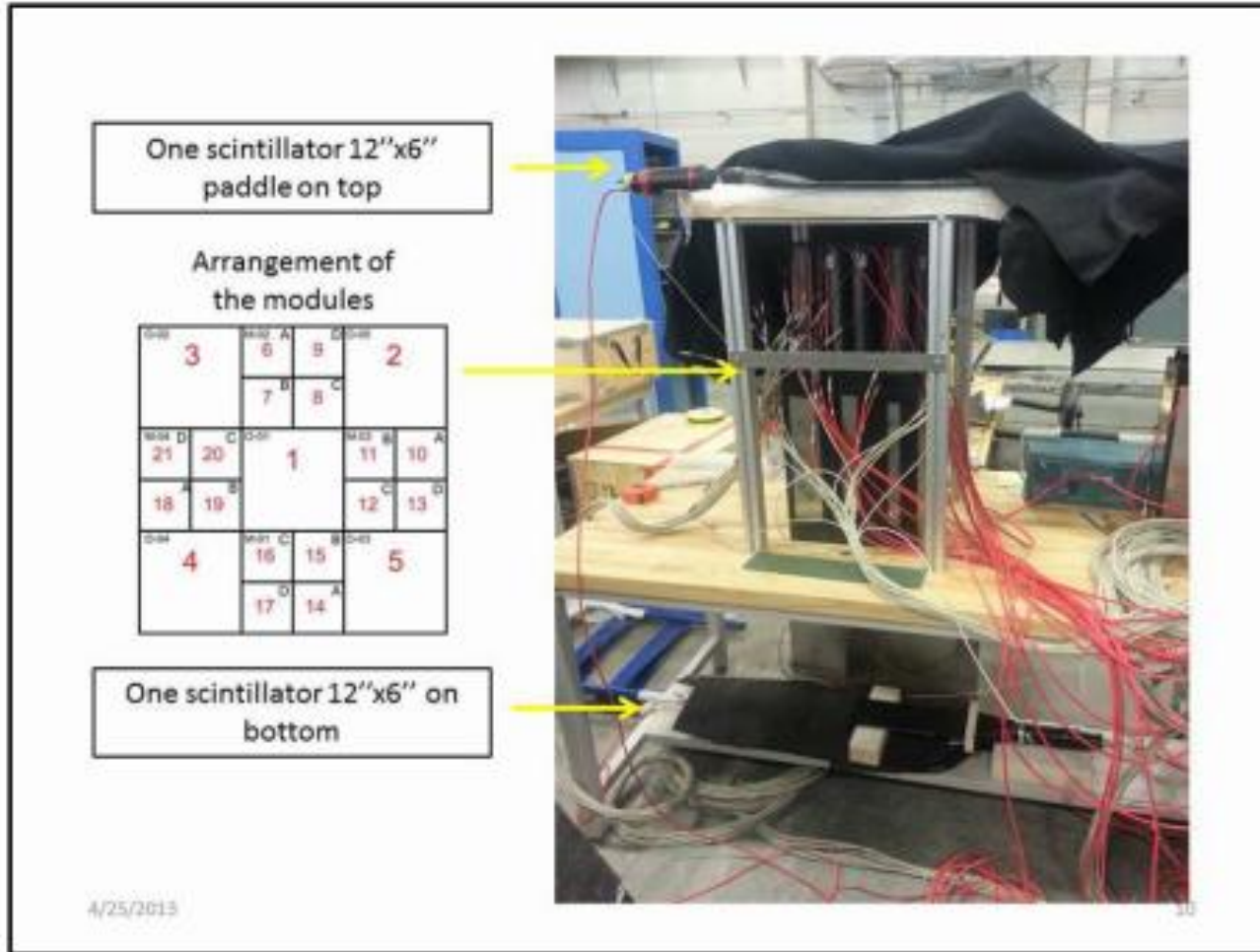


# Update on ECal for GEp5

Mark Jones  
Charles Perdrisat  
Vina Punjabi  
Ed Brash  
Carlos Ayerbe-Gayoso  
Tony Losada

