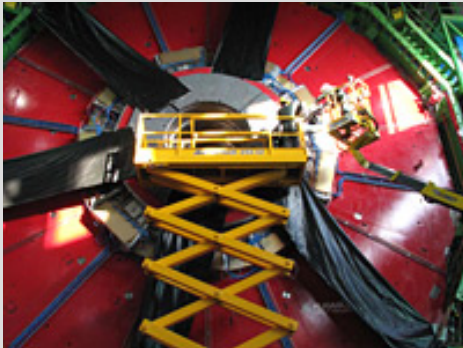


Around the World

Thinking Small to Make the Big Things Work: MDI



CMS might provide valuable lessons for future ILC detectors.

The ILC detectors come with many question marks attached. What will they look like? Will they be permanently installed or rolled into the beam with a system that lets one take data while the other enjoys a maintenance makeover (called "push-pull")? Despite all these questions, a group of experts on machine-detector interface, the MDI panel, is already thinking about cavern size, heavy-load cranes and cable leads in the return yokes. With the detectors for the LHC nearing completion, the MDI panel visited CERN in October to find out about the dos and don'ts of detector integration.

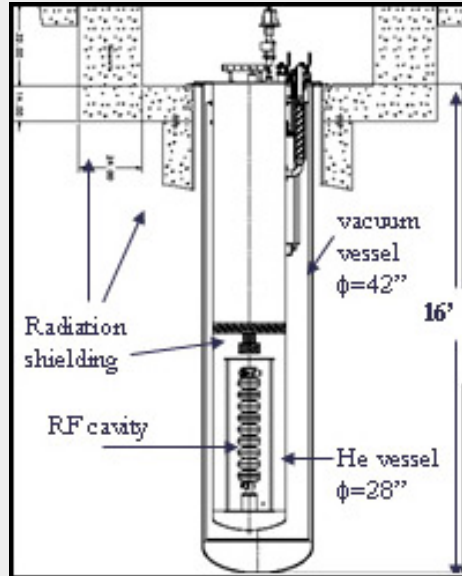
[Read more...](#)

-- Barbara Warmbein

Calendar

Feature Story

Vertical Test Stand Under Construction at Fermilab



A schematic engineering drawing of the vertical test stand that is now under construction at Fermilab.

Fermilab has a new hole in the ground – a 7 metre deep hole to be precise. While a very large rabbit on site might find that it makes for a cosy home, this hole located in Fermilab's Industrial Building is the start of construction for the lab's first Vertical Test Stand for qualifying superconducting cavities for the International Linear Collider.

Starting in mid-2007, Fermilab will use this vertical test stand to test bare 1.3 Ghz 9-cell niobium cavities. During a vertical test, physicists apply an RF voltage to a superconducting cavity and measure the Q (or quality) factor – a measure of the rate of energy loss. A high Q factor means that the cavity will better retain the energy pumped into it – a desirable outcome from the vertical test stand process.

[Read more...](#)

-- Elizabeth Clements

In the News

Director's Corner

GDE and WWS meet at Valencia
 Today's issue features a Director's Corner from Brian Foster from the University of Oxford.



The welcome cocktail took place in the La Nau de la Universitat.

On Tuesday a momentous meeting for the future of the ILC began in Valencia. Under cloudy skies and occasional rain, the ILC family has gathered for one of its tri-annual joint meetings, reviewing progress and the status following the Vancouver meeting last July. The beautiful surroundings and amazing architecture of the medieval old centre of Valencia are an inspiring environment in which the almost 400 participants can contemplate the future of our science.

[Read more...](#)

-- Brian Foster

[Director's Corner Archive](#)

Image of the Week

Upcoming meetings, conferences, workshops

[ILC – ECFA Valencia Workshop and GDE Meeting](#)

Valencia, Spain
6-10 November 2006

[CARE06 Annual Meeting](#)

Frascati National Laboratories, Italy
15-17 November 2006

What is the role of China confronted with the International Linear Collider (ILC), a large scientific international collaboration project

5-7 December 2006
Beijing, China

[European LC WS Meeting](#)

8-9 January 2007
Daresbury Laboratory, UK

MAC meeting

10-12 January 2007
Daresbury Laboratory, UK

[USPAS](#)

Texas A&M University
15-26 January 2007

[The 9th ACFA ILC Physics & Detector Workshop & ILC GDE Meeting](#)

IHEP, Beijing
4-7 February 2007

[Annual WILGA Conference](#)

Warsaw University of Technology
Resort, Poland
21-27 May 2007

[GDE Meetings Calendar](#)

From *Panorma Actual*
8 November 2006

The CSIC and Valencia University collaborate in defining the new particle accelerator.

[Read more...](#) (in Spanish)

From *Levante*

7 November 2006

Light on the dark matter

[Read more...](#) (in Spanish)

From *ABC*

7 November 2006

The new accelerator will decode the new keys of "dark matter"

[Read more...](#) (in Spanish)

From *Las Provincias*

7 November 2006

400 experts analyse in Valencia the constitution of the Universe

[Read more...](#) (in Spanish)

From *Northwest Development Agency*
6 November 2006

Prime Minister highlights England's Northwest as a leading region for science and innovation

[Read more...](#)

From *Interactions.org*

3 November 2006

Open Access publishing in physics gains momentum

[Read more...](#)



Have a look at the latest images from the meeting in Valencia, Spain!

[View Slideshow](#)

Announcements

ILC-Related Preprints

[hep-ph/0611060](#)

6 Nov 2006

Effects of R-parity violating supersymmetry in top pair production at linear colliders with polarized beams

[hep-ph/0611056](#)

5 Nov 2006

Revisiting electroweak baryogenesis in context of cancelation scenario in the MSSM

[EUROTeV Reports](#)

[EUROTeV-Report-2006-020](#)

Measurement of a Magnet Girder in MAXLab

[EUROTeV-Report-2006-021](#)

GEANT4 Simulations of Energy Deposition in ILC Spoilers

[EUROTeV-Report-2006-102](#)

A Structure for a Wide Band Wall Current Monitor

[EUROTeV-Report-2006-103](#)

Numerical Simulations of Collimator Insertions using MAFIA