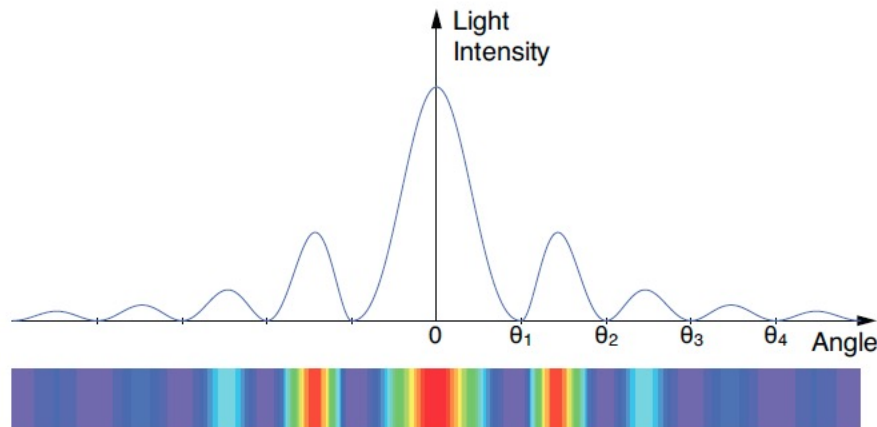


VM program in eA at the EIC – ATHENA



Series of study

- I. Baselines and setups
- II. PHP, t reco, and mass
- III. Preliminary proposal of ϕ
- IV. First attempt full simulation

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BNL

10. 18. 2021

Status

- Procedure:
 - ✓ Generator – Geant4 (sim) – Digi/Reco – Analysis.
 - ✓ Analysis (physics benchmarks – diffractive_phi) is being developed.
 - ✓ Test performed on BeAGLE ep events!
- Issue:
 - Currently, the full simulation framework does not take nuclei PDG code. All above tests are done with ep.
- Looking ahead this week:
 - Test on after-burner files (Brain Page has started to look into these files.)
 - If the PID issue can be resolved soon, BeAGLE and Sartre eA will be tested. Hopefully with after-burner.
 - Need some help on large mc files production (from simulation team).

Gitlab page (being developed)

- https://eicweb.phy.anl.gov/EIC/benchmarks/physics_benchmarks/-/tree/diffractive-phi-benchmarks/benchmarks/diffractive_phi

EIC > benchmarks > physics_benchmarks > Repository

diffractive-phi-b... physics_benchmarks / benchmarks / diffractive_phi History Find file Web IDE 059636a0 Clone

