

Calendar

Wednesday, Dec. 10
2:30 p.m.
 Special Particle Astrophysics Seminar(NOTE DATE) - Curia II
 Speaker: Wenjuan Fang, Columbia University
 Title: Gravitational Leakage vs. the Cosmological Constant
3:30 p.m.
 DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over
 THERE WILL BE NO FERMILAB COLLOQUIUM THIS WEEK

Thursday, Dec. 11
1:00 p.m.
 Physics and Detector Seminar - West Wing, WH-10NW
 Speaker: Jeff Gronberg, Lawrence Livermore National Laboratory
 Title: Gamma-Gamma Physics and Detectors at the ILC
2:30 p.m.

[Theoretical Physics Seminar](#) - Curia II
 Speaker: Puneet Batra, Columbia University
 Title: Supersymmetric Electroweak Symmetry Breaking
3:30 p.m.
 DIRECTOR'S COFFEE BREAK - 2nd Flr X-over
4:00 p.m.
[Special Joint Experimental-Theoretical Physics Seminar](#) (NOTE DATE) - One West
 Speaker: Georgia Karagiorgi, Massachusetts Institute of Technology
 Title: Electron Antineutrino Appearance Results from MiniBooNE

[Click here](#) for NALCAL, a weekly calendar with links to additional information.

Weather

Feature

Thin ice makes ponds dangerous



A thin layer of ice covered a portion of the pond near Wilson Hall last January.

A dog chasing a goose onto the ice on one of Fermilab's ponds last week broke through to the frigid water below.

He easily could have died as a Yorkshire terrier did when it fell through another pond on site Nov. 29.

But this German shepherd mix was lucky. His owner jumped in to save him, and five members of the Fermilab Fire Department along with three members of the Roads and Grounds crew arrived shortly afterward. They saved the man from freezing by wrapping both him and his dog in wool blankets and driving them to safety.

While at this time of year ice-covered ponds beckon for skating, ice fishing and even goose chasing, venturing on the ice can be deadly for both animals and people.

Not far from the laboratory, a 9-year-old girl drowned after she and an 8-year-old boy fell through ice on a neighborhood pond in Naperville [last month](#).

Even cool water can steal body heat, causing hypothermia, said Neil Dal Cerro, battalion chief for the Fermilab Fire Department.

"And if you have hypothermia, you're very susceptible to going into cardiac arrest," Dal Cerro added. "I don't care how healthy you are."

When considering walking on ice, keep in

From the Particle Physics Division

MINERvA reaches a milestone

Anna Pla-Dalmau, leader of the Scintillation Detector Development Technical Center at Fermilab, wrote this week's column.

The MINERvA experiment at Fermilab, to be assembled in the MINOS underground area, will study neutrino interactions in unprecedented detail by exposing a fine-grained particle detector to an extremely intense muon neutrino beam. To detect particles emerging from neutrino interactions, MINERvA uses plastic scintillators that emit light when ionizing radiation or charged particles go through them.



Anna Pla-Dalmau

Last week the Scintillation Detector Development Technical Center celebrated the completion of MINERvA's scintillator work. All scintillator strips for the MINERvA detectors are now ready for assembly into 5-foot-wide hexagonal planes.

The scintillator work, including R&D, prototyping and production phases, took three years, and we completed the work safely, without incident. Although each stage had its challenges, the R&D step was the most rewarding. Many questions needed to be resolved to make the transition from a conceptual drawing to a final product.

The active elements of MINERvA's inner and outer detectors are extruded plastic scintillator strips developed in Lab 5 at Fermilab. Lab 5 hosts an extrusion facility, part of the collaboration between the Northern Illinois Center for Accelerator and Detector Development and Fermilab. NICADD purchased the initial extrusion line in 2003. Two years later, Fermilab funded a small extruder to enable the application of a white reflective coating on scintillator strips, a MINERvA scintillator requirement.

The strips for the MINERvA inner detector have a triangular shape; those for the outer detector have a nearly square profile. All strips have a white reflective coating on the outside



Increasing clouds
26°/18°

[Extended Forecast](#)
[Weather at Fermilab](#)

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Wednesday, Dec. 10

- Smart cuisine: Cajun style lentil soup
- Cajun chicken ranch
- Smart cuisine: tilapa w/ jalapeno lime sauce
- Chicken parmesan
- Smoked turkey panini pesto mayo
- Assorted sliced pizza
- Chicken alfredo fettucine

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesdsay, Dec. 10 Lunch

- Sweet & sour chicken
- Jasmine rice
- Egg roll
- Almond cake

Thursday, Dec. 11 Dinner

- Shrimp cocktail
- Beef Wellington
- Garlic smashed potatoes
- Sautéed spinach
- Chocolate cups with raspberry mousse

Archives

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[ILC NewsLine](#)

mind that water that appears thoroughly frozen can be deceptive.

