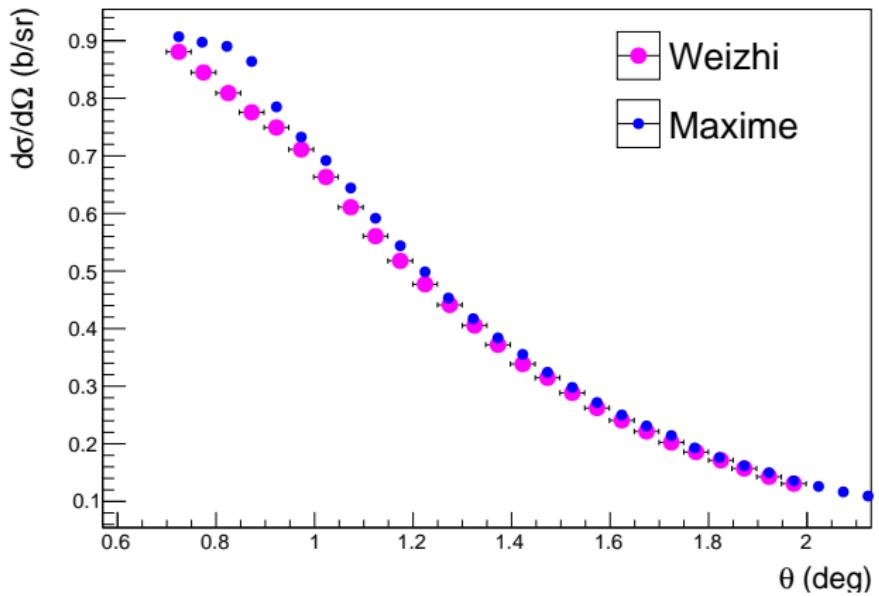
- Discrepancy between 0.75 and 0.9 deg

Ratio

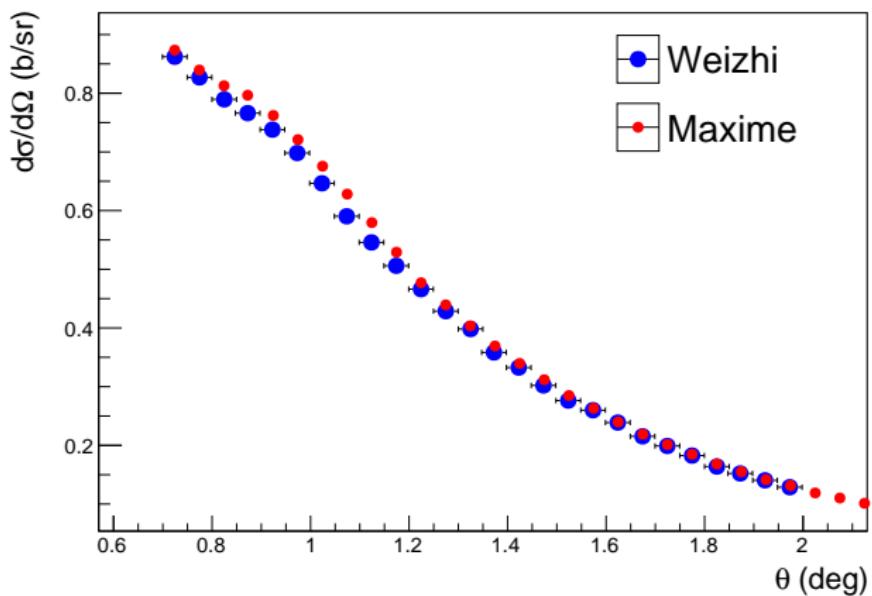


- ▶ Almost into systematic uncertainties
- ▶ No real trends

Data ep/ee ratio

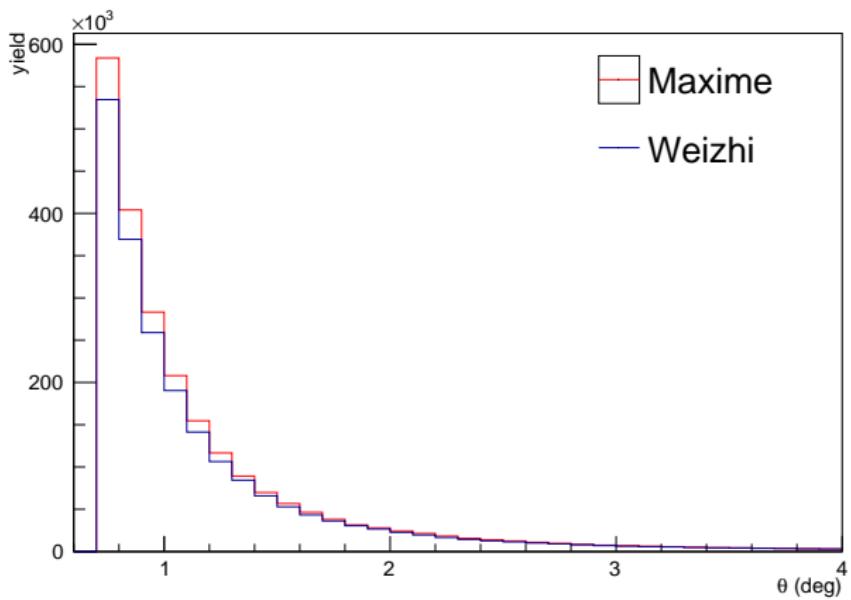


Simulation ep/ee ratio