finish giveme_t
Kong Tu authored 2 days ago

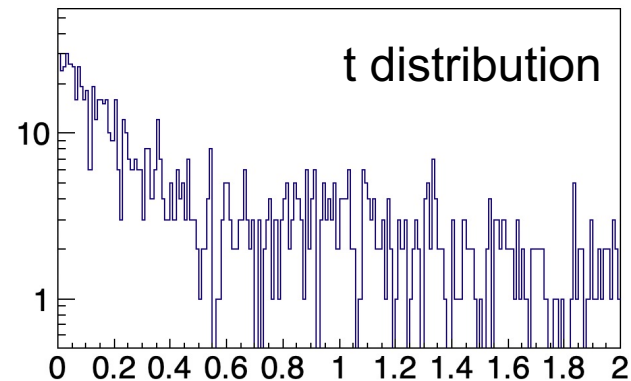
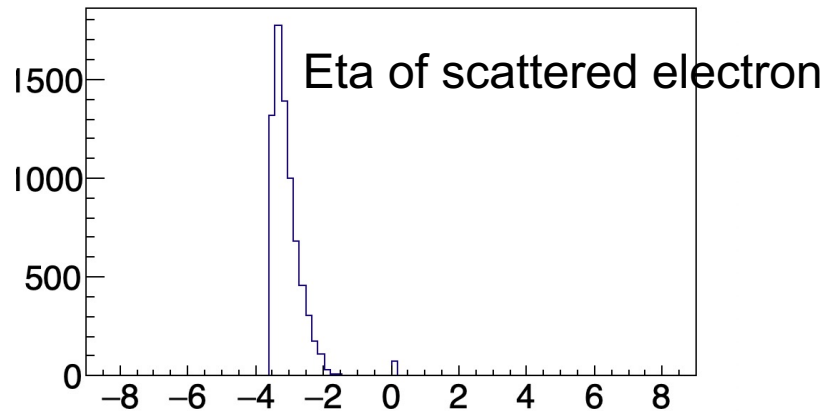
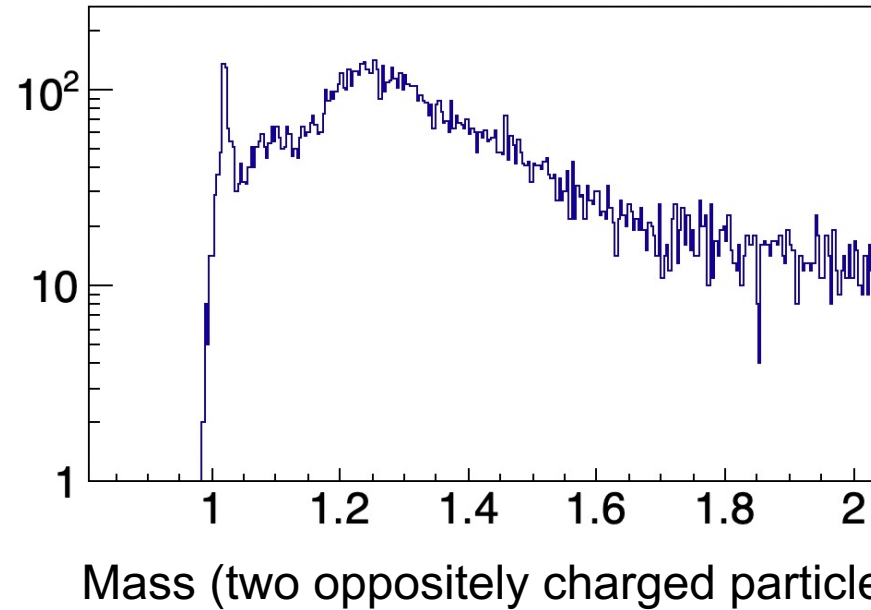
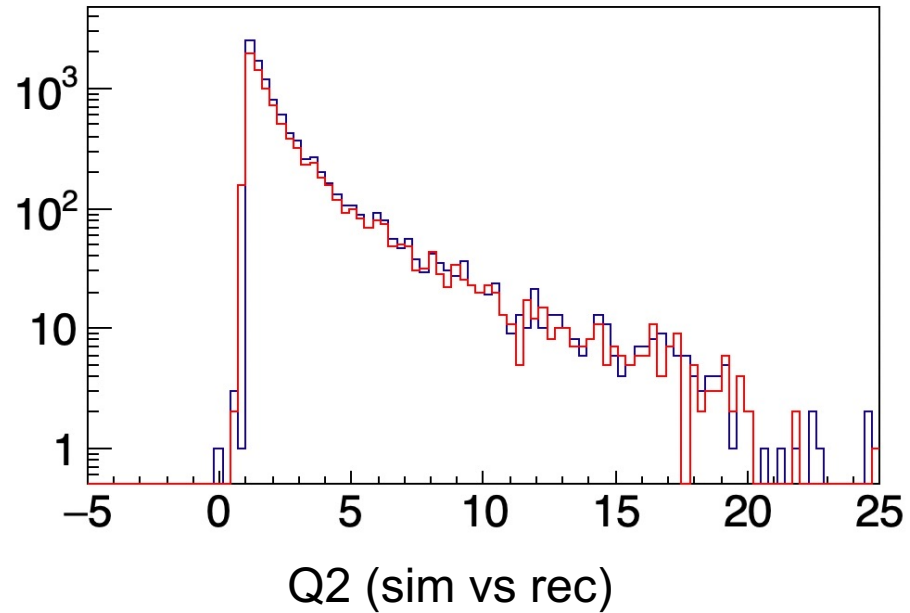
Name	Last commit	Last update
..		
README.md	finish giveme_t	2 days ago
++ README.md	first commits	5 days ago
analysis-only.sh	adding analysis	3 days ago
config.yml	adding analysis	3 days ago
diffractive_phi.sh	Update benchmarks/diffractive_phi/config...	6 days ago
env.sh	initial commit	4 days ago
gen.sh	adding analysis	3 days ago
reco_local.sh	adding gen.sh and modifying	4 days ago

README.md

#Instructions

When I finish this, I will try to write an instruction if it is useful.

BeAGLE ep VM process – 10k events



Summary

- Time is limited, but so far on track.
- eSTARLight may have some problem, still communicating with Spencer.
- Next Monday – (hopefully) first results in eA.