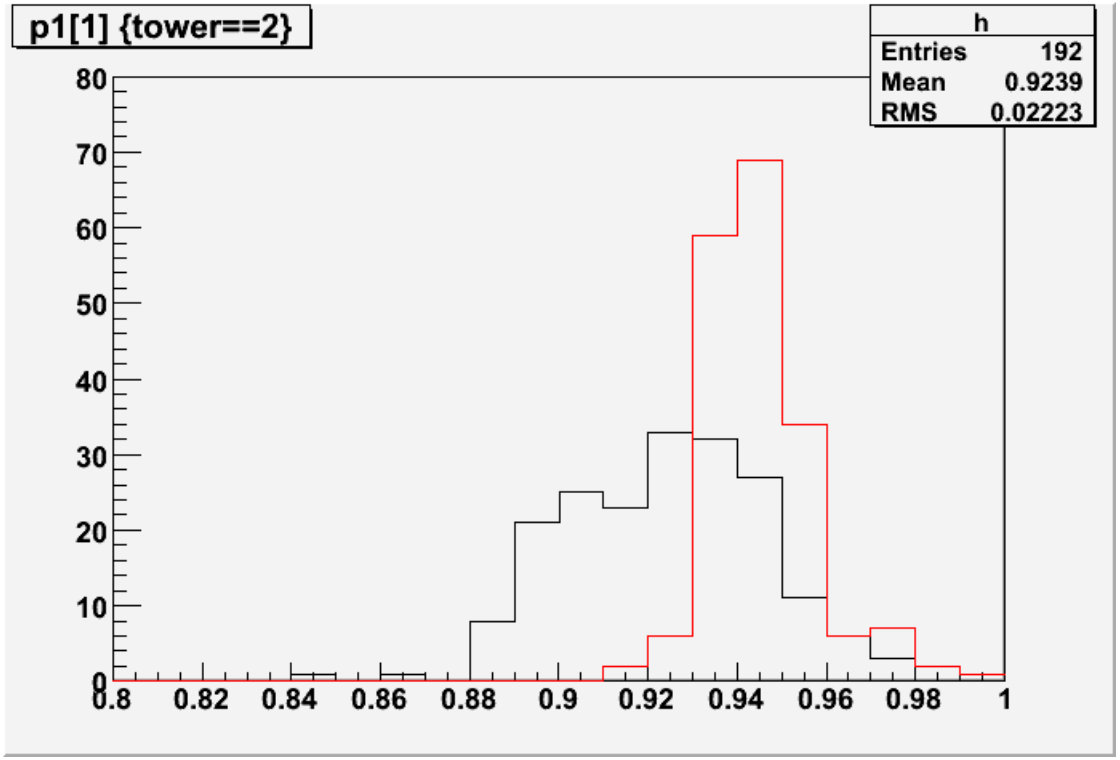
Calorimeter energy discussion

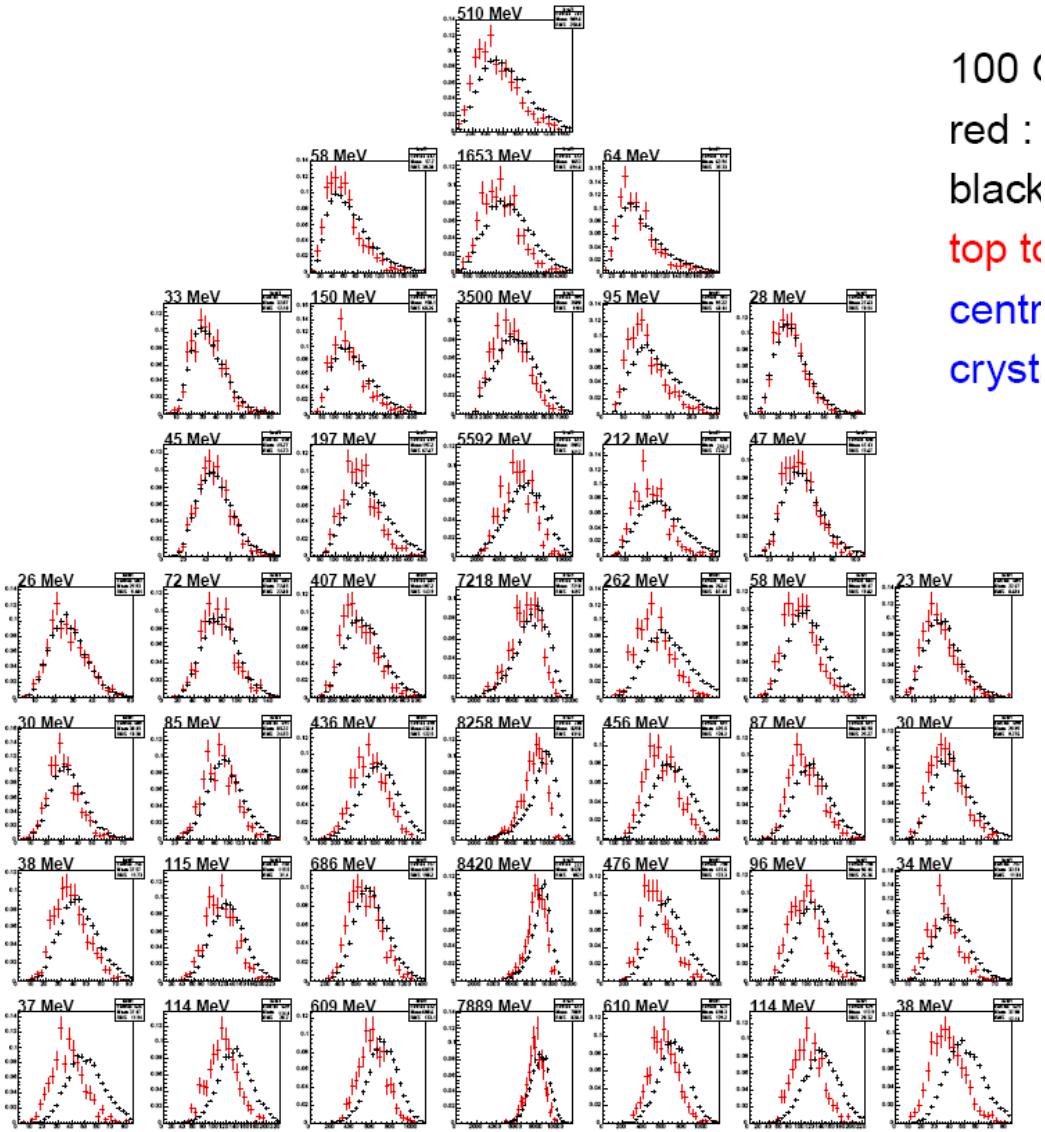
- The brave new world
  - Perfect standalone calibration (charge injection + muon)
  - Perfect simulation
  - Beamtest Brother is watching…
  - Delta(alpha, beta, gamma) < epsilon << 1
- The best world
  - Good standalone calibration (charge injection + muon)
  - Tunable simulation
  - Agreement is reached after tuning the simulation
  - Everything is easily transfered to the LAT
- The best posible world ("C'est la vie"-world…)
  - Not fully understood standalone calibration
  - (maybe not entirely) tunable simulation
  - Modifying the calibration to get agreement between data and MC
  - BUT transfering this calibration to the LAT will not be easy
  - BUT since we have no constraint to tune the MC, we are less sure that the agreement is valid throughout th phase space

LEX1 vs HEX8

- HEX8/LEX1 should be 1 if muon peak calibration in small diode is correct
- What is the precision of the muon calibration of HEX8 with muon gain ?
- Last non-linearity correction has a positive effect, but that is not all
- We always corrected HEX8. Do we have to correct LEX1 instead ?



