Kaon LT Status Update

November 26th, 2019

Richard Trotta

Current Status

Ongoing [Calibrations]

Timing windows and reference times

- Richard/Stephen
- Status Completed

Calorimeter

- Hamlet/Richard/Hakob/Stephen/Vladimir/Vardan
- Status Ongoing

Aerogel

- Vladimir
- Status Completed

HGCer

- Garth/Vijay
- Status Ongoing

HMS Cer

- Richard/Ali?/Vijay?
- Status Completed

HMS DC

- Stephen
- Status Completed

SHMS DC

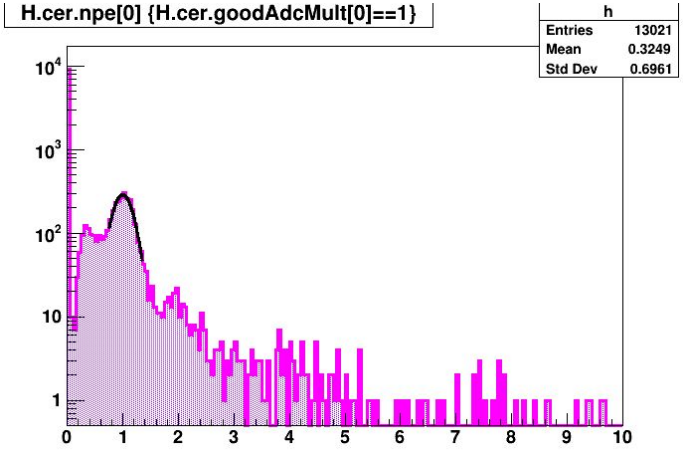
- Richard/Stephen
- Status Completed

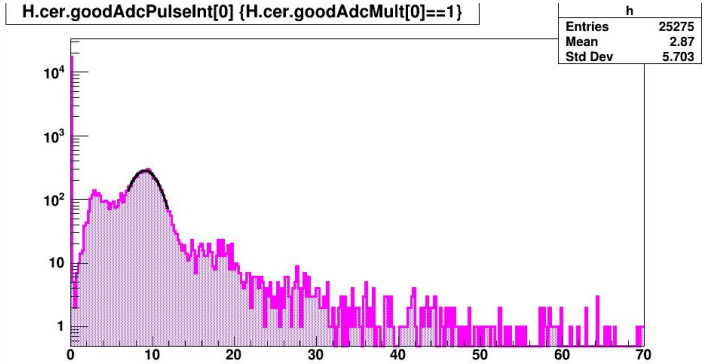
Hodoscope

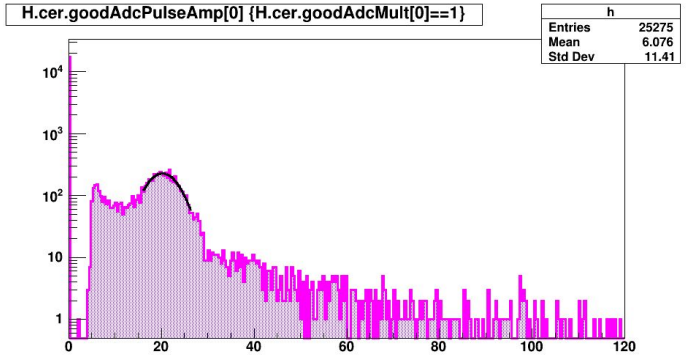
- Vijay/Ali
- Status Completed

HMS Cherenkov

- ADC time window cut values
  - hcer_adcTimeWindowMin = 90.,98.
  - hcer_adcTimeWindowMax = 115.,120.
- Calibration coefficients:
  - Fall 2018: hcer_adc_to_npe = 1./10.69, 1./9.81
  - Spring 2018: hcer_adc_to_npe = 1./9.069, 1./9.035







hallc_replay_lt

- Made a paper going through each directory in hallc_replay_lt.
- This is ongoing, but calibration section is complete

Hall C Replay Outline

Richard L. Trotta III

November 24, 2019

Contents

Data Analysis ¶

- Analysis Tasks
- Analysis How-To
- Kaon LT Online Replay Git Repo
- L/T Separation Software (see Sec 4.2 of https://misportal.jlab.org/ul/publications/view_pub.cfm?pub_id=15234 for description)
- Hall C Logbook
- Kaon LT Logbook
- Logbook for Analysis
- Online Replay Histograms
- SIMC results for comparison
- Golden SIEVE runs
- Heep rate runs and analysis
- Physics runs and analysis
- Luminosity scan runs and analysis
- Single Spin Asymmetry Analysis
- High and Low Epsilon Comparison

Navigating hallc_replay_lt

- The GitHub can be found here
- Attached is a summary for all directories in files in hallc_replay_lt [ONGOING] hallc_replay_outline.pdf

Next Steps

- Finalize calibrations

On deck [Efficiencies and offsets]

Luminosity

- Status Ongoing

Elastics

- Status Ongoing

First iteration of cross section

- Status On deck