RICH Calibration Plan

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at

PHENIX Calibration Task Force Meeting

on

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- procedure to calibrate RICH to put it ready
  - calibration system
    - LED's controlled by the FEE
  - hardware parameters to set
    - probably only monitoring and stability check in Year-1
    - may adjust VGA especially after LV1 trigger is implemented
- estimation of how much data are required
  - data required for initial calibration
    - ~ 1 K single photon hits per PMT
    - ~ 10 K LED events
  - dedicated calibration run without beam ?
    - preferred
  - running time and frequency
    - 1-2 minutes × 1 per shift

- dedicated calibration events during data taking
  - not planned
- real physics events for calibration and monitoring
  - timing calibration
    - offline analysis may or may not be needed
    - ~ 1 K real hits per PMT
    - ~ 1 M minimum bias events
    - ~ 1 shift
  - higher order calibration, *e.g.* eID tuning
    - offline analysis required
    - > 1 M peripheral events ?
    - < 1 per day
- offline calibration