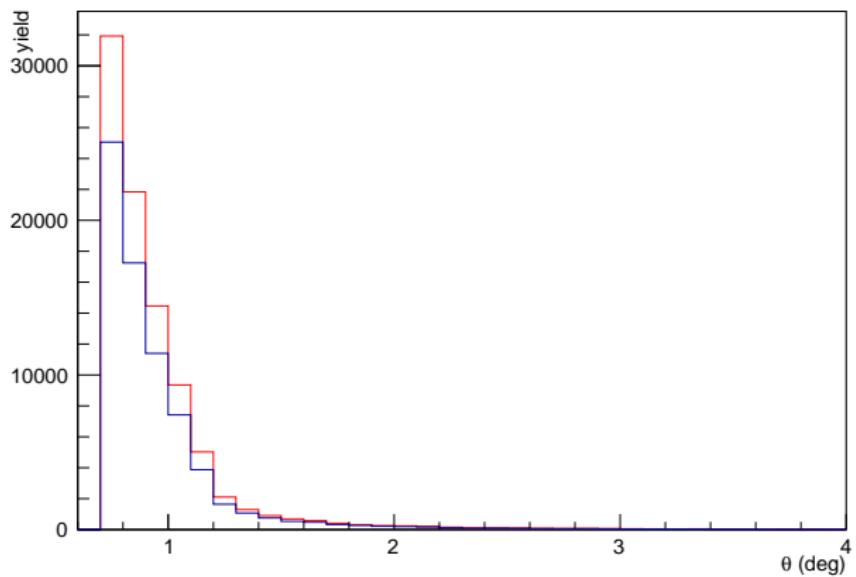
- ▶ Same trend as for data but much smaller difference
- ▶ Cut let go of more ep background or cut too much ee

Raw ep Yields (run $\in [1448,1454]$)



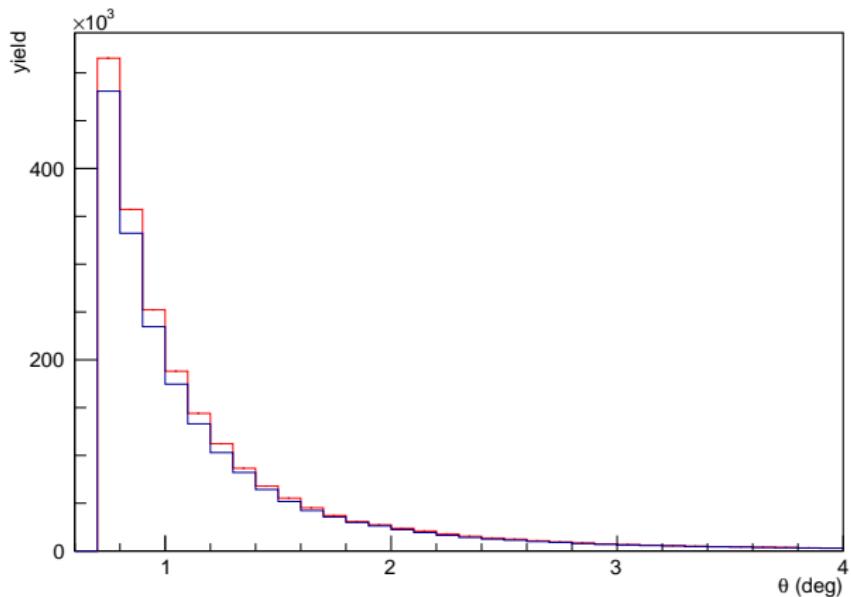
Background ep Yields (run $\in [1448,1454]$)

