

Information / News

- ◆ Personal impressions of this weeks SW Workshop
- ◆ January FCC Workshop

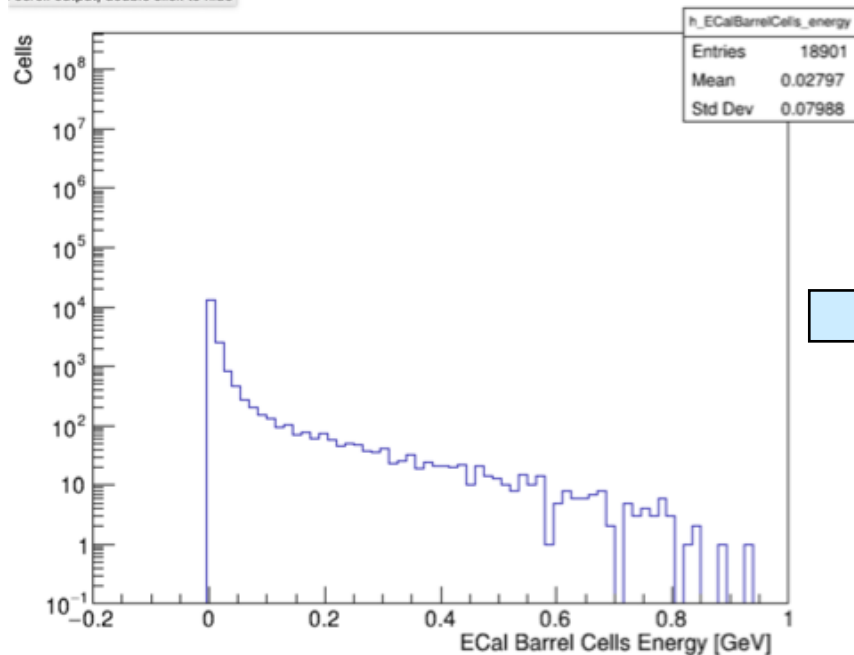
Personal impressions from SW Workshop

Example of what we did:

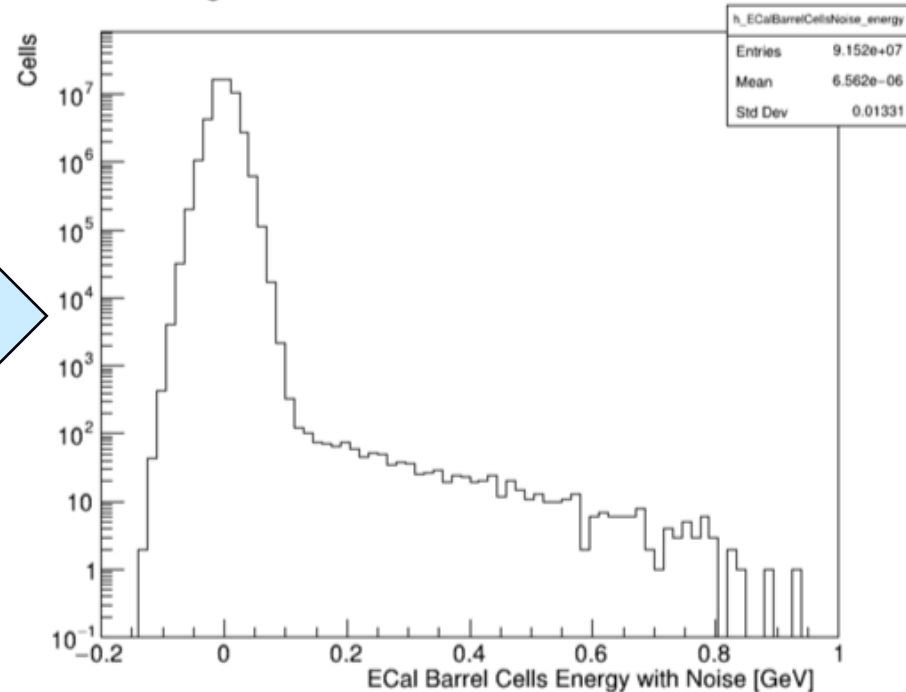
Full Geant4 simulation + reconstruction of LAr calorimeter

