

Feature Story

Progress Made on ILC Test Area at Fermilab



The installed Capture Cavity II in the Meson building.

At Fermilab, the last year was a busy one for the team that gutted out the New Muon and Meson buildings, preparing them to be test areas for the ILC and Proton Driver. Formerly known as the Superconducting Module and Test Facility (SMTF), the renovated space is now called the ILC Test Area (ILCTA -Meson Detector Building and ILCTA-New Muon). At one of Fermilab's weekly All Experimenters' Meetings in November, Paul Czarapata provided an update on the facility.

"We chose the Meson area because it was an available space that included a long straight beam line, cryogenics and power.", Czarapata said. "The disadvantage was cleaning out the space and doing some infrastructure maintenance."

Starting in October 2004, a group of physicists, engineers and technicians from across the laboratory began the arduous task of cleaning out the Meson Detector and New Muon buildings. The team removed two very large magnets, one over 1500 tons, hundreds of shielding blocks, the remnants of a target station, and numerous magnets, collimators, and miscellaneous devices. "Over the past year, we removed a bone yard of magnets and 1800 tons of steel.", Czarapata said.

[Read more...](#)

Around The World

Linear Collider School Now Accepting Applications



The International Accelerator School for Linear Colliders will take place at Sokendai, a graduate university about 70 km south of Tokyo.

The [International Accelerator School for Linear Colliders](#) is now accepting applications. Jointly organized by the GDE, International Linear Collider Steering Committee and the ICFA Beam Dynamics Panel, the school will take place at Sokendai in Hayama, Japan from 19-27 May 2006. The deadline to apply is 15 February 2006.

The 8-day program will consist of six days of lectures on accelerators at Sokendai and two days for site visit to KEK, which is optional. There will be a total of 20 lectures, covering basic and advanced accelerator topics, with an emphasis on the ILC. Students will receive homework assignments, but no examinations or university credit will be given out. A complete description of the program is [available online](#).

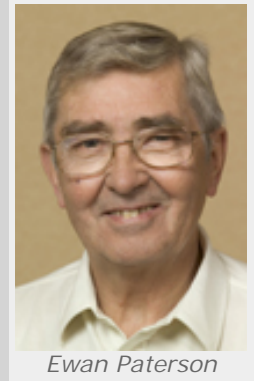
"We encourage young physicists to apply.", said Weiren Chou, Chair of the ICFA Beam Dynamics Panel. "In particular, we welcome those physicists who are considering changing their career from experimental physics to accelerator physics."

A maximum of 80 students from around the world will be accepted.

Director's Corner

Design Cost Board

At Frascati, I created three boards that will become the centerpiece of the GDE organization as we now move forward from having determined the baseline for the ILC towards doing the technical design for a construction project. Today, I want to introduce the new GDE Design Cost Board (DCB) that will be chaired by Peter Garbincius of Fermilab. The other members of this important board include: Wilhelm Bialowons (DESY), Jean-Pierre Delahaye (CERN), Atsushi Enomoto (KEK), Bob Kephart (Fermilab), Olivier Napoly (CEA-Saclay), Ewan Paterson (SLAC), Nan Phinney (SLAC), Tetsuo Shidara (KEK) and Nobuhiro Terunuma (KEK).



Ewan Paterson

The immediate tasks for the DCB are directed toward producing a Reference Design Report (RDR) by the end of this calendar year, and the board's mission as I defined it at the Frascati GDE meeting is the following:

The Design / Cost Board will be responsible for assessing and providing guidance for the overall RDR design effort program. The DCB initial goals will be to propose the overall structure and content for the RDR document to be developed by the end of 2006. It also will provide early guidance required to enable the design / cost effort to get fully underway by the time of the Bangalore GDE meeting.

