Analysis Progress

for the d_2^n analysis meeting

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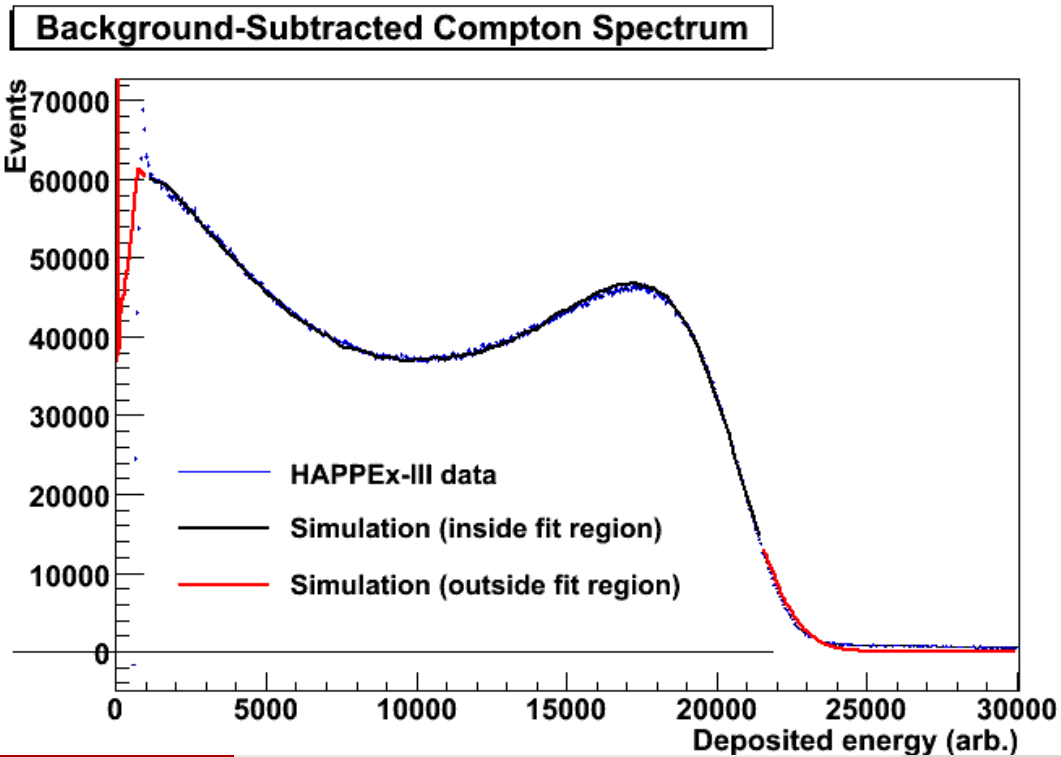
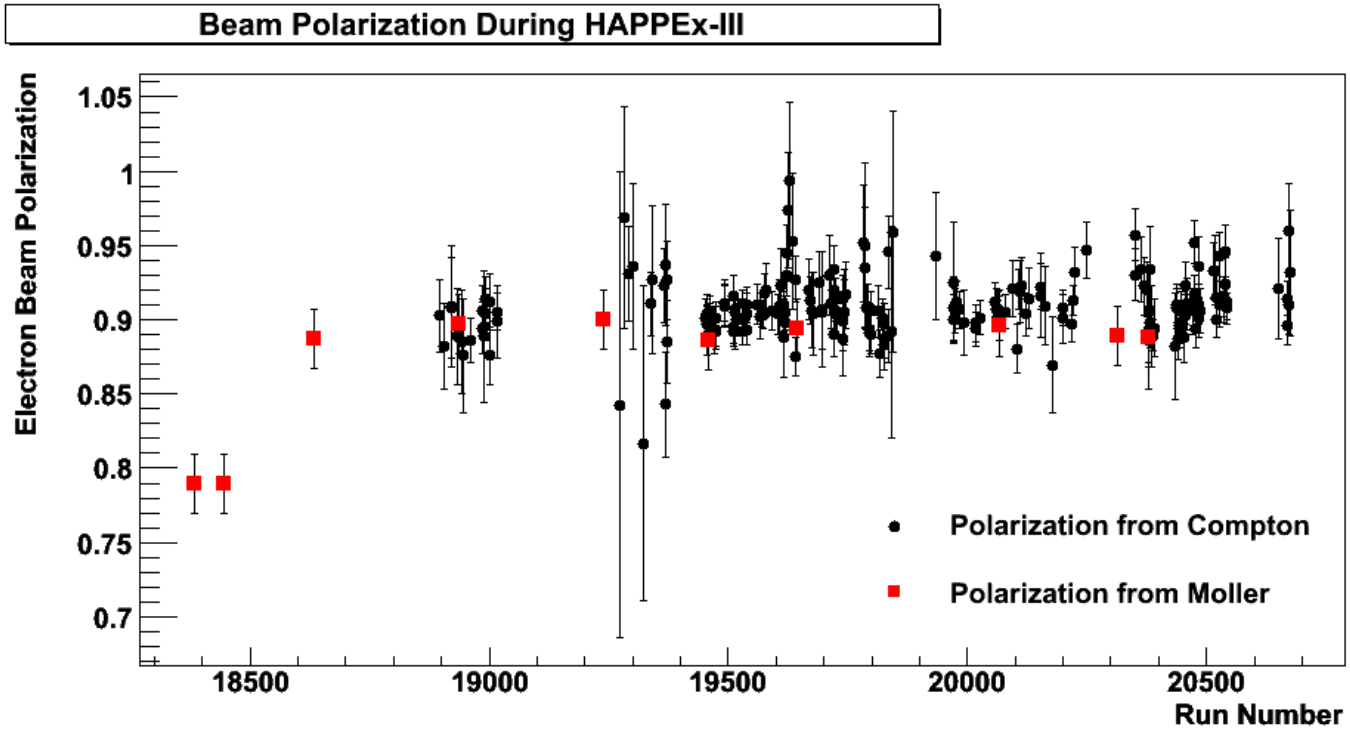
Progress Toward Analyzing Power

- For Compton beam polarization, we need an analyzing power
  - QED knowledge of Compton scattering
  - Beamline information
  - Detector response function
- This work is nearing completion for HAPPEx-III data
- d_2^n needs different GEANT4 simulation



Preliminary Beam Polarizations for HAPPEx-III



- Good sign: Agreement with Møller
- Still needed: extension to d_2^n, work on systematic errors
- This work has been done by Gregg Franklin, Megan Friend

What's Next?

- BB Optics
  - Waiting for BPM calibration
- Compton
  - Systematic errors
  - Extend analyzing power calibration to d_2^n
- Beamline calibrations
  - Working on finalizing beam charge calibrations for quality checks
  - BPM calibration problem
    - Take initial coeffs from EPICS variables and continue to raster calibration?
    - Brad's idea: use LHRS optics (sieve/elastic data with raster on/off) to check effect of calibs on hole, y-target reconstruction