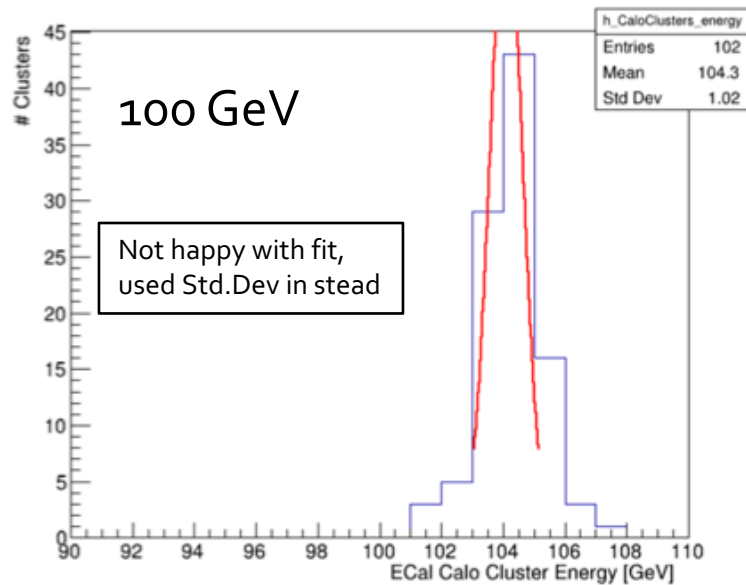
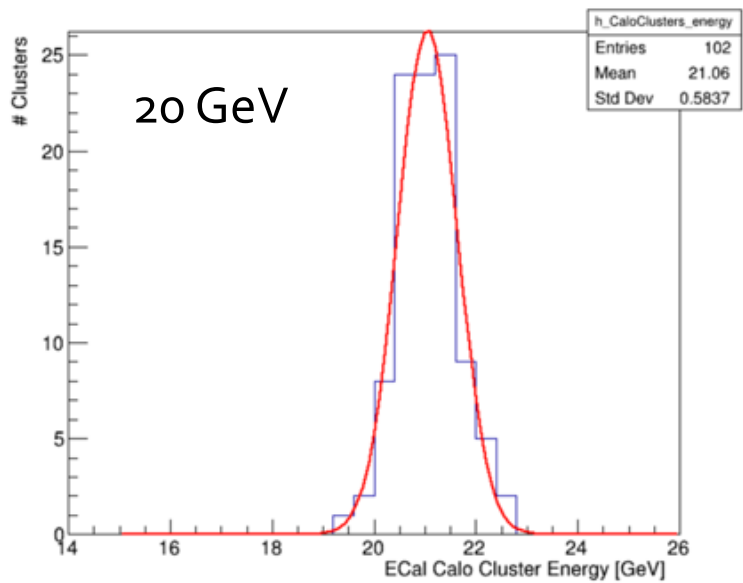