The DCB will set goals and milestones for producing the RDR, conduct design reviews and provide guidance

--Elizabeth Clements

Calendar

Upcoming meetings, conferences, workshops

Control System Meeting: RF and Timing Specifications

FNAL

Contact: Sergei Nagaitsev (nsergei@fnal.gov)

John Carwardine (carwar@anl.gov)

17 January 2006

[Area Systems Leaders Meeting](#)

KEK

19-20 January, 2006

Control System Meeting: Feedback, Operations, High Availability

SLAC

Contact: John Carwardine

(carwar@anl.gov), Marc Ross, Phil

Burrows

19-20 January 2006

[Open Symposium on European Strategy for Particle Physics](#)

LAL, Orsay, France

30 January-1 February 2006

[LET Meeting](#)

CERN

8-11 February 2006

[LLRF Hardware Development Workshop](#) (rtf)

FNAL

9-10 February, 2006

[Area Systems Leaders Meeting](#)

FNAL

13-14 February, 2006

[EUNET Kick-Off Meeting](#)

DESY

15-17 February 2006

[LCWS 2006](#)

Bangalore, India

9-13 March 2006

[ILC GDE Meeting](#)

Bangalore, India

9-11 March, 2006

Financial aid will be provided to all students for airfare, lodging, meals, local transportation and school supplies. Applicants should complete the online registration form (link to school web site) and submit a curriculum vita and recommendation letter from his/her supervisor. For more information, contact Yoko Hayashi (ilc-school@mil.k.kek.jp).

The school is sponsored by the U.S. Department of Energy Office of Science, Fermilab, SLAC, CERN, DESY, KEK, PPARC, INFN and CARE/ELAN.

--Elizabeth Clements

In the News

From *Fermilab Today*

9 January 2006

Muons Inc. Will Co-Host Muon Collider Workshop

Retired Fermilab physicist Rol Johnson and the company he founded in 2002, Muons Inc., are using Small Business Innovation Research (SBIR) grants for basic research on future accelerators. Now, along with Fermilab's Technical Division, Muons Inc. will co-host the Low Emittance Muon Collider Workshop, to be held at the lab from February 6 to 10, 2006. "Our first projects were to invent ways to cool or shrink beams of muons almost as much as antiprotons are cooled for the Tevatron collider. Now we want to use these new inventions to design a muon collider based on this extreme muon cooling, where muons are accelerated to high energy by recirculating through ILC RF cavities," says Johnson.

[Read more...](#)

From *FYI: The AIP Bulletin of Science Policy News*

FYI Number 4: 9 January 2006

NSF Seeks Comments on Strategic Plan

...The public is asked to use the current strategic plan to answer two questions that will be used in the writing of the next plan: "Does NSF's current Strategic Plan effectively communicate NSF's roles and responsibilities as part of the science and engineering (S&E) community? If

and assessments of the RDR effort. The DCB will report to the Director and EC regularly as the design / cost effort progresses, reporting on early evaluations of costs, problems and changes needed in the BCD, etc.

[Read more...](#)

--Barry Barish

[Director's Corner Archive](#)

Announcements

RSS Feed Now Available for NewsLine

[Read More](#)

Responses from the GDE Executive Committee About the BCD Now Online

The responses from the GDE Executive Committee to reviews, comments and remarks on the ILC Baseline Configuration recommendations are now available [online](#). Any questions or comments should be directed to the Executive Committee (gdeec@fnal.gov).

Pre-register for LCWS06 by 15 January

Pre-register for the 2006 Linear Collider Workshop in Bangalore, India by 15 January. More information about the workshop is [available online](#). A [GDE meeting](#) will take place in conjunction with LCWS06.

ILC Related Preprints

[hep-ph/0601072](#)

10 Jan 2006

Double diffractive meson production and the BFKL Pomeron at e^+e^- colliders

[hep-ph/0601027](#)

4 Jan 2006

Single and pair production of heavy leptons in E6 model

[physics/0512275](#)

31 Dec 2005

Silicon detectors for the next generation of high energy physics experiments: expected degradation

[International Symposium on Detector
Development in Particle and
Astroparticle Physics and Synchrotron
Radiation](#)

SLAC

April 3-6, 2006

[International Accelerator School for
Linear Colliders](#)

Sokendai, Graduate School for
Advanced Studies

Hayama, Japan

19-27 May 2006

not, what is lacking and how can it be improved?" and "What broad characteristics of the near- and long-term environment for S&E research and education should NSF consider and address in its next Strategic Plan?"

[Read more...](#)