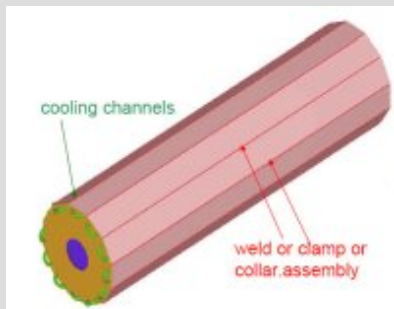


Around the World

Texas team proposes new superconducting cavity design



View of an assembled polyhedral cavity from the outside.

At Texas A&M University, a team led by Peter McIntyre has developed a new design for superconducting cavities for linear colliders, perhaps even the International Linear Collider. Their polyhedral cavity design, which is only in its beginning stages and requires a significant amount of R&D, could offer such benefits as increasing the accelerating gradient and making the cavities more cost-efficient.

[Read more...](#)

-- Amelia Williamson

[View slides: "Polyhedral Cavities for Linac Colliders,"](#) Peter McIntyre, Al McInturff, Nathaniel Pogue, and Akhdyor Sattarov, Department of Physics, Texas A&M University

Calendar

Upcoming meetings, conferences, workshops

[CHEP 07 - International Conference on Computing in High Energy and Nuclear Physics](#)

Victoria, Canada
2-7 September 2007

[VII International workshop on Problems of Charged Particle Accelerators: Electron-positron Colliders](#)

JINR-BINP, Alushta (Crimea, Ukraine)
2-8 September 2007

[TWEPP 2007](#)

Feature Story

Live from the test beam: calorimetry rises from the ashes



The morning shift rotates the HCal to 60 degrees for the last three days of data taking. Click here to see a slideshow of the test beam time.

This summer, a stage was all the world for some of the men and women of the [CALICE](#) collaboration. For the first time, the full prototypes of the electromagnetic calorimeter, the hadronic calorimeter and the tailcatcher and muon tracker (designed and built by international collaborations and assembled in Paris, Hamburg and Northern Illinois respectively) played lead roles in the SPS test beam at CERN. In more than two months, the collaboration collected more than 100 million events, nearly 14 terabytes of data, thus not only testing their prototypes but also the data grid.

[Read more...](#)

-- Barbara Warmbein

In the News

From *Fermilab Today* 29 August 2007 **Kim presents plan to Fermilab audience**

The roadmap to Fermilab's future continues to point toward the proposed International Linear Collider, said Fermilab Deputy Director Young-Kee Kim at a labwide meeting on Friday.

[Read more...](#)

Director's Corner

The ILC Engineering Design Phase – Towards the production of an Engineering Design Report

Today's issue features a Director's Corner from Marc Ross, Project Manager for the Global Design Effort.

In August 2007, the Global Design Effort for the International Linear Collider published a Reference Design Report that contains a description of the design of the linear collider and a 'value' cost estimate.

The design described in the RDR and its associated estimate allow the GDE to plan and prioritise the next phase of the ILC, the creation of an engineering design and the production, by mid 2010, of an Engineering Design Report.

[Read more...](#)

-- Marc Ross

[Director's Corner Archive](#)



Marc Ross

Image of the Week

Staffers tour ILC facilities at Fermilab



Last week, Christopher King, Adam Rosenberg and Michelle Dallafior, three staffers of the US House Committee on Science & Technology, visited Fermilab. Expressing an interest in the ILC, the staffers visited Fermilab's Cryomodule Assembly Facility, where technicians are in the

Prague, Czech Republic
3-7 Sept 2007

[IEEE EUROCON 2007](#)

Warsaw, Poland
9-12 Sept 2007

[12th International Workshop on Polarized Sources and Targets \(PST 2007\)](#)

Brookhaven National Laboratory
10-14 September 2007

[ILC Positron Source Collaboration Meeting](#)

Argonne National Laboratory
17-19 September 2007

[Workshop on ILC Interaction Region Engineering Design](#)

SLAC
17-21 September 2007

Upcoming schools

[Second International Accelerator School for Linear Colliders](#)

Ettore Majorana Center, Erice (Sicily), Italy
1-10 October 2007

[US Particle Accelerator School](#)

UC at Santa Cruz
14-25 January 2007



= Collaboration-wide Meetings

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

From *WIRED Magazine*
27 August 2007

Fermilab Proposes New "Project X" Particle Smasher

...Last week, Fermilab directors quietly outlined plans for a new accelerator in the Batavia, Ill. facility, temporarily dubbed "Project X," that would help keep the lab active and in the forefront of research while it bids to host a larger international project designed to complement the European experiments.

[Read more...](#)

From *The Courier News*
25 August 2007

Fermilab unveils 'Project X' plans

A new machine: Plan aims to keep lab viable in future, with or without ILC.

[Read more...](#)

From *SLAC Today*
23 August 2007

New Project Tools to Coordinate ILC Design

International Linear Collider (ILC) researchers from around the globe are beginning the project's engineering design with a new set of tools that will allow decentralized collaborators to work in concert.

[Read more...](#)

From *Nature*
23 August 2007

The theatre of quantum physics

Finn Aaserud reviews Faust in Copenhagen: A Struggle for the Soul of Physics by Gino Segre

[Read more...](#)

From *Asimmetrie*
June 2007

La materia oscura - E allora la fabbrichiamo...

(...) presumibilmente, sarà necessario un apparato in grado di eseguire misure più precise prima di poter dire la parola finale su tale identificazione. Un acceleratore di questo tipo è già in via di progettazione: si tratta dell'ILC (International Linear Collider) (...)

[Read more...](#)

process of stringing cavities together for the first cryomodule to be built in the US. "Hopefully we can act as a conduit, providing as much information to the decision makers as possible," said King at a meeting with Director Pier Oddone, Deputy Director Young-Kee Kim and members of the ILC project.

Announcements

Register for ALCPG07

The joint meeting of the American Linear Collider Physics Group and ILC Global Design Effort will take place at Fermilab on 22-26 October. The deadline to register is 12 October. A block of rooms has been reserved for meeting attendees at the Pheasant Run Resort in St. Charles, IL. This block of rooms will only be held until 19 September. Meeting attendees are encouraged to book your rooms soon. Questions? Contact [Cynthia M. Sazama](#).

[More information](#)

ILC Notes

[2007-015](#)

Design Requirements for the Undulator Photon Dump

[2007-016](#)

Beam-Gas Interactions in the ILC Beam Delivery System

arXiv preprints

[0708.3327](#)

24 Aug 2007

Impact of Unparticles on Asymptotic Freedom and Unification of Gauge Couplings

[0708.2982](#)

22 Aug 2007

ILC Positron Production Target Simulation

[0708.2951](#)

22 Aug 2007

QCD corrections to $t\bar{t}b\bar{b}$ productions via photon-photon collisions at linear colliders

[0708.2755](#)

21 Aug 2007

Higgs bosons of the NMSSM with explicit CP violation at the ILC

[0708.2692](#)

20 Aug 2007

Search for effects beyond Standard Model in photon scatterings and in nonminimal gauge theories on linear colliders of new generation

