

Feature Story

Fermilab's new Horizontal Test Stand sees its first cavity



Andy Hocker, left, and Elvin Harms peer into the Horizontal Test Stand chamber.

The newest resident in Fermilab's Meson Detector Building is up and running. Last week, Fermilab scientists installed a nine-cell 1.3 GHz TESLA-style cavity into a cryostat in order to commission the new Horizontal Test Stand. Designed to test both 3.9 Ghz and 1.3 Ghz 9-cell niobium cavities, the Horizontal Test Stand will play an important role in the growing ILC R&D programme at Fermilab.

[Read more...](#)

-- Elizabeth Clements

Calendar

Upcoming meetings, conferences, workshops

[Annual WILGA Conference](#)

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

[POSIPOL 2007 Workshop](#)

LAL-Orsay, France
23-25 May 2007

 [LCWS 2007](#)

Hamburg, Germany
30 May - 3 June 2007

 [ILC 2007](#)

Hamburg, Germany
30 May - 2 June 2007

ILCSC Meeting
DESY

Feature Story

Sports car treatment for cavities



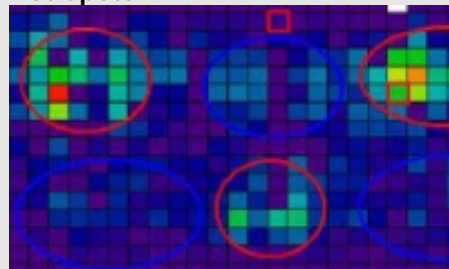
A new hydroforming technique for ILC cavities is also used by the car industry for high-end sports cars. (Image: Sandbox Studio)

Challenges are all around for cavities that want to perform well. The material they are made of, the way they have been cleaned, the way they are shaped and the way their cells are welded together all influence the way the electrons fly through them. A process called hydroforming might be a means to tackle the last two threats, and a small team from DESY has just created the first all-niobium hydroformed nine-cell cavity. [Read more...](#)

-- Barbara Warmbein

Image of the Week

Hot Spots



A little hint, and we got flooded with responses! A temperature map indeed, showing hot spots on a cavity at Cornell University. Congratulations to Marion White of Argonne who was the first person to send us the correct answer. Thank you to everyone else who participated!

Think you can stump NewsLine readers with an ILC-related photo? [Send us](#) your candidates for "What is It?" and we will use them in a future issue of *ILC NewsLine*.

In the News

Director's Corner

Troika proposed to manage ILC engineering design



A troika, a Russian sled drawn by three horses

Developing an engineering design for the ILC represents a formidable challenge with many hurdles in our path. We must satisfy the different goals of our collaborating countries, maintain regional balance, keep flexibility to be responsive to results from the LHC and prioritise our R&D resources to support the design. Lastly, we must develop a robust engineering design, while maintaining a very aggressive schedule. There are just too many separate tasks involved for a single manager to oversee the effort and therefore we are proposing to literally borrow the famous Russian symbolism of a "Troika," and create a Project Office consisting of three project managers: Marc Ross (Fermilab), Nick Walker (DESY) and Akira Yamamoto (KEK). This team will have both shared and separate responsibilities, and Marc Ross will serve as the initial chair of the group.

[Read more...](#)

-- Barry Barish

[Director's Corner Archive](#)

Announcements

1 June 2007

[US ILC Detector R&D Review](#)

Argonne National Laboratory
19-20 June 2007



= Collaboration-wide
Meetings

[GDE Meetings Calendar](#)

From *Fermilab Today*

21 May 2007

ILC task force seeks feedback for EDR at town meeting

Seeking both suggestions and signups, Technical Division head Marc Ross described the activities of the ILC Engineering Design Report task force at an ILC Town Meeting in One West last Wednesday.

[Read more...](#)

From *Nature*

18 May 2007

How to survive in a black hole

So there you are: you discover that your spaceship has inadvertently slipped across the event horizon of a black hole - the boundary beyond which nothing, not even light, can escape the hole's fearsome gravity.

[Read more...](#)

From *SLAC Today*

17 May 2007

Strong Focus on Test Beams

On the opposite rim of the Pacific Ocean, a group of SLAC physicists are part of the international team helping to expand the Accelerator Test Facility (ATF) at the Japanese lab KEK.

[Read more...](#)

LCWS2007 and ILC2007

The workshops LCWS07 and ILC2007 take place in Hamburg from 30 May to 3 June. Agenda are available [online](#).

ALCPG07

ALCPG07 is the next in a continuing series of North American regional meetings on the physics, detector and accelerator issues of the future International Linear Collider and will be held at Fermilab on 22-26 October. A meeting [web site](#) is now available, although online registration will not be available until 20 June.

If you need a [letter of invitation](#) for visa purposes, please contact [Cynthia Sazama](#).

[more information](#)

arXiv preprints

[705.2595](#)

17 May 2007

Detecting atmospheric neutrino oscillations in ATLAS

[705.2425](#)

17 May 2007

Singlet Higgs Phenomenology and the Electroweak Phase Transition

[705.221](#)

15 May 2007

Study in a beam test of the resolution of a Micromegas TPC with standard readout pads

[704.3514](#)

26 Apr 2007

Scintillator Tile Hadron Calorimeter with Novel SiPM Readout

EUDET Report

[2006-089](#)

A Study of Emittance Measurement at the ILC