

Technical Board – DCAL Software

- Neils Meyer led the discussion on integration of DCAL software
- Uniform sharability of data
 - Can all DHCAL outputs integrated into one combined data set as events get built?
 - What do we need for this to happen?
 - Relevant people from ANL and UK DAQ group with NM to hammer out details → report to TB in two week time scale
- Software framework
 - The current scheme of LCIO + LCCD + Marlin + MOKKA (used by ILD) seems to be the best fit for easier integration of output
 - The analysis tools that work on the final reco output should not be restricted
 - Eg. JAVA based analysis tools can be allowed sing LCIO output

TB Summary - Software Discussion

- Geometry (and other conditions data)
 - A transparent propagation of conditions data (calibration, dead cell maps, cell positions, etc) to analysis level needed and taken into account in reco software design
- Common DHCAL reconstruction framework
 - Maximally common reconstruction framework for DHCAL desirable
 - A task force with reps from DHCAL groups will be formed to discuss the prospects
 - Will report back at the Tech Board Review in May at FNAL
 - Issues which should be addressed by the task force:
 - what is the reasonable level of comparison both different technologies and what is needed get there?
 - what is the preferred way of data-MC comparison?
 - What are the common aspects in reco/digi, evaluate prospects of combined framework?

Technical Board – Beam Tests

- Ongoing Beam Tests
 - Apr. 29 – May 26 at MTBF
 - Scint/W ECAL+AHCAL+TCMT
 - FNAL seems to be willing to give a bit more duty factor if we need
 - FNAL Summer shut down to begin June 10, 2009
 - June at CERN
 - GRPC 1m² plane testing
- Upcoming beam tests
 - Mid 2009 GEM DHCAL chamber characterization
 - Late 2009 – 2010 ECAL + RPC DHCAL + TCMT @ MTBF
 - Late 2009 – 2010 1m³ GRPC and μ Megas @ CERN
 - Combined test? When and where?
 - Late 2009 – 2010 33cmx100cm GEM DHCAL unit chamber testing
 - Late 2010 – 2011 five GEM DHCAL plane testing with CALICE stack

Technical Board Review

- Expected in the time scale of May, 2009 @ FNAL
 - Exact date will be determined in TB meetings within the next month
 - Will announced to the collaboration
- Some topics to be reviewed
 - DHCAL Software integration
 - DHCAL hardware preparedness
 - Mechanical prototype preparedness
 - Short term beam test plans
 - Mid and long term beam test plans
 - Plus other topics TB agrees to cover

2005 2006 2007 2008 2009 >2009

CALICE ECAL

Other HCALS (RPC, GEM, etc)

CALICE TILE HCAL+TCMT

LCD R&D, calibration

Other HCALS (RPC, GEM, etc)

CALICE TILE

Combined Calorimeters

PFA and shower library Related Data Taking

Plans in 2005 CALICE meeting at NIU

Phase 0: Prep.

Phase I: LCD Detector R&D, PFA development, Tech. Choice

Phase II

2006 07, 08 2009 2010 2011 2012 >2013

Si/W & Scint/W ECALs

AHCAL+TCMT

RPC DHCAL

GRPC DHCAL

μ Megas DHCALs

RPC DHCAL

EUDET Mech. Prototype

GEM DHCAL

LC Detector Prototypes

Combined CALICE Stack Runs

Phase I: LCD Detector R&D, PFA development, Tech. Choice

Phase II