PMD Calibration

Basanta K. Nandi

PMD Calibration

ALICE PMD Layout

○──► Positions of fiducial markers on the
Supermodule boundary – 16 Nos/plane
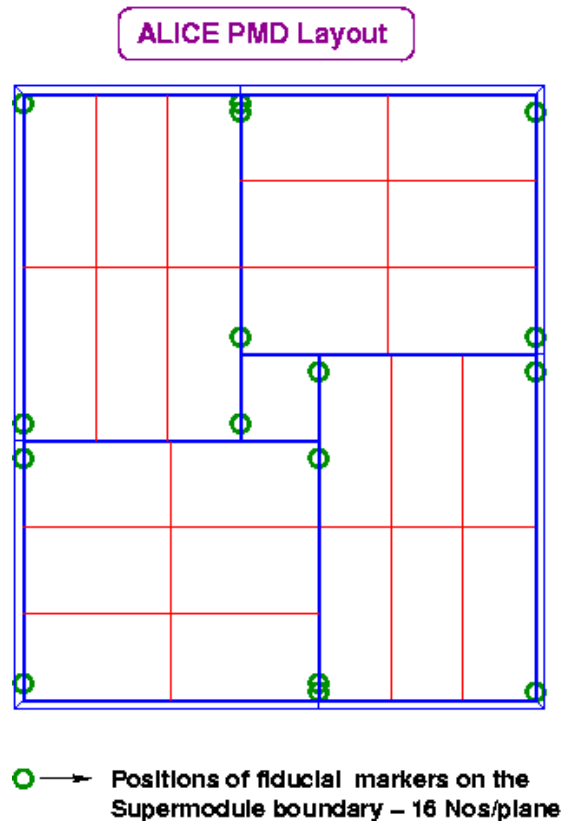
Two detector Planes: CPV and Preshower

Total No. of Modules : 48
Total No. Channels   : 220K

Data Format for each cell :
Det plane, Module No., Row, Col, Gain
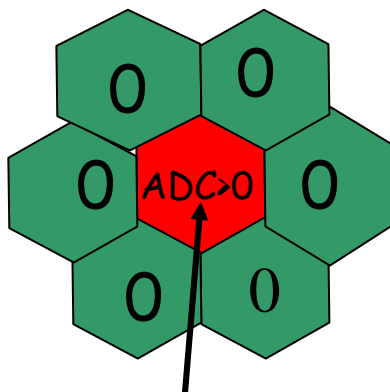Int, Int, Int, Int, Float

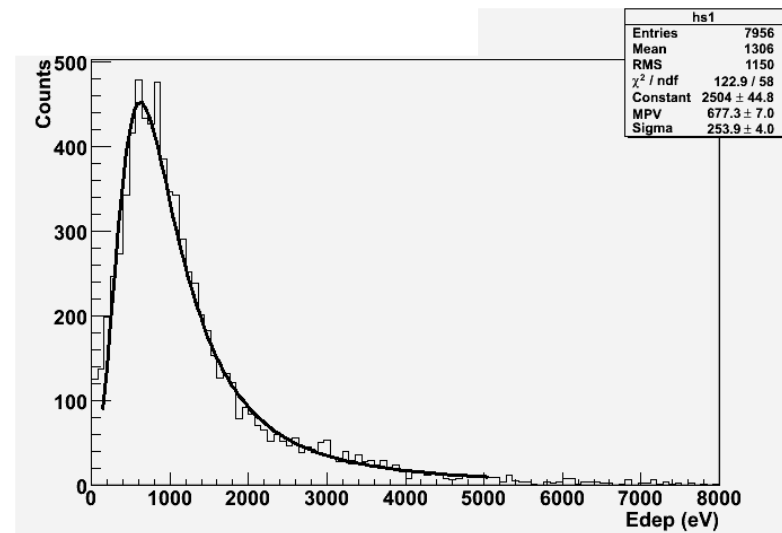The file size is ~ 4MB/Run

Procedure to Obtain gain of a Cell:

Test beam : Charged hadrons typically hit single cell

Data   : Look for isolated hit cell.
**   Take the energy deposition**

typical spectra

isolated cell

hs1	
Entries	7956
Mean	1306
RMS	1150
χ^2 / ndf	122.9 / 58
Constant	2504 ± 44.8
MPV	677.3 ± 7.0
Sigma	253.9 ± 4.0

Status

Calibration Class : **AliPMDCalibrator**

Calibration Object : **AliPMDCalibData**

Data Size : Need discussion in the group

By October 15, 2006

SHUTTLE : Work in progress

Expected to finish by end of October (Z. Ahamed)

ONLINE : Integration of calibration code at LDC level
by end of December (Z. Ahamed)