Ice fishing enthusiasts check the thickness of ice by drilling a hole before picking a spot. They look for ice at least four inches thick. But thickness alone does not determine ice strength. Ice does not necessarily lose its thickness as it melts; it often decays into a weakened, porous condition.

Ice created by melting snow looks opaque or milky and has a low density, making it weak. The strongest type of ice is clear and formed by a long, hard freeze. But this type of ice can be misleading as well. Heat released by rotting vegetation and water currents underneath the ice can erode it.

Dal Cerro suggests treating all ice with caution and watching pets around the water.

“Make sure to have them leashed,” Dal Cerro said. “They’ll chase animals into the water. The ice is very thin right now and very easy to go right through.”

-- Kathryn Grim

Correction

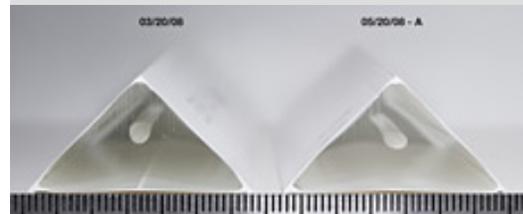


This photo of Director Pier Oddone accepting an environmental award should have accompanied yesterday's [Director's Corner](#). *Fermilab Today* regrets the omission.

In the News

and a center hole for a wavelength shifting fiber. The position and the size of the hole were designed for easy assembly of the strips into detector modules. Design parameters, including the coating thickness, were assessed for their effect on light yield.

While this is just one of many milestones for the MINERvA experiment, the work offered many opportunities for the Scintillator Detector Development Technical Center and represented a great occasion to develop advanced plastic scintillator designs and test new ideas.



[MINERvA scintillator strips](#)

Safety Update

ES&H weekly report, Dec. 9

This week's safety report, compiled by the Fermilab ES&H section, includes no injuries. We have now worked 35 days since the last recordable injury. Find the full report [here](#).

[Safety report archive](#)

Announcements

[Have a safe day!](#)

[Science Chicago hosts Mythbusters](#)

[Annual enrollment through Dec. 10](#)

[Annual enrollment carrier meetings Dec. 9](#)

["Atom Smashers" DVD discount](#)

[NALWO - A Russian Style New Year](#)

[FileMaker Pro 8.0 - Dec. 10](#)

[NALWO - Christkindlmarket Chicago, Dec. 13](#)

[Barn Dance Dec. 14](#)

[The University of Chicago Tuition Remission Program deadline Dec. 17](#)

[Weekly time sheets due Dec. 18](#)

Fermilab Today
is online at:
www.fnal.gov/today/

Send comments and
suggestions to:
today@fnal.gov

Obama Transition Web Document Describes Science, Technology, STEM Education Agenda

**From *American Institute of Physics*,
Dec. 9, 2008**

There is considerable discussion about the Obama Administration's expected approach to science, technology, and STEM education programs. A comprehensive outline of the incoming Administration's plans can be found at www.change.gov, the website of the Office of the President-Elect.

The website lists 23 major agenda items, among which is "Technology." The section on Technology begins by citing Obama's February 2007 Springfield IL announcement speech:

"Let us be the generation that reshapes our economy to compete in the digital age. Let's set high standards for our schools and give them the resources they need to succeed. Let's recruit a new army of teachers, and give them better pay and more support in exchange for more accountability. Let's make college more affordable, and let's invest in scientific research, and let's lay down broadband lines through the heart of inner cities and rural towns all across America."

The Technology section then provides an overview of "The Obama-Biden Plan":

[Read more](#)

[Monthly leave sheets due Dec. 19](#)

[Shop early - Lederman Science Center store open until Dec. 20](#)

[Barn Dance Dec. 21](#)

[Weekly time sheets due Dec. 22](#)

[SciTech winter camps, Dec. 22-23 and 29-30](#)

[Find carpool partners with PACE](#)

[Python Programming - Jan. 6 - 8](#)

[Intermediate / Advanced Python Programming - Jan. 27 - 29](#)

[Submit an announcement](#)

[Additional Activities](#)