



Collaboration Meeting



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CALICE Collaboration Meeting
Argonne National Laboratory
March 19 – 21, 2014



Thanks to **everyone** for coming



We have 52 registrants

General News

LCC EB (Linear Collider Collaboration Physics and detector Executive Board)

Contacted CALICE for nominations for a LCC Detector R&D Liaison
The CALICE Steering Board provided several names
The LCC EB chose

Maxim **Titov** (CEA Saclay, France) and
Jan **Strube** (Rutherford, UK, deputy)



ILC Timelines

Being discussed in the LCB (Linear Collider Board)

Current Japanese estimates show construction starting 2018

Probably a staged approach (250 GeV, then 500 GeV, with upgrade option of 1 TeV)

Activities between 2014 – 2018 (estimated at €20M/year) are not yet funded

Detector construction could start in 2018. Detectors to be commissioned in 2027

(2 detectors still the default option)



CEPC (Chinese Electron Positron Collider)

Progress/plans/ideas presented at ICFA meeting (20-Feb-2014)

Initially a Higgs factory at 240 GeV in a 50 – 70 km tunnel
Later conversion into a pp collider

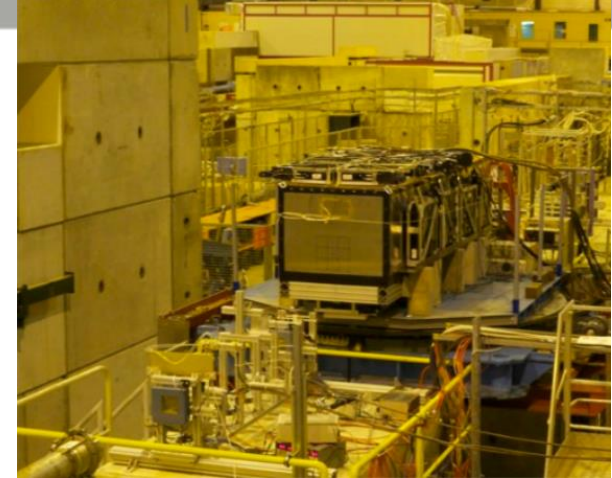
Construction could start in 2022

The cost is estimated at about \$3B



Calorimeter News I

First results from **SUPERDREAM** presented at LCWS2013

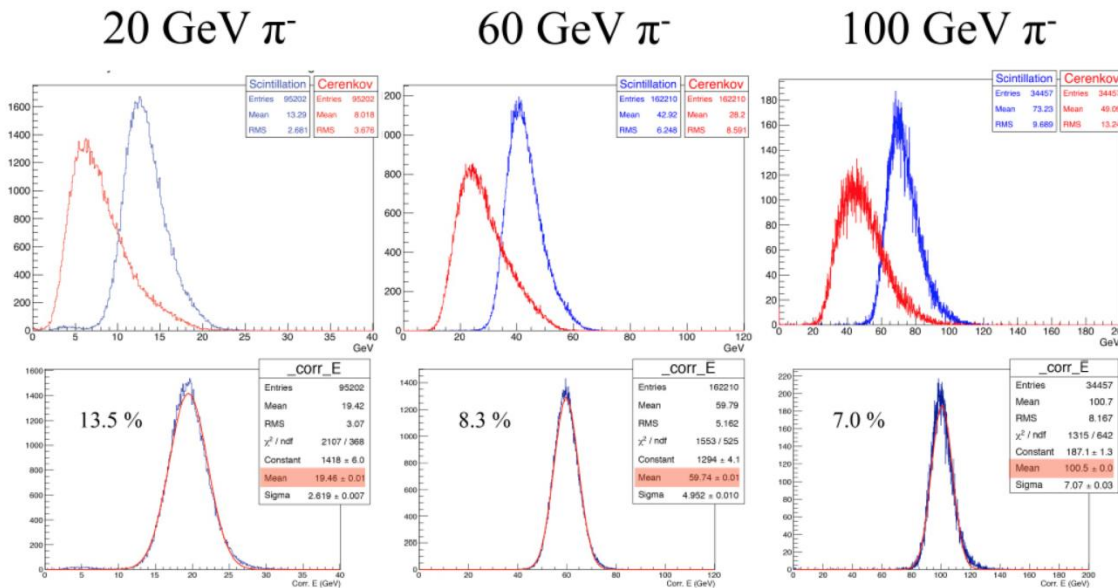


Hadronic energy resolution

Corresponds to $60 - 70\%/\sqrt{E}$
 No evidence of substantial leakage degrading the energy resolution
 (no tail towards lower energies)

