

Around the World

University Profile: Northern Illinois University

More than a hundred universities around the globe are contributing to International Linear Collider R&D. Share your story with [ILC NewsLine](#), and we will feature your university in an upcoming issue.



Members of the NICADD team at Northern Illinois University who contribute to ILC R&D are (left to right) Victor Rykalin, Vishnu Zutshi, John Powell, Gerald Blazey, Mike Smith, Alexandre Dychkant and Kurt Francis. (Image courtesy of NIU)

Amidst the corn fields in DeKalb Illinois, 65 miles to the west of Chicago, a group of 22 physicists and students, who are members of the Northern Illinois Center for Accelerator and Detector Development (NICADD) at Northern Illinois University, contribute to the International Linear Collider in more ways than one. From beam dynamics to calorimetry hardware to simulation software, the ILC group at NIU covers it all. Because the group consists of such a large number of undergraduate and graduate students, training the future generation of scientists – who may be running the actual ILC one day – is perhaps one of their largest contributions of all.

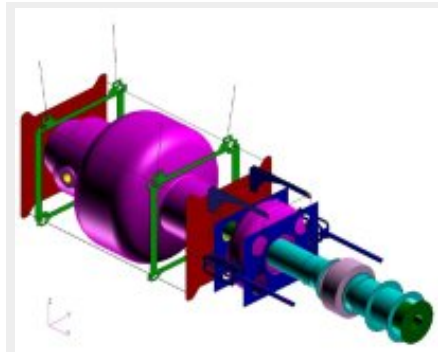
[Read more...](#)

-- Elizabeth Clements

Calendar

Feature Story

Crabbing in the cavity



A CAD drawing of a crab cavity

What do superconducting cavities and the beach have in common? KEK accelerator physicists can give you the answer: the crab. During the spring operation period of the KEKB accelerator, scientists successfully achieved effective electron-positron collisions in a new cavity. Called the crab cavity, it tilts each bunch sideways so that the bunches collide head-on at the interaction point. This success will allow the KEKB to boost its luminosity, which is already the world's highest for a B-factory, to an unprecedented level. Crab cavities will also play an important role in achieving high luminosities at other machines, including the International Linear Collider (ILC), upgrades for the Large Hadron Collider (LHC) at CERN, as well as future synchrotron light sources.

[Read more...](#)

-- Rika Takahashi

Image of the Week

When in Rome



The GDE Executive Committee needed a lot of coffee during the last few days. Senior management got

Director's Corner

Akira Yamamoto: A man of calm and expressions

Today's issue features a Director's Corner from Mitsuaki Nozaki, GDE Asian Regional Director.



Yamamoto in the BESS experiment (Front row, second from right) (Image courtesy of NASA)

"He is an active person who enjoys mountain climbing and jogging as hobbies. Well, at least he used to in the past. Now his hobby is physics," Akira Yamamoto's colleagues say. Newly appointed as one of three ILC project managers, Akira Yamamoto is a scientist working at KEK specialising in superconducting magnet development. He is highly respected among scientists all over the world.

[Read more...](#)

-- Mitsuaki Nozaki

Director's Corner Archive

Announcements

New issue of NewsLineQ

A new issue of NewsLineQ, a quarterly print publication about the ILC, is now available [online](#).

Visa letters for ALCPG07

The next ALCPG and GDE meeting will be on 22-26 October at Fermilab. Information about obtaining a visa to enter the U.S. is available [online](#). Please allow at least three months for visa application processing.

New version of DCR online

The new version of the DCR is now [online](#). You are still invited to send your edits and corrections to the editors and to [sign up as an author](#) for Volumes 2 and 4 of the RDR. An

Upcoming meetings, conferences, workshops

[Photon 2007](#)

Paris, France
9-13 July 2007

[2007 Cryogenic Engineering Conference and](#)

[International Cryogenic Materials Conference](#) Chattanooga Convention Center
Chattanooga, Tennessee USA
16-20 July 2007

[European Physical Society HEP 2007](#)

Manchester, UK
19-25 July 2007

[Lepton-Photon 2007](#)

Daegu, Korea
13-18 August 2007

Upcoming schools

[Toward the ILC: A Fermilab Community School on R&D Challenges and Opportunities](#)

Fermilab
25-27 July 2007

[2007 SLAC Summer Institute](#)

Stanford Linear Accelerator Center
30 July - 10 August 2007

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

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



= Collaboration-wide Meetings

[GDE Meetings calendar](#)

[View complete ILC calendar](#)

together to make plans for the Engineering Design Report phase and to prepare for Wednesday's meeting of the Funding Agencies for Large Colliders (FALC), where they presented the final Reference Design Report in talks and even a printed copy to FALC members. But they were in luck: the meeting took place in Rome where there's plenty of excellent coffee.

In the News

From *Nature Magazine*
11 July 2007

French universities to gain control

"In the race against Stanford, Cambridge or Harvard, French universities run with their laces tied together and a backpack full of stones." So said Nicolas Sarkozy in the run-up to the French presidential election, as he pledged to reform the country's archaic university system.

[Read more...](#)

From *Nature Magazine*
11 July 2007

Austria's science institute gathers steam

Austria will, after all, get the élite graduate-level institute it wants — even though plans seemed on the verge of collapse last year.

[Read more...](#)

From *FYI: AIP Bulletin of Science Policy News*
9 July 2007

Senate Appropriators Recommend 10.8 Percent Increase for NSF in FY 2008

The Senate Appropriations Committee has sent to the floor an FY 2008 appropriations bill that would increase the National Science Foundation's budget by 10.8 percent.

[Read more...](#)

From *Stanford News Service*
6 July 2007

SLAC names new director and deputy director of particle and particle astrophysics

Steven Kahn, deputy director of the Kavli Institute for Particle Astrophysics and Cosmology at Stanford University, has been named director of particle and particle astrophysics at the Stanford Linear Accelerator Center (SLAC).

[Read more...](#)

impressive 545 people have signed up so far!

arXiv preprints

[0707.0729](#)

5 Jul 2007

Pair production of the heavy leptons in future high energy linear e^+e^- colliders

[0707.0374](#)

3 Jul 2007

Vibration diagnostics instrumentation for ILC

[0707.0359](#)

3 Jul 2007

SM scalar and extra singlet(s)

[0707.0356](#)

3 Jul 2007

No Higgs at the LHC ?! A case for the ILC

EUROTeV Reports

[2006-098](#)

Effect and Tolerances of RF Phase and Amplitude Errors in the ILC Crab Cavity

[2007-038](#)

Spin tracking at the International Linear Collider

[2007-039](#)

A Prototype Energy Spectrometer for the ILC at End Station A in SLAC