Modifying the calibration



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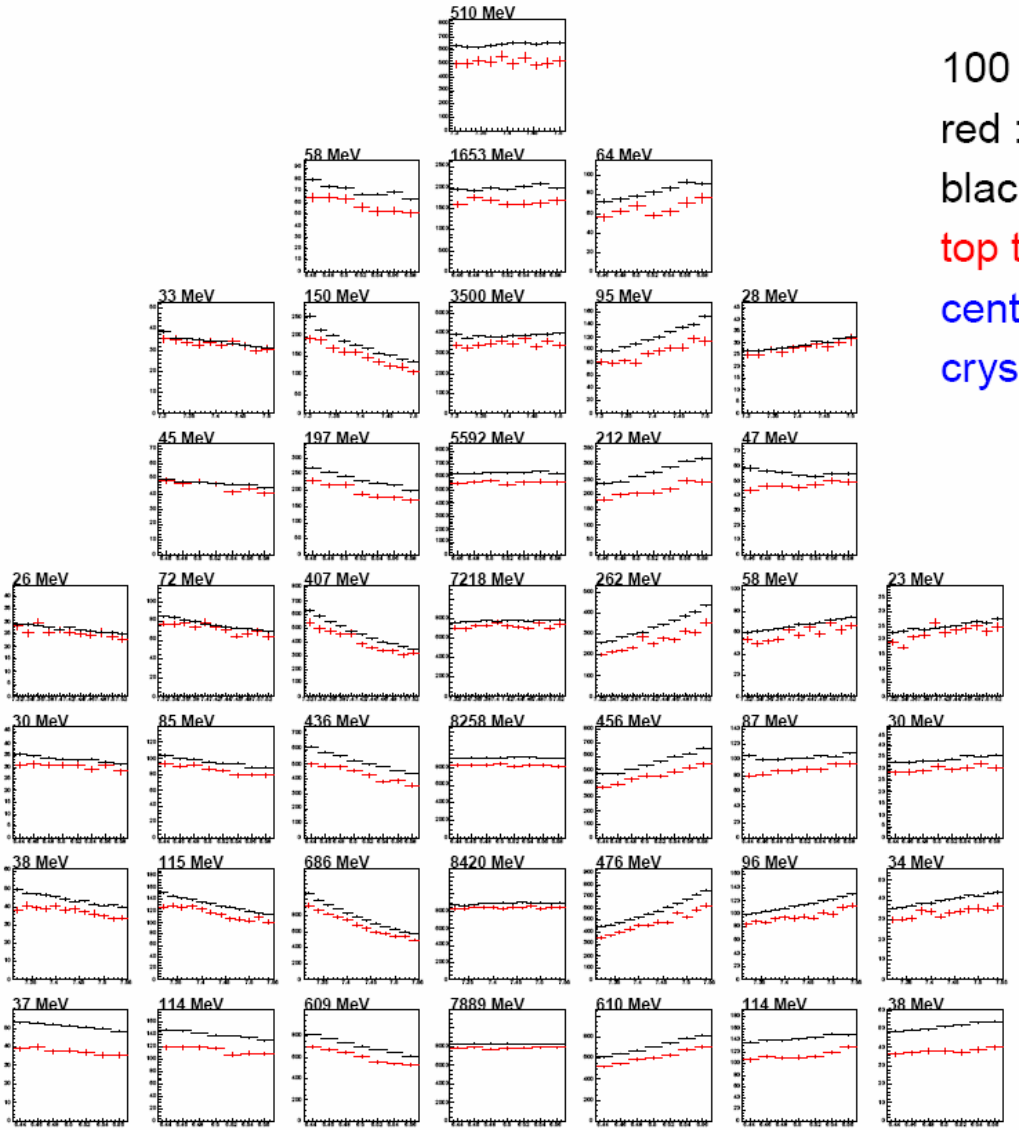
Modifying the calibration