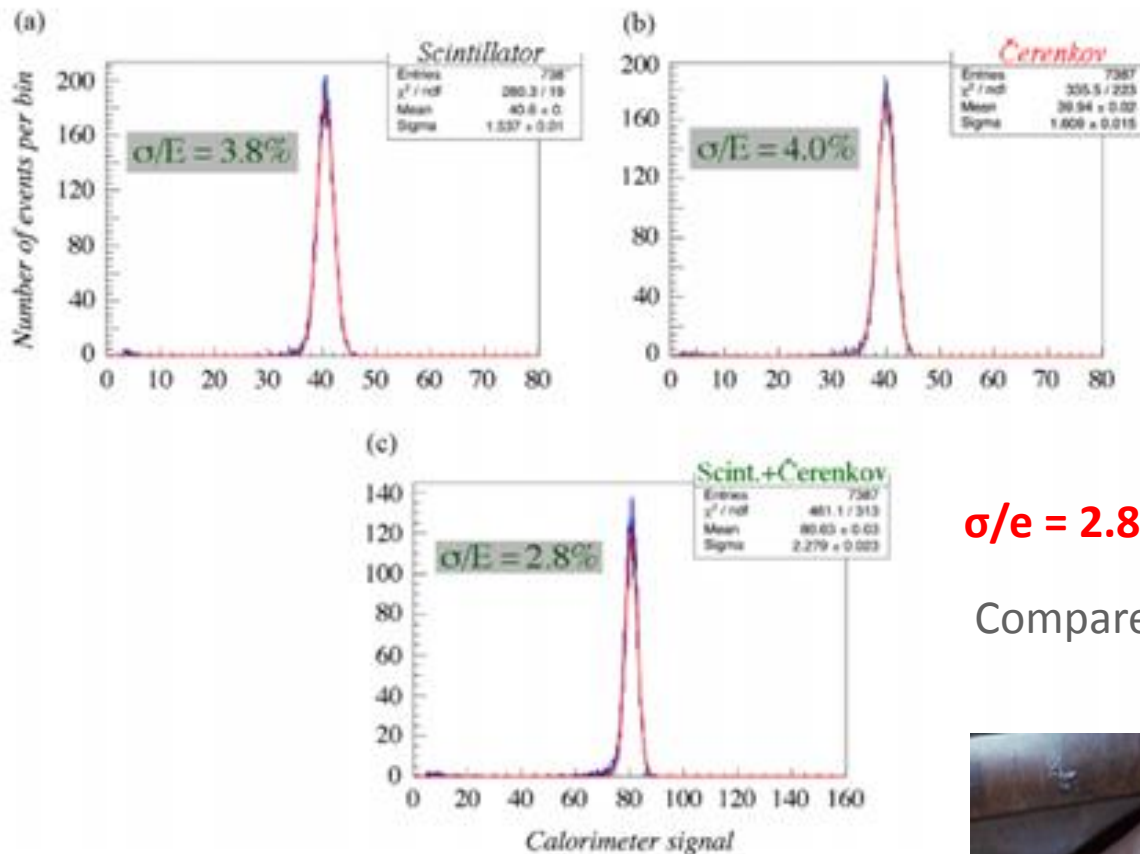
No explanation of why the results are so poor

Compare to ZEUS: $\sigma/E = 35\%/\sqrt{E}$



SUPERDREAM's electromagnetic resolution already quite poor

N. Akchurin et al. / Nuclear Instruments and Methods in Physics Research A 735 (2014) 130–144



$$\sigma/e = 2.8\% * \sqrt{80} = 25\%$$

Compare to ZEUS $\sigma/E = 18\%/VE$

Question

Is this the end of the DREAM?



Calorimeter News II

First combined DHCAL and SDHCAL meeting

Hosted by Imad Laktineh in Lyon on January 15, 2014

Attended by ~20 people

In-depth discussion of calibrations, digitizers, resolutions...

→ **Very constructive**

Next meeting to be scheduled soon



At this meeting

Three full days...

More talks than ever!