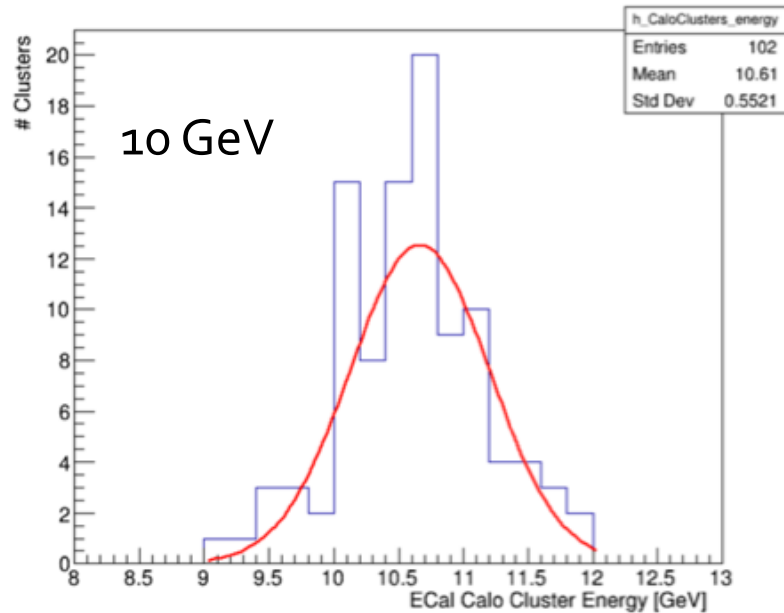
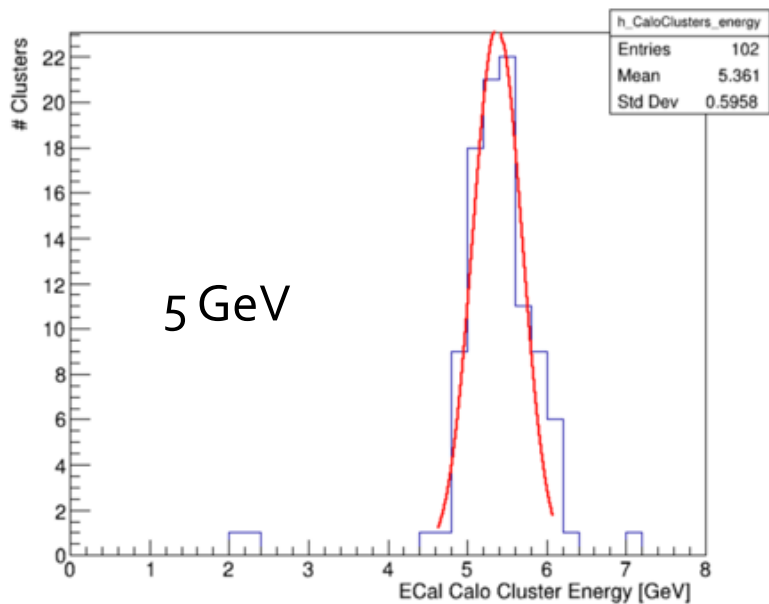
Here 5 GeV electrons