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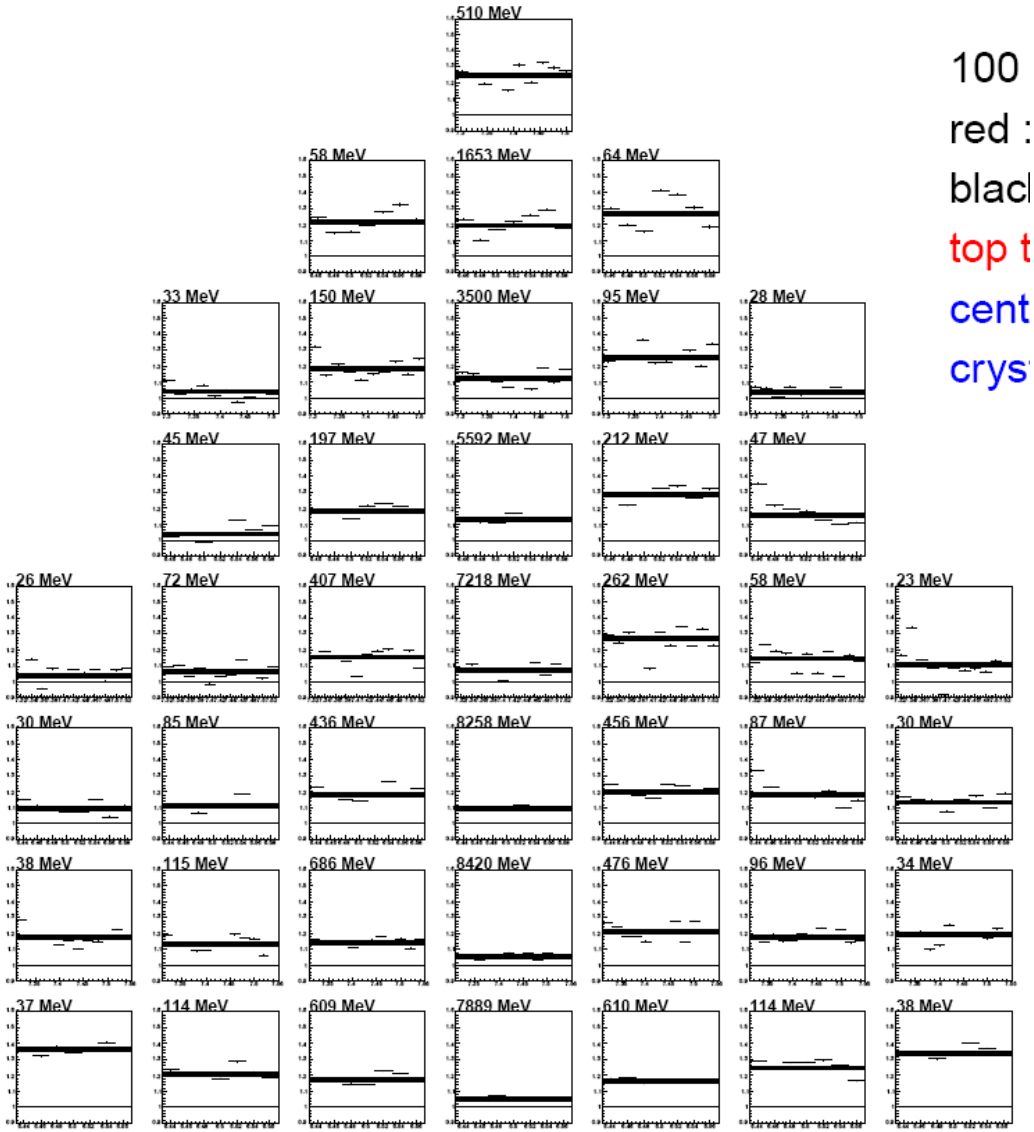

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