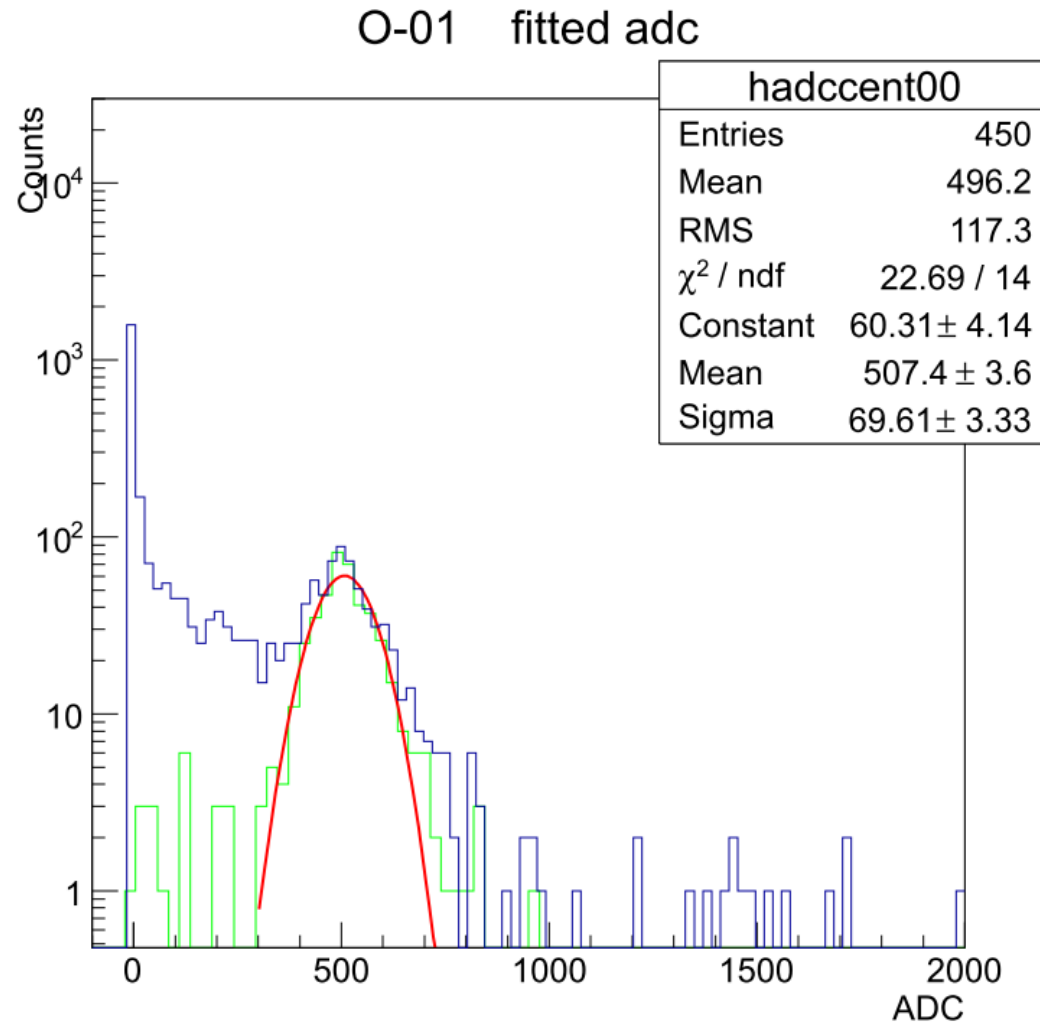
# Test of HERA-B Calorimeter

- Started cosmic tests in February.



