
WWS Calorimetry R&D Review: CALICE Wrap-up

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On behalf of the  Collaboration


The logo for CALICE (Calorimeter for ILC) features the word "CALICE" in blue, with the "I" and "C" stylized as a particle detector. Below it, the text "Calorimeter for ILC" is written in a smaller font, with "ILC" in green.

CALICE Summary

- We believe an evaluation of **different calorimeter technologies** is essential to make the right choices
- We believe this needs to be done in a **systematic and coordinated** manner
 - To provide **meaningful** comparisons
 - To make the most **efficient use** of scarce resources
- We have planned a **major program of R&D** to achieve this aim
 - This is starting to produce results
 - First public presentations at this workshop
- We estimate **~3 years** to complete the full program
 - This will produce results in time for the **detector EDRs**

Schedule

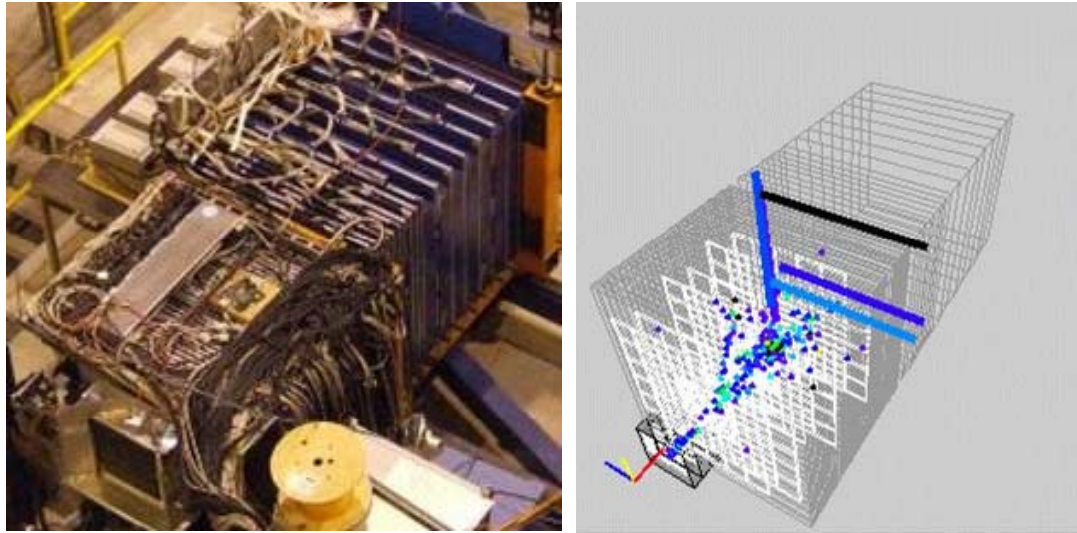
- **Funding uncertainties** make scheduling difficult but...
- **Physics prototypes** beam tests
 - ECAL, AHCAL, TCMT: CERN Jul-Aug 2007
 - ECAL, AHCAL, TCMT: FNAL Q1 2008
 - ScECAL, AHCAL, TCMT: FNAL Q2 2008
 - ECAL, DHCAL, TCMT: FNAL Q3 2008 onwards

Mainly 2007/8
- **Technical prototypes**
 - ECAL, AHCAL: beam tests mid 2009-2010
 - DHCAL: assembly and beam tests 2009-2010

Mainly 2009/10
- **Analysis of data, understanding operational issues and incorporating results into detector optimisation will take time after the hardware programme is complete**

Prototypes

- The main issue is; **can we achieve this schedule?**



- The **CERN system** is equivalent to an experiment in its own right
 - E.g. ECAL had more channels than BaBar's; data rate was higher than H1
- We believe we have shown we have a **critical mass** of people
 - We ran continuous shifts with $> 90\%$ detector uptime throughout the run
- We believe we have demonstrated we can **deliver**
 - Around 100M events have been taken and results are appearing

Management

- We have a **well-defined collaboration structure**
 - **Spokesperson** (J.-C.Brient)
 - **Steering Board** (chair J.Repond): one member per country
 - **Technical Board** (chair J.Yu): subsystem leaders
 - **Speakers Bureau** (chair D.Ward): representatives from analysis groups
 - The collaboration has an **MoU** agreed by all institutes
 - There are regular **technical reviews** of the subsystems
 - There are **regulations** and guidelines for talks and (future) papers
- There is a clear **management structure** in place
 - We believe we have demonstrated it to be **working**
- We believe we have the **expertise** to direct the work
 - We can organise ourselves and know the **issues** intimately
- With apologies to Churchill...

Given the tools, we will finish the job