Validation WG: News and Planning

Aug 7th, 2024

News

- Ready for Snakemake 8 (blocked by python version conflict with py-protobuf)
- Tracking benchmarks run over all past campaigns on eicweb, also local sim
- DEMP benchmark merged
- Jets(DIS) benchmark updated

Development progress

Physics benchmarks

- **Made changes to the Snakefile, analysis, and plotting scripts** ✓
  #17 by Lovepreet6 was merged 2 weeks ago • Approved • ◓ 3 of 7 tasks

- **mirror.yaml: mirror branch delete actions to eicweb** ●
  #16 by veprbl was merged last month • Approved

- **demp,diffractive_vm: drop use of S3RemoteProvider, stream from XRootD** ✓
  #15 by veprbl was merged on Jul 7

- **Benchmark for Deep Exclusive Meson Production (DEMP) physics** ✓
  #14 by bschmookler was merged on Jul 3 • Approved • ◓ 2 of 7 tasks

- **dis/analysis/jets.cxx: update from the latest code** ✓
  #13 by veprbl was merged 3 weeks ago • Approved

Detector benchmarks

- **tracking_performances: upload debug plots as artifacts** ✓
  #41 by veprbl was merged 2 days ago

- **fix: bench:tracking_performance:** `snakemake --cores 3` ✓
  #40 by wdconinc was merged 2 days ago • Approved • ◓ 2 of 7 tasks

- **Modified zdc lyso analysis code.** ✓
  #39 by JiaJunHuang120000 was merged last week • Approved • ◓ 2 of 7 tasks

- **ecal_gaps: use DETECTOR_CONFIG from the wildcard in eicrecon** ✓
  #38 by veprbl was merged 2 weeks ago

- **Benchmark for low-energy photons in the ZDC LYSO** ✓
  #37 by bschmookler was merged 2 weeks ago • Approved • ⊡ 6 tasks

- **tracking_performance: enable running over campaigns** ✓
  #35 by veprbl was merged last week

- **included software version** ✓
  #34 by Simple-Shyam was merged 2 weeks ago • ⊡ 5 tasks

- **mirror.yaml: mirror branch delete actions to eicweb** ✓
  #33 by veprbl was merged last month • Approved

- **tracking_performances: fix for removed 7.x-specific remote** ✓
  #32 by veprbl was merged on Jul 7

- **tracking_performances: Adjust axis extent** ✓
  #31 by Simple-Shyam was merged last month • Approved • ⊡ 5 tasks

- **drop use of Snakemake 7.x-specific remote functionality** ✓
  #30 by veprbl was merged on Jul 5

- **benchmarks/tracking_performances: implement CI** ✓
  #29 by veprbl was merged on Jul 6

Development status

Physics benchmarks

☐ ⑂ **Lambda zdc** ●
　　#19 opened 2 days ago by sebouh137 ◐ 4 of 7 tasks

☐ ⑂ **Semi-coherent zdc benchmark** ✓
　　#18 opened 5 days ago by JiaJunHuang120000 ◐ 2 of 7 tasks

Detector benchmarks

☐ ⑂ **treewide: use `set -m` and exec to avoid lingering ddsim processes** ✓
　　#42 opened 2 days ago by veprbl

☐ ⑂ **snakemake.yml: allow using S3 (XRootD is down sometimes)** ✓
　　#36 opened 2 weeks ago by veprbl

- #18 needs some help to figure out on-the-fly HepMC file generation
- #19 needs to be fixed to run properly on eicweb
- #42 could use a review
- #36 is ready

Expected developments

- Roman Pots ML training
- Calorimetry PID benchmark
- Calorimetry PID ML training
- Integration of CI with image browser

(Wouter) Discussion item: What's a reasonable duration for a benchmark pipeline. When do we parallelize over serialize?