Inclusive PWG Update

Most recent Inclusive PWG meeting held Jan 13th (Joint with EW/BSM)

Ongoing efforts

- NC/CC reduced cross sections (ep)
- Double Spin Asymmetries (p and He3)
- Electron ID
- Kinematic Resolutions

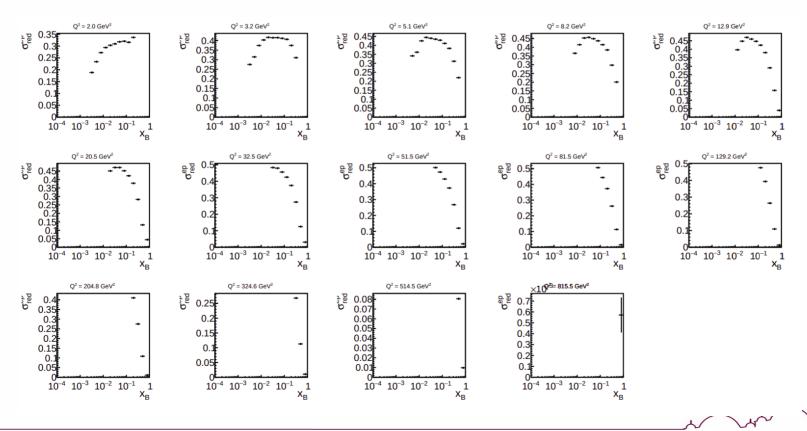
Comment:

• Still need to look into e⁻ on heavy A (volunteer needed)

Most Recent NC Cross Sections

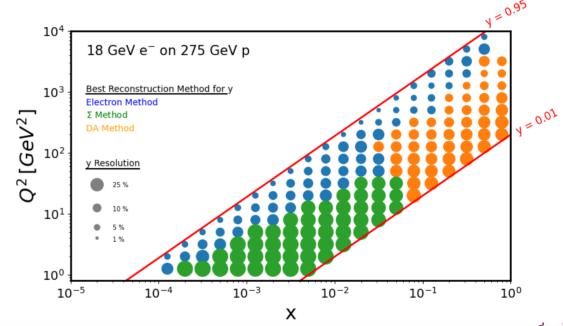
Fully Simulated NC Reduced Cross sections obtained

Note: Realistic eID



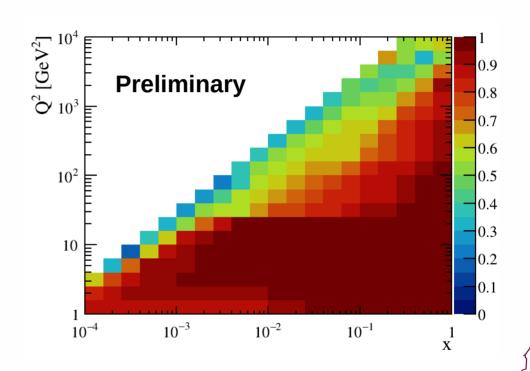
Most Recent Kinematic Resolutions

- Resolutions on kinematic variables (24.10.0 campaign files)
 - Color of point indicates best y reconstruction method
 - Size of point indicates y resolution



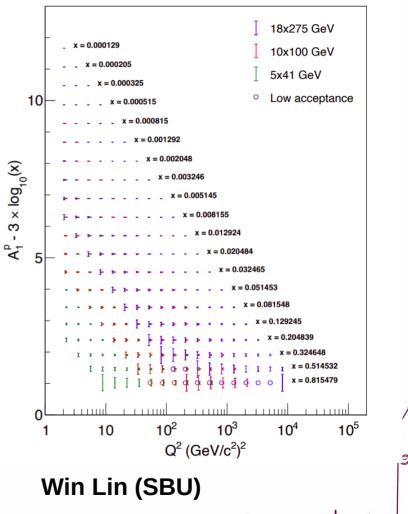
Electron Finder Efficiency Update

- Electron finder efficiency appears to drop outside of EEEMCAL
 - Investigation required → Different
 E/p cut for different calorimeters?



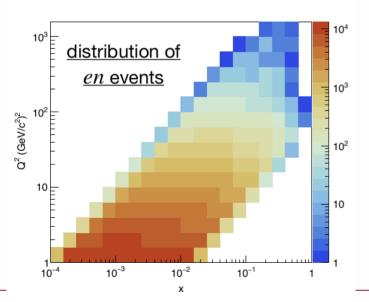
Most Recent A₁^p plot

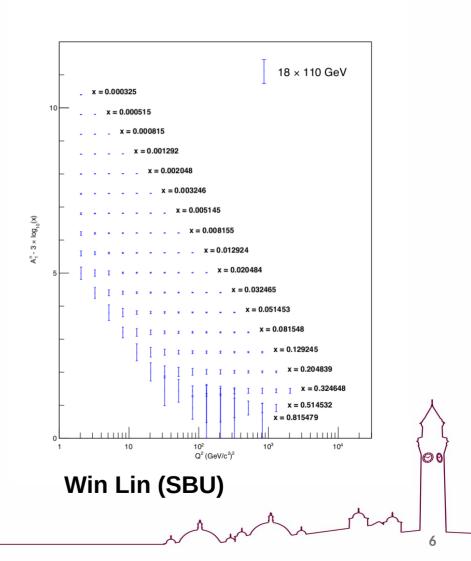
- Fully simulated A₁^p determination
 - 3 beam configurations
 - Realistic eID



Update to A₁ⁿ studies

- Fully simulated A₁ⁿ determination using e+³He events (BeAGLE)
 - Realistic eID
- To be shown in first PWG meeting after Collaboration meeting





Data Inputs and Requirements for Physics Analysis

- Initial thoughts (will circulate question to analyzers and update if needed)
- Inclusive PWG Data Inputs are simple:
 - Reconstructed NC and CC Events (ep,eA)
 - Luminosity (would be nice to have record of luminosity included with output files)
- Requirements:
 - Factor of 10 more statistics than data feels reasonable but is this a hard limit?

