SW Liaison Report

- Generic Pythia8 afterburner for crossing angle corrections, other beam effects:
  - https://indico.bnl.gov/event/12022/

- Full simulations are appearing on S3
  - access instructionshttp://doc.athena-eic.org/en/latest/howto/s3_file_storage.html
  - username/password: ask on slack #ip6-software-wg (or DM me)
  - ATHENA/EVGEN/JETS/crossDivNrgCrab – HepMC2 files
  - ATHENA/FULL/JETS/crossDivNrgCrab – full sim ROOT files, weekly
  - ATHENA/RECO/JETS/crossDivNrgCrab – reconstructed ROOT files (focused on ECAL and HCAL clustering, every few days

- Computing needs (see next slide)

Computing Needs

https://docs.google.com/spreadsheets/d/1FpzI20WqMaIhbOqeGEiJMsXRwAvzisWRjCMfOHasUz0/edit#gid=0

Semi-Inclusive Working Group	# events **generator-level**	# events **fast** simulation	# events **full** simulation
basic SIDIS sample for 18x275, 10x100, 5x100, 5x41, Q2>1	4x100M split up in ~3 Q2 ranges	fast simulations for all. Need to try different detector onfigurations, so fast simulations would be ~3x more events than pythia	4x100M (same as generator level)
di-hadron/di-jet sample	need ~4x1M di-jet and di-hadron events. Probably need to filter ~100M pythia8 events	same as above	~4M generated
lambda sample	can be filtered from basic SIDIS sample		~3M (might be the same as standard SIDIS sample, but might want to try out different tracking options here)

- What Q^2 ranges?
- Do we care about very high Q^2 (e.g., > 1000 GeV^2)
- What's the luminosity (i.e., is this enough)? Note we can re-scale projections, but in any case we need to know the total cross sections
- Can the SW group filter for lambdas, or is that something we should develop?