PROton
RaDiUs

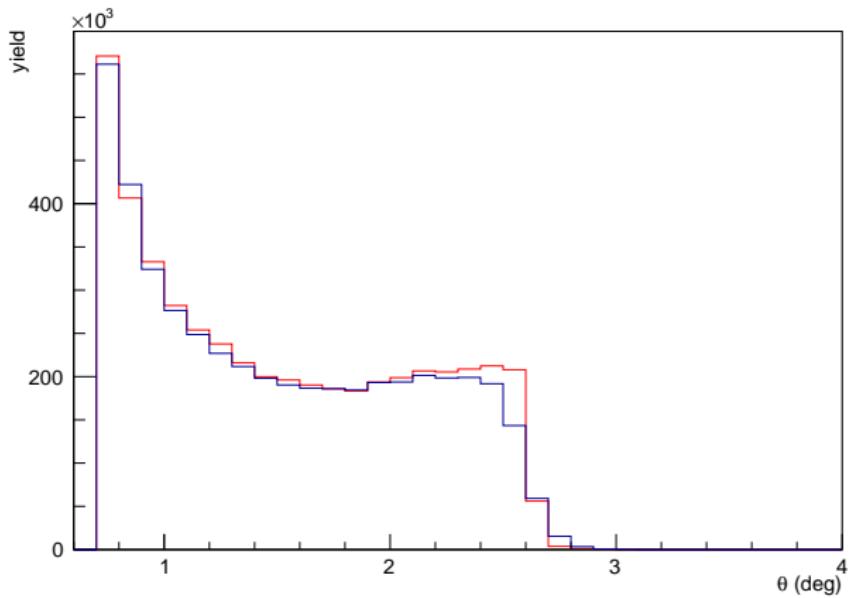


Background subtracted ep Yields (run ∈ [1448,1454])

PR_{ton}
Radius

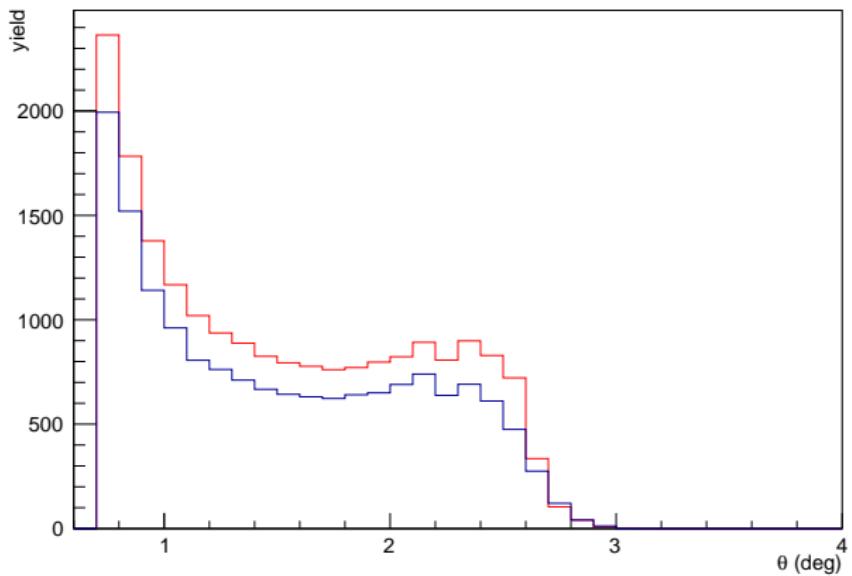


Raw ee Yields (run $\in [1448,1454]$)



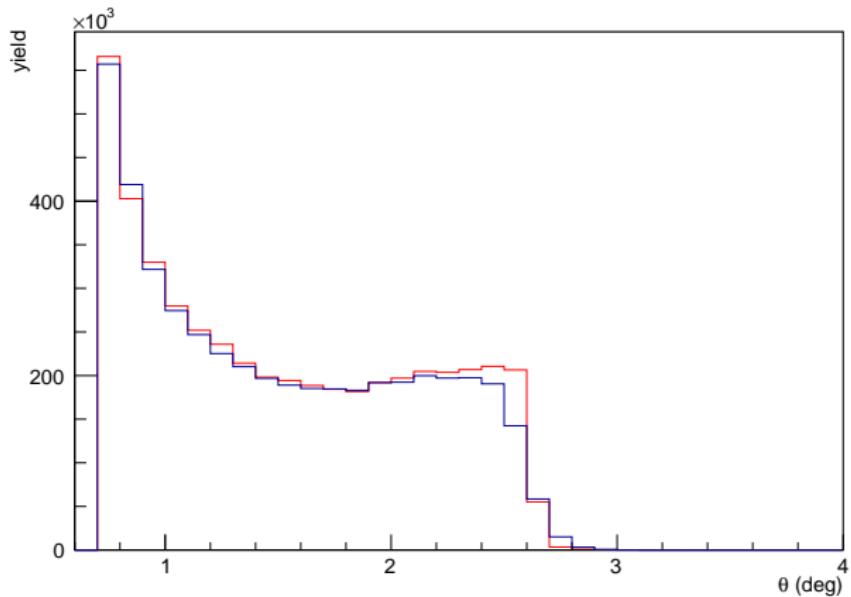
Background ee Yields (run $\in [1448,1454]$)

