Review Goals and Charges

```
4<sup>th</sup> CALICE TB Review, DESY
Apr. 19 – 20, 2007
Jae Yu
University of Texas at Arlington
```

- Forewords
- Goals
- Reviewer Charges

Forewords

- CALICE Collaboration is leading calorimeter R&D
 - Si/W ECAL+AHCAL+TCMT stack
 - Has been exposed to particle beams last year at CERN
 - Is readying to take "Physics runs" this year
 - Mechanical support and drive system almost ready
 - RPC, GEM and μMegas DHCAL
 - Chamber prototypes exposed to particle beams at FNAL
 - Gearing up for larger scale electronics and 1m³ beam tests
 - Getting ready for the run near future
 - Scintillator/W ECAL exposed to beam at DESY
 - Getting ready to be integrated into the system
- CALICE has been effectively working as a well coordinated collaboration

But the work is only beginning...

- We were successful because we had planned well
 - Well thought out run plans for CERN last year was a tremendous tool
 - Erika and Goetz → Erika and Fabrizio
 - We were able to leverage work performed by other components
 - We develop common utilities, reconstruction and analysis software and databases, for combined beam test
 - We have been exercising software for data analyses
 - Well positioned to extract "physics" expeditiously
 - We utilized and shared experiences on bureaucratic requirements such as MOU to facilities
- Time is ripe, and the time is right!
 - For "real" physics from the existing ECAL+AHCAL+TCMT stack
 - For the DHCAL and Scintillator/W ECAL

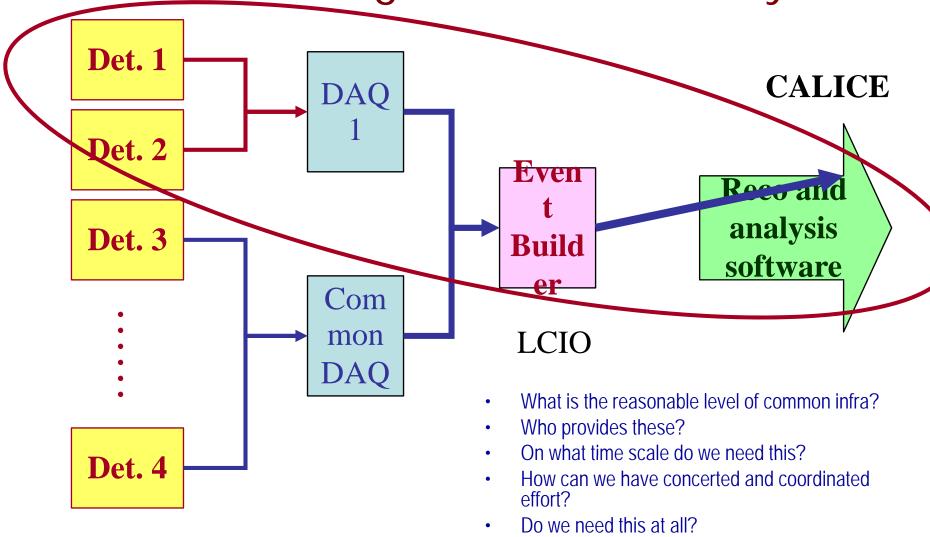
Goals of This Review

- Assess the status of all detector components and software
- Draw well coordinated plans for the upcoming physics runs at CERN
- Plan ahead for the move and a optimized start up at FNAL
- Coordinate for integration of DHCAL and Scintillator/W ECAL to the existing CALICE DAQ system
- Establish milestones to accomplish the above
- Establish plans to implement recommendations
- Start preparing for necessary paperwork
- Prepare for the upcoming ILC R&D panel review at DESY
- Present the review results at the KOBE meeting

Some Notable Requests at IDTB07 Workshop

- Large bore, high field magnet (up to 5T)
 - VTX and tracking groups
 - We might need this test as well, especially gas calorimeters
- ILC beam time structure (1ms beam + 199ms blank)
 - VTX, TRK and CAL electronics
- Mimicking hadron jets
 - VTX, TRK and CAL
- Tagged neutral hadron beam
- Common DAQ hardware and software
- Common online and offline software
 - Reconstruction and analysis software

Point of Merge for Commonality



Technical Board Members

- Si/W ECAL: Jean-Charles Vanel
- Scintillator/W ECAL: Tohru Takeshita
- AHCAL: Felix Sefkow
- DHCAL: José Repond
- TCMT: Vishnu Zutshi
- DAQ: Paul Dauncey
- VFE: Christophe de la Taille
- Software: David Ward
- Chair: Jae Yu

Reviewer Charges

- Reviewers: All Technical Board Members
- Write a review report that
 - Assesses the current status of each component
 - Document the "physics" run plan for the upcoming CERN beam test
 - Identifies areas that need attention for the move to FNAL
 - Identifies areas that need attention to integrate DHCAL and Scintillator/W ECAL
 - Establishes milestones within the given component and across others
 - Makes recommendations to meet the milestone goals
 - Provides plans to implement recommendations
- Prepare for the R&D Review
- Start preparing for MOU to FNAL
 - Identify the primary person in charge to prepare MOU