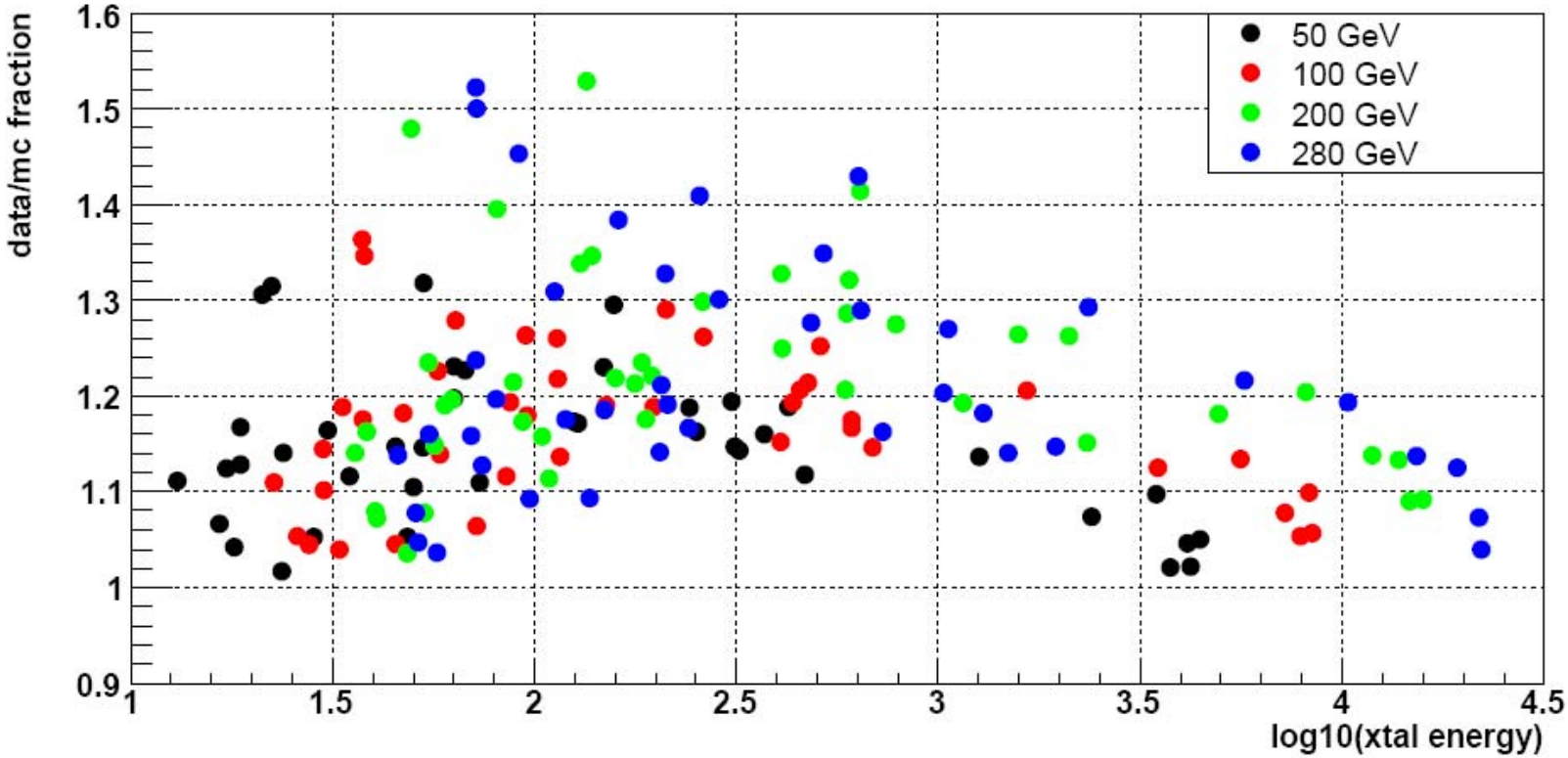
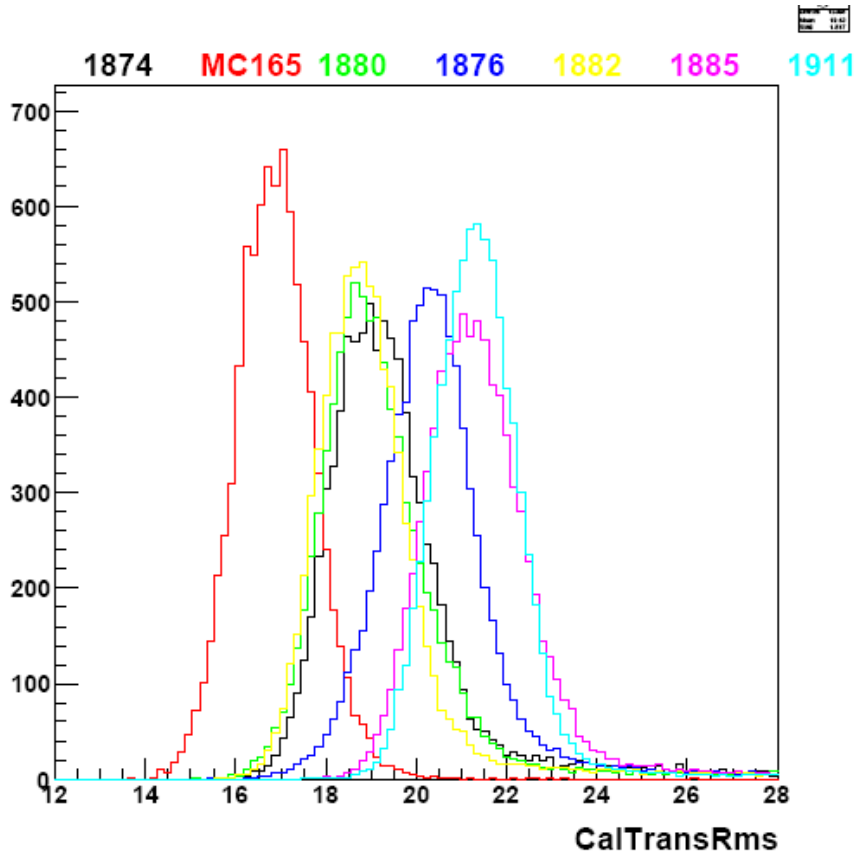
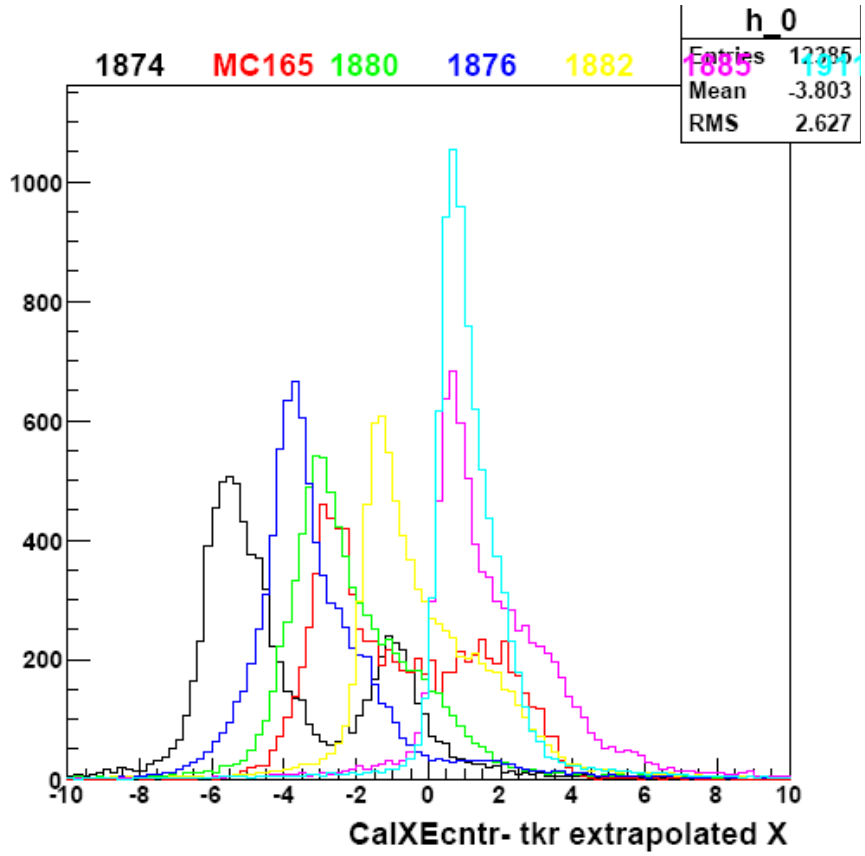
