Project name and short description : CALICE SiW-ECAL

June

None

- An imaging ECAL for the ILD; this technological prototype features 12 layers (12k channels) separated by a variable amount of tungsten (0–2X0).
- Responsible Person : Vincent Boudry
- Participating Groups: CNRS-LLR, CNRS-LAL, CNRS-LPNHE, CNRS-LPSC + (optionally) U. Kyushu,
- Number of requested weeks: 2 weeks
- Preferred month(s) :
- Required infrastructure (beam telescope, magnetic field, gas, stages) : optionally EUDET/AIDA beam telescope
- Irradiated samples:

The purpose of the BT are two fold:

- 1- test our devices (10 layers of Silicon-Tungsten) first without B-field in «quiet condition»: we suffered from the noisy environment at CERN in June, and want to insure that we get all the devices running. DESY is for this much more relax that CERN: less stress and low energy electron beam + support from our DESY colleagues.
- 2- If possible (i.e. goal 1 achieved) run them in the magnetic field with the highest possible field, so that we check that Power pulsing in B field is possible, in transverse (Barrel case) and longitudinal (endcap case) directions.
 - Our device is ~ 45 cm in height and depth × ~80 cm in width.

Physics program

"As many SLABs as possible" \Rightarrow 5–10

Run with electrons

- Punch through (no W)
 - Check response of mip like at low rates
 - Optionally at angle (45°) $\rightarrow \times \sqrt{2}$ in mean signal
 - vary beam & DAQ rate & conditions (Nb of SLABs)
 - Comparison with cosmics
- Full calorimeter (20 X₀):
 - Check response with beam & DAQ rate & conditions (Nb of SLABs)
- Test a couple of SLAbs in B field
 - PCMAG (1Tesla Solenoid $\emptyset \approx 85$ cm, TB24/1), but the telescope would not fit in easily and the weight might be a problem.

ILC Testbeam	1			
ILC Testbeam General Glass RPC SD-HCAL Logbook	116	Sat Oct 8 22:42:50 2016		
ILC Shift				
ILC Shift Checklist Densch shift make a tew message where yos detail all the dast taken and problems encountered run ml, circumstances, steps taken to solve the problem. You can edit the same message several times. See LLC Testbaam General for info.	87	Sat May 19 01:13:15 2012		
ILC Shift Remarks	23	Fri Nov 6 15:18:55 2015		
ILC DAQ HowTo's	28	Sun Dec 7 12:07:52 2014		
ILC TB Setup and Data Access	21	Tue Jun 14 20:30:49 2016		
ILC Data Small Chambers Donnees Petites Chambres	635	Fri Jul 9 14:24:09 2010		
ILC Data Square Meter	24106	Fri Mar 17 20:15:09 2017		
ILC TB0814 🖨 CMS test beam PS 2014	123	Tue Aug 12 21:44:55 2014 by Test beam shifter		
ILC CMS TB	250	Wed Jun 10 09:39:18 2015		

ILC DAQ and	Electro	onics
ILC DAQ HardRoc1	26	Sat Apr 28 10:50:47 2012
ILC DAQ Hardroc2	8	Tue Nov 9 11:06:03 2010
ILC ASU-DAQ Problems and solutions	11	Wed Mar 16 08:26:48 2011
ILC M3 Construction Put here information about SD-HCAL cubic meter construction	7	Wed May 4 16:35:31 2011 by Nick
ILC RPC construction Put Here comments on RPC construction (paint/resistivity /glass etc)	30	Thu Aug 11 15:19:36 2011 by Florent Schirra
ILC Offline		
ILC Testbeam Data Analysis Put here results from Testbeam data analysis	10	Sun Oct 9 00:09:17 2011
ILC Testbeam Data Analysis Put here results from Testbeam data analysis ILC Simulation Put here any note on Simulation changes or results	10 9381	Sun Oct 9 00:09:17 2011 Tue Aug 2 06:09:58 2011
ILC Testbeam Data Analysis Put here results from Testbeam data analysis ILC Simulation Simulation changes or results ILC Reconstruction Put here notes on PFA/Reconstruction updates	10 9381 1	Sun Oct 9 00:09:17 2011 Tue Aug 2 06:09:58 2011 Tue Feb 16 16:55:22 2010 by Robert Kieffer
ILC Testbeam Data Analysis Put here results from Testbeam data analysis ILC Simulation Simulation changes or results ILC Reconstruction Put here notes on PFA/Reconstruction updates GIF Detectors Put here results from GIF	10 9381 1 30	Sun Oct 9 00:09:17 2011 Tue Aug 2 06:09:58 2011 Tue Feb 16 16:55:22 2010 by Robert Kieffer Thu Oct 22 10:39:01 2015
ILC Testbeam Data Analysis Put here results from Testbeam data analysis ILC Simulation Simulation changes or results ILC Reconstruction Put here notes on PPA/ Reconstruction updates GIF Detectors Put here results from GIF CMS Prototyping Put here information about CMS	10 9381 1 30 14	Sun Oct 9 00:09:17 2011 Tue Aug 2 06:09:58 2011 Tue Feb 16 16:55:22 2010 by Robert Kieffer Thu Oct 22 10:39:01 2015 Fri Nov 27 15:54:18 2015 by Victor Buridon
ILC Testbeam Data Analysis D Put here results from Testbeam data analysis ILC Simulation Put here ary note on Simulation changes or results Put here notes on PFA/ Reconstruction updates GIF Potectors Put here results from GIF Put here results from GIF Potectors Put here information about CMS Prototyping GIF Context Simulation GIF Context Simulation Put here information about CMS Prototyping GIF Context Simulation GIF Context Simulation Put here information about CMS	10 9381 1 30 14 218	Sun Oct 9 00:09:17 2011 Tue Aug 2 06:09:58 2011 Tue Feb 16 16:55:22 2010 by Robert Kieffer Thu Oct 22 10:39:01 2015 Fri Nov 27 15:54:18 2015 by Victor Buridon 24-03-2017-01:29:01 by Maxime Gouzevitch