

# calibration todo (Raphaelle)

## online calibration on DAQ machines

- 🌐 Pedestal run in principle all ok except that people don't have the reflex to use the macro provided on the tsukubatr machine to check the output (reference data and calibration constant in AliEn at the end of the run). Should we provide something else?

## online calibration on HLT machines

- 🌐 not yet working...
- 🌐 use of TH2I (dE/dx in each detector) and TProfile2D (average pulse height and PRF) as monitoring at HLT (per detector)

## offline calibration

- 🌐 Size and granularity of reference data (I can give a new estimate tonight for both supposing that we run "high granularity" from the beginning...)
- 🌐 Monitoring (in time and over the chambers) of the calibration constants (Paul Constantin, Anton Andronic)

# alignment todo

## cosmics 2008

- 🌐 check efficiency (Sebastian)
- 🌐 check resolution (Yvonne)
- 🌐 rerun production (centrally?)
- 🌐 run alignment procedure on ESDs and friends
- 🌐 compare results to survey (SM 0, 8, 9, 17)
- 🌐 compare results to caliper measurement (SM 8)
- 🌐 compare results to Münster alignment (SM 7)
- 🌐 put the results to OCDB

## cosmics 2009

- 🌐 run alignment procedure on ESDs and friends
- 🌐 compare results to cosmics 2008 (SM 9, 17)
- 🌐 put the results to OCDB

# QA todo (Sylwester)

## software:

- 🌐 fully online monitoring with Amore (Markus)
- 🌐 OCDB content (histos and params) visualizer (on tsukubatrdr), in particular vis. pedestals
- 🌐 clusters with prompt reco or HLT (big subject)

## hardware tests (using AliTRDqaBlackEvents)

- 🌐 detecting and patching faulty MCMs / ADCs
- 🌐 analysis of noise and stability

## if possible:

- 🌐 trending from TRD.QA.root
- 🌐 offline follow-up on data collected

# Krypton calibration (Anton)

- ⊛ Will serve us as good as it served the TPC, see nice summary by Danilo <http://indico.cern.ch/materialDisplay.py?contribId=3&materialId=slides&confId=14403>
- ⊛ Calibration of gain (sensitive to all non-uniformities, detector + FEE)
- ⊛ Assuming we need 2000 clusters per pad →  $2 \times 10^9$  decays in total, assuming same source intensity as TPC i.e. 100 decays/event → we get  $3/80 \times 100 = 3.75$  clusters/event
- ⊛ With 1 kHz data taking (random trigger): 200 hours (8 days) running
- ⊛ We may need to run at a reduced (by a factor ~2) gain (main photon: 41.5 keV, 67%)

## To do:

- ⊛ "order" the (Rb-83) source (at Isolde) - don't know the "delivery time"
- ⊛ changes in the gas system (Chilo notified 2 days ago)
- ⊛ Kr clusterizer (the one of TPC not really recommended by Marian)

## Concerns:

- ⊛ safety? TPC source was 7 MBq → no problem
- ⊛ data size (?)

# data flow for TRD calibration, alignment, QA