→ Please, stick to your allotted time ←



Project overviews

Short, high-level talks, one per major project within CALICE
We do this once a year

New session: Other applications

Spin off from work done at CALICE
Benefitting experiments/projects outside of the LCC

Discussion session on Friday

Open for any topic which should be discussed by the collaboration as whole
So far: **Fitting response curves** (Coralie Neubüser)

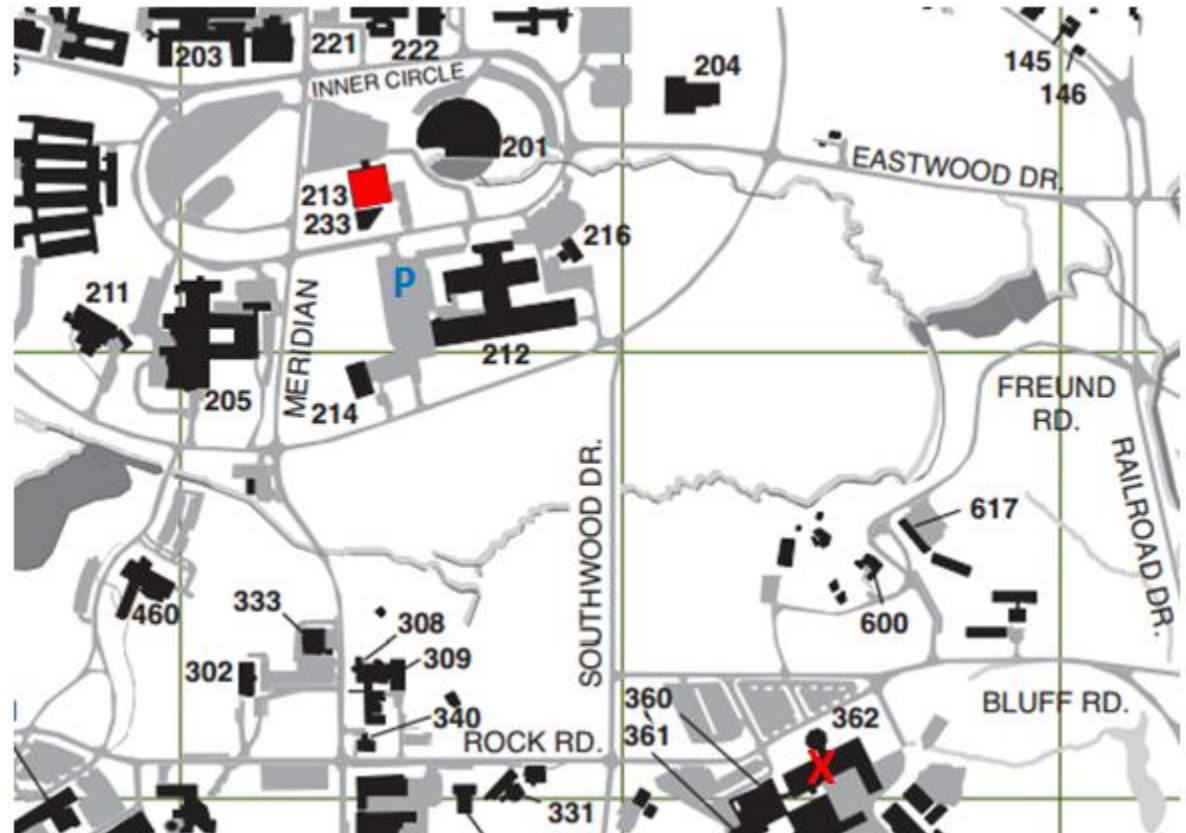
Internet Connection

Use **Argonne-guest**

No password required
Fill out form (once)



Lunches



Recommendation

Argonne cafeteria

12 minute walk from here (in good weather through the woods)
Food is generally quite good

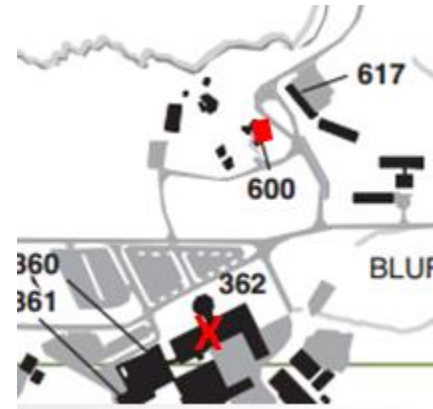
Social Events

Welcoming Reception

Tonight at 18:45

In the **Freund Lodge** (Building 600)

No skunks please!



Banquet

Mesón Sabika

1024 Aurora Avenue

Naperville, IL 60540

To-morrow night 18:30

Bus will pick us up at 17:45

(and bring us back after dinner)



Enjoy the Meeting