PROton
RaDiUs



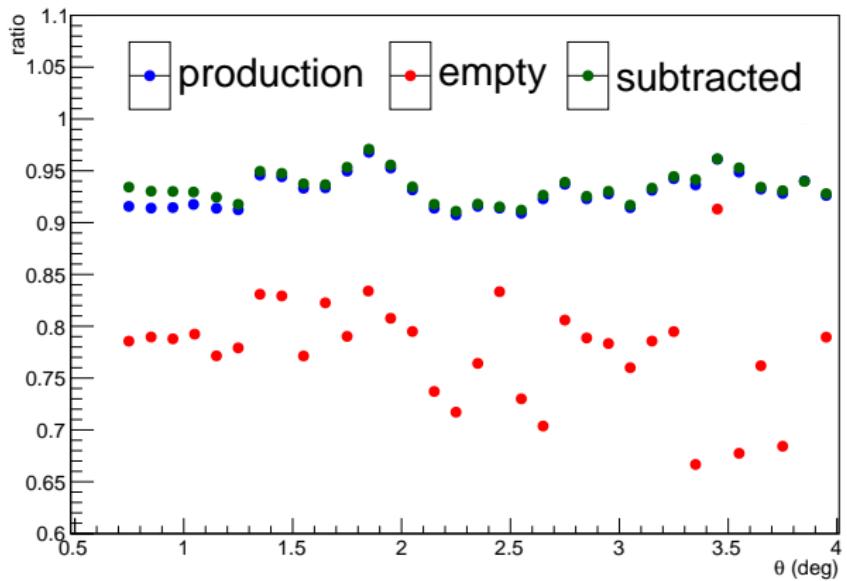
Background subtracted ee Yields (run ∈ [1448,1454])

PR_{ton}
Radius



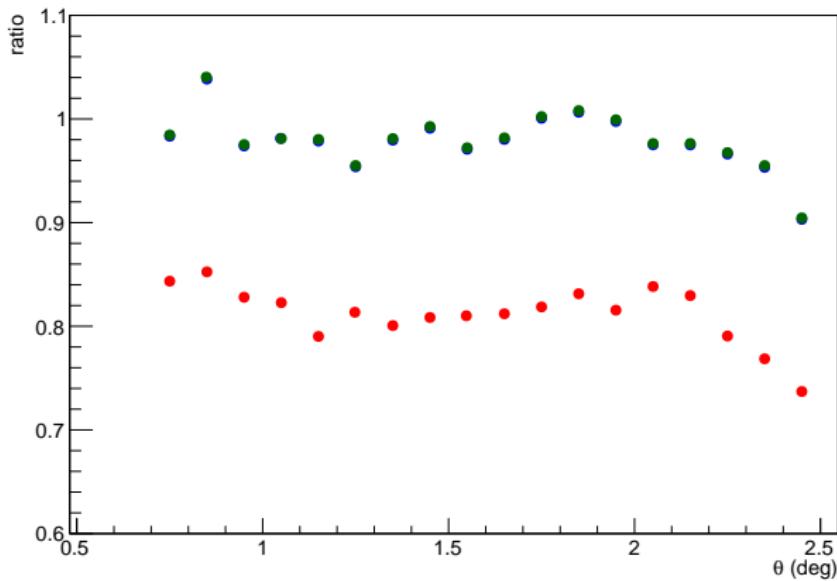
Ratios ep Yields (run $\in [1448,1454]$)

PROton
radius



Ratios ee Yields (run $\in [1448,1454]$)

PROton
radius



- ▶ Weizhi has stricter cut than me, that are more efficient to remove background of empty run
 - ▶ Need to find which cut
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- ▶ Geometry Summary available (not fully complete yet)
https://www.jlab.org/prad/minutes/geometry_description.txt