SIDIS full simulation

Sanghwa Park (SBU)

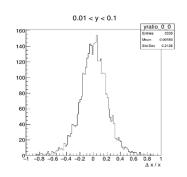
Full Simulation for SIDIS

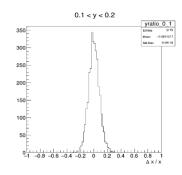
Simulation outputs: two energies 5x41 and 18x275 available, for reconstruction there are only 5x41 (in the S3 storage)

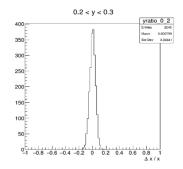
Truth information now included in the tree (mcparticles2)

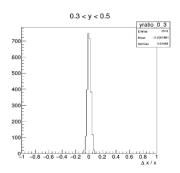
Reconstruction variables from tracking, energy from calorimeter. Using truth PID for now

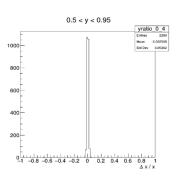
First look at the kinematic reconstructions (electron method, JB and DA methods) with only part of the produced samples for test











Strategy for full simulation analysis

Generalized SIDIS analysis package based on the existing code by Chris

- Developed for Delphes output
- Wrapper to analyze DD4hep almost ready, separate event loop but taking advantages of existing analysis chain and allows one to compare two outputs easily in the same format
- Future implementation for fastsim and ultimately asymmetry calculations to be added