Signal in Calorimeter Cells: Without Noise

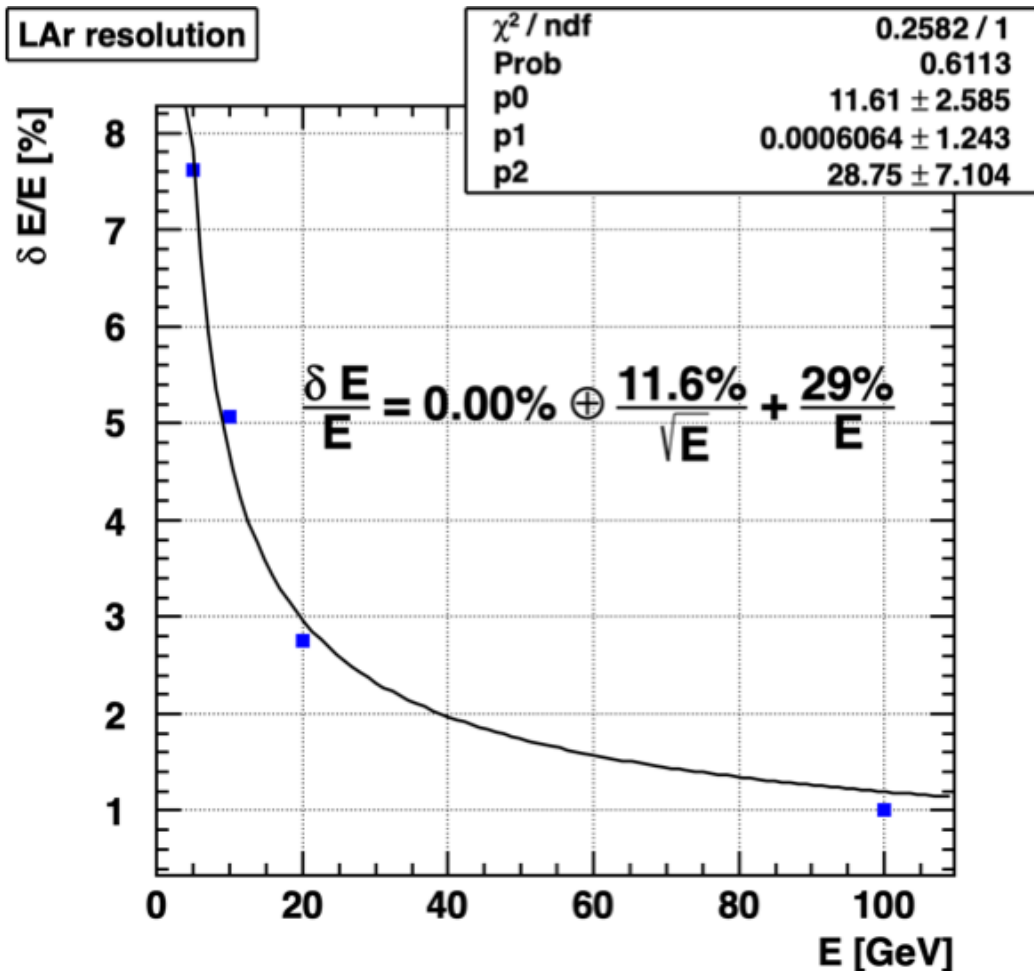


Signal in Calorimeter Cells: With Noise





End result after one day's work



Of course very preliminary and based on low statistics.

Very impressive what one can learn in only one day!

Thank you very much to Clement, Gerardo, and Valentin for an exciting, interesting (and fun!) workshop!
Highly recommended!

January FCC Workshop



3rd FCC Physics and Experiments Workshop

13-17 January 2020

CERN

Europe/Zurich timezone

The yearly FCC physics and experiments Workshop is meant to cover recent progress in the study of the physics prospects of the complete FCC experimental programme, with the ee, hh and eh colliders.

In previous events, the discussions were focused on the preparation of the physics volume of the Conceptual Design Report. In 2020, we expect to have two main themes, running mostly in parallel. On one side we propose a broad overview of all recent theoretical and phenomenological studies that have appeared since the CDR, ranging from precision physics to BSM searches. On the other, we plan sessions focused on the detector concepts and the various aspects of the FCC-ee experimental programme. A few plenary sessions will address the common aspects of the two main themes.

We expect to allocate time to presentations proposed by the participants, and encourage you to propose an abstract, using the link below. In particular, we invite short talks in the areas of:

- SM physics and precision calculations
- Flavour physics at FCC
- Higgs studies at FCC
- BSM searches at FCC
- Detector technology and performance

- Overview
- Programme Committee
- Call for Abstracts
- Timetable
- Contribution List
- Registration
- Participant List
- Videoconference Rooms
- Getting to CERN
 - └ CERN entrance opening hours
 - └ Accommodation
 - └ CERN maps
 - └ CERN network

About time to seriously start organising this!

Comittee: **MD**, Martin, Manuela, Guy, Paula, Franco, Gerardo, Werner(?)

First Outline of exp/det sessions

- ◆ Physics requirements!!
 - Do we need a task force for this? Before/after workshop? What is realistic?
- ◆ Status of existing concepts: CLD, IDEA, LAr/Tile
- ◆ MDI status and outlook
- ◆ Vertex detector
 - Cooling issues: How to keep material budget low without power pulsing.
 - ❖ Development of power lean detectors over 10-15 years?
- ◆ Tracker
 - Si - similar cooling issues as for Vertex Detector
 - Gaseous (TPC, DC)
- ◆ Calorimetry
 - Si, Scintillator, Dual Readout, LAr, others
 - ❖ Physics requirements!!
- ◆ PID
 - Physics requirements and possibilities
- ◆ Muon system
- ◆ Magnet system (thin coil before calorimetry)
- ◆ TDAQ – is this an issue?
- ◆ Software

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- ◆ Software Gerardo