Configuration for FLE thresholds calibration

- To decrease the rate we have to cut off the low energy depositions
  - We can set ~50 MeV FLE threshold at positive crystal ends while keep nominal value ~100 MeV at negative end
  - Require CAL_LO trigger:
    - FLE discriminator at positive end will provide the trigger
    - We can measure FLE threshold at negative end using diagnostic information
- This method requires 2 configuration: for positive and for negative crystal ends
- Total number of run configurations 3x2x2=12:
  - 3 threshold settings (100,125,150 MeV) to be measured
  - 2 trigger patterns (ODD/EVEN crystals enabled)
  - 2 threshold configurations (50 MeV at positive/negative ends)

- Tkr && CAL_LO (thr=50 MeV) gives the event rate 1.6

Configuration for FHE threshold calibration

- To measure FHE threshold we can use FLE trigger with conservative FLE threshold = 150 MeV
  - Require CAL_LO trigger
  - Use ordinary symmetric configuration
- Total number of run configurations 3x2=6:
  - 3 threshold settings (1000,1250,1500 MeV) to be measured
  - 2 trigger patterns (ODD/EVEN crystals enabled)
- Time required: 6x15 min = 90 min
- CAL_LO (thr=150 MeV) gives the event rate ~1kHz, it should be prescaled by factor 3
- Total number of events required: ~1.8×10^6
- To decrease data volume
  - Set LAC thresholds to maximum possible value (LAC DAC = 127 or 6 MeV)
  - Suppress tracker readout
- Forced HEX8 readout (autorange OFF)

LAC thresholds calibration on orbit

- 4 configurations:
  - 2 values of LAC thresholds: "2 MeV" and "4 MeV"
  - LAC "disabled" at Positive or Negative end of all crystals by setting LAC DAC=127 (highest possible value).
- Time required: 60 min total (15 min per configuration) if collecting data with nominal science trigger configuration at 300 Hz.
- Total number of events: 1.1×10^6