# Test of HERA-B Calorimeter

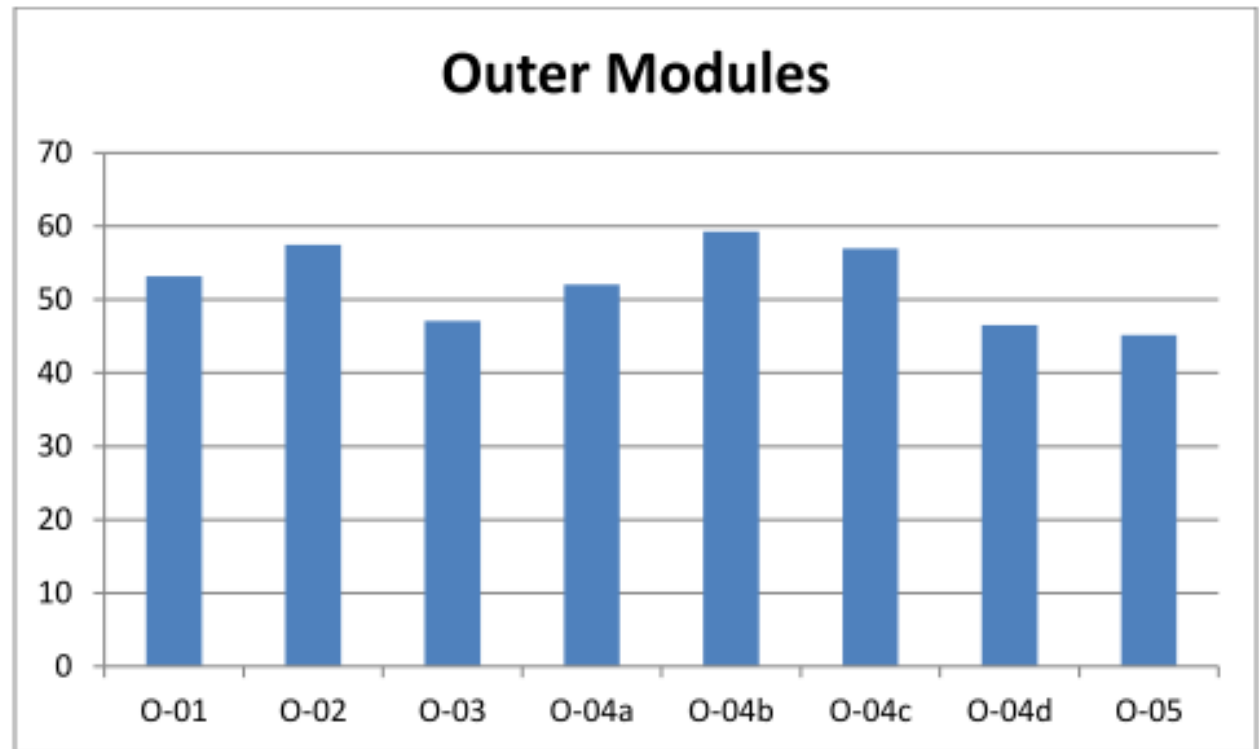
- Trigger on scintillators. Select event which as center block and no hits in surrounding blocks.



# HERA-B Calorimeter Test

- Test of 5 “Outer” Modules ( 1 PMT for 11x11cm) give about 1000 photo-electrons per GeV which is consistent with the expected results.

