Progress of CGEM cosmic data analysis in CgemBoss

Linghui Wu

For the CGEM cosmic data analysis group

Feb 13, 2020

Track reconstruction

- Look into track fit with event display (Aiqiang)
  - Some events are not well fitted due to using wrong cluster
  - Some events have too many REC clusters due to large number of fired strips (to be understood)
- Track fit (Hongpeng)
  - Optimize the selection of clusters

    loop the possible cluster combinations and select the best candidate with track chisquare

Alignment & calibration

- ## Alignment (Aiqiang)
  - Might be improved after improvement of track reconstruction

- ## Calibration (Jingyi)
  - Calibration constants of T_{Rising} and $T_{Falling}$ from run 1 to 17 are available
  - Path of calibration files
    /bes3fs/cgemCosmic/data/timeFitCalibConst
  - define the calibration file in jobOption:
    CgemCalibFunSvc.TimeFitFile="/bes3fs/cgemCosmic/data/timeFitCalibConst/{calibFileName}";