

HPS Java Tests

Tracking Unit Tests

Running the unit tests in the tracking module will run the following two tests:

- TruthResidualTest: performs reconstruction on 500 events from a raw Lcio file of A' MC events, accessed remotely at http://www.lcsim.org/test/hps-java/ap_prompt_raw.slcio . Puts the reconstructed Lcio, along with a set of plots of residuals (reconstructed vs MC truth), in the tracking/target/test-output/ folder. Tests the residuals for reasonableness.
- ComparisonTest: performs reconstruction on 500 events from a raw Lcio file of data events (golden run 5772), accessed remotely at http://www.lcsim.org/test/hps-java/hps_005772.0_recon_Rv4657-0-10000_raw.slcio . Puts the reconstructed Lcio, along with a set of plots of basic reco quantities, in the tracking/target/test-output/ folder. Compares the reco distributions (using t-test and KS-test, $\alpha=0.05$) against a set of reference distributions, found at http://www.lcsim.org/test/hps-java/referencePlots/hps_005772-ref.aida

Location of the files on jLab machines

In case the reference files fail in future PR CI checks, the reference files should be updated. The current reference files are stored on jLab machines on: `/u/group/hps/www/hpsweb/html/test/hps-java/referencePlots/`