Modifying the calibration



Position measurement can be used as a constraint





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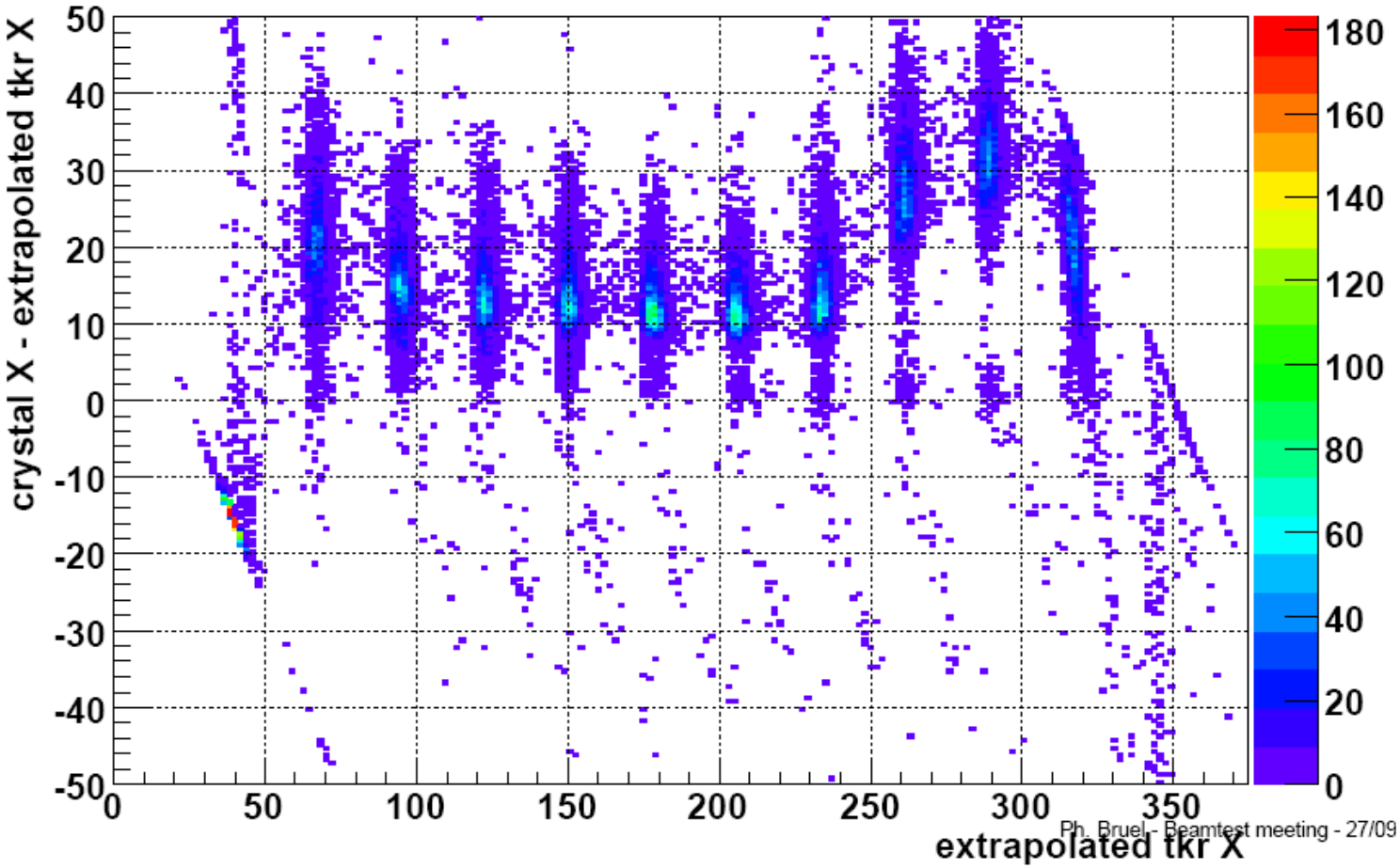

Position measurement

- We should check/use the position measurement in GCRCalib
- Is the tack extrapolation accurate enough ?