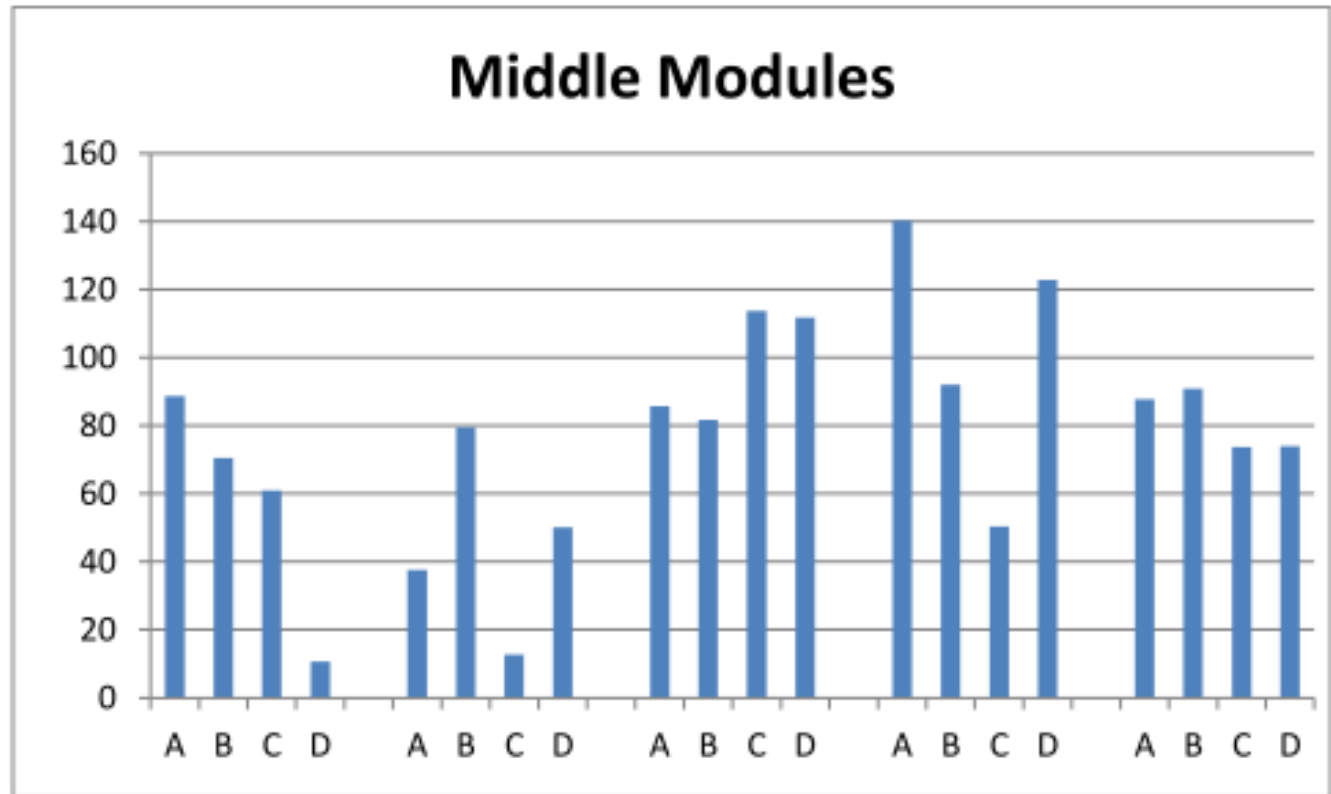
Number of photo-electrons  
For 50 MeV  
Energy deposit



# HERA-B Calorimeter Test

- Test of 4 “Middle” Modules ( 4 PMTS divide 11x11cm) give more sporadic results.

Number of photo-  
electrons  
For 50 MeV  
Energy deposit



# HERA-B Calorimeter Status

- Presently testing PMT separately using LED setup.
- Planning to test modules at SLAC with test beam in June. Secondary electron beam at 5Hz with beam energy between 3-15 GeV.
- But unfortunately at this point the likelihood of getting the modules is low. Have been in contact with Zaitsev. May get an answer by 2014.
- Charles has asked for estimates of cost for new modules from other groups in Russia.

# Possibility of using CLAS Large Angle Calorimeter parts

- Bogdan suggested the idea of cutting up the CLAS Large Angle Calorimeter to make sampling calorimeter.
- The scintillator is about 40x33 planes of 1.5x10x220cm and 24x16 1.5x10x440cm planes.
- Lead is 0.2cm thick covering 220x440cm with 33 planes.
- Not the ideal ratio of lead to scintillator thickness for electron calorimeter.
- Would cut up lead and scintillator into 5 or 10 cm blocks and then use a WLS along the side to transmit light to the PMT.
- Need to determine a practical arrangement with thickness of  $20X_0$  and run GEANT for energy and position resolution.
- Need to make cost estimate.