

Calendar

[Have a safe day!](#)

Friday, Sept. 4
3:30 p.m.
DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
4 p.m.

[Joint Experimental-Theoretical Physics Seminar](#) - One West

Speaker: Sarah Eno,
University of Maryland
Title: New DZero Results on
the W Width and Charge
Asymmetry, and on Gauge
Couplings

Monday, Sept. 7
Labor Day holiday

Tuesday, Sept. 8
3:30 p.m.
DIRECTOR'S COFFEE
BREAK - 2nd Flr X-Over
THERE WILL BE NO
ACCELERATOR PHYSICS
AND TECHNOLOGY
SEMINAR TODAY

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

Campaigns

[Take Five](#)

[Tune IT Up](#)

Weather

 Sunny
78°/50°

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

Current Security Status

[Secon Level 3](#)

Feature

Fermilab life of LabFest



Fermilab neutrino physicist [Dave Schmitz](#) and DZero physicist [Mike Cooke](#) demonstrate physics principles to attendees at Chicago's LabFest on Friday, Aug. 21.

When Fermilab scientists used liquid nitrogen to shoot a ball skyward through man-made fog, the crowd parted. Some gasped in their lawn seats while covering their ears. Older elementary school-aged boys broke into a run across Millennium Park in search of the flying trophy.

Everyone was paying attention.

The cryogenic show was only one of several activities Fermilab volunteers, docents and Education Office staffers brought to the Chicago landmark park last month to celebrate the grand finale of LabFest, a series of 14 outdoor, summer science fairs. Each LabFest drew between 450 and 2,000 spectators, except for the Millennium Park event that attracted 8,000 science lovers.

Fermilab volunteers made physics fun and accessible at all of the outings. ABC's "[Live Green](#)" TV segment captured the festive spirit at the LabFest at Oscar DePriest Elementary School in Chicago.

"It is wonderful when kids ask questions," said Penelope Constanta of Fermilab's Computing Division. "I love Fermilab, so I am happy to tell people about it. I think if you love science, you have a responsibility to propagate that in the next generation."

At the various LabFests, children and parents tried simple experiments and watched demonstrations arranged by Fermilab

Recovery Act Feature

ARRA funds SRF technology, U.S. industry to benefit



Fermilab will use Recovery Act funds to expand its superconducting radio frequency test facility and make cryomodules to construct a prototype accelerator.

In August, the Department of Energy announced that the American Recovery and Reinvestment Act will provide Fermilab with \$52.7 million to test and develop superconducting radio frequency cavities, a key technology for next-generation accelerators and the future of particle physics. The funds provide a significant boost to the [SRF program](#) at Fermilab, allowing the laboratory to expand its test facilities and strengthen American manufacturing capabilities.

"The Recovery Act speeds up what we were doing and allows us to do things we wouldn't be able to do otherwise," said Bob Kephart, director for Fermilab's International Linear Collider program.

Fermilab will invest roughly 80 percent of the \$52.7 million in stimulus funds in U.S. industry.

"There has been lots of progress, but at this time, no U.S. vendor is yet qualified to produce accelerator cavities of the quality needed for the proposed Project X or ILC," Kephart said. "The Recovery Act will advance funding to allow U.S. industry to develop the

Wilson Hall Cafe

Friday, Sept. 4

- Italian vegetable soup
- Teriyaki chicken
- Southern fried chicken
- Mediterranean baked tilapia
- Eggplant parmesan panini
- Assorted sliced pizza
- Assorted sub sandwich

[Wilson Hall Cafe menu](#)**Chez Leon**

Wednesday, Sept. 9

Lunch

- Chicken Marbella
- Saffron rice w/vegetables
- Chocolate cheesecake w/strawberry coulis

Thursday, Sept. 10

Dinner

- Closed

[Chez Leon menu](#)

Call x3524 to make your reservation.

Archives**Fermilab Today**[Result of the Week](#)[Safety Tip of the Week](#)[User University Profiles](#)[ILC NewsLine](#)**Info**

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volunteers in order to learn about the physics concepts of light and color, electricity, force and motion and magnetism. Physicist Dave Schmitz volunteered at the final fest, and you can read his first-hand account on [his blog](#) at Quantum Diaries.

The LabFests were just some of the events Fermilab participated in as part of [Science Chicago](#), a collaborative year-long celebration of scientific discovery through free hands-on activities, demonstrations and take-home activities at parks, libraries and festivals across the Chicagoland area as well as lectures and open houses.

-- Tona Kunz



Fermilab physicist Dave Schmitz demonstrates physics principles to a young LabFest attendee.

Photo of the Day**Giant puff ball fungus from Fermilab's forest**

Roads and Grounds intern Julie Allen (pictured) found this giant puff ball, a species of fungus, in the wooded area behind the Fermilab Fire Department.

In the News

capabilities they need to become competitive manufacturers of SRF components.”

Plans call for Fermilab to purchase around 40 SRF cavities and other cryomodule components from U.S. vendors, helping U.S. industry develop the capabilities they need to become a competitive manufacturers of SRF components.

Fermilab will distribute a portion of the funds to upgrade existing SRF infrastructure at Argonne National Laboratory, Thomas Jefferson National Accelerator Facility and SLAC National Accelerator Laboratory.

At Fermilab, in addition to ordering cavities, the stimulus funds will also go toward building a cryogenic plant at the New Muon Laboratory to cool cryomodules to minus 271 degrees Celsius. Other items Fermilab will purchase include a high-temperature oven and additional systems to test the capability and quality of SRF cavities. All of this infrastructure will enable Fermilab to evolve into one of the most advanced SRF R&D centers in the world.

SRF cavities have become the technology of choice for many proposed accelerator-based projects, including the proposed Project X, [International Linear Collider](#) and a [muon collider](#), because of their highly efficient ability to accelerate beams of particles. Physicists expect that SRF technology has potential applications in medicine, energy and material science.

-- Elizabeth Clements

Visit Fermilab's [Recovery Act Web site](#).

Announcements**Latest Announcements**

[Weekly time sheets due Sept. 4](#)

[Chicago Field Office of Intelligence and Counterintelligence offer counterintelligence cyber awareness seminar - Sept. 15](#)

[S&T Policy: A View from Washington, D.C. - Sept. 18](#)

[Country dancing in Kuhn Village Barn](#)

[Vacation policy changes for exempt employees in effect](#)

Tevatron tightens up the race for the Higgs

From *New Scientist*, Aug. 31, 2009

With the Large Hadron Collider still in the repair shop, the race to find the Higgs boson has become a lot tighter, thanks to the older and less powerful - but working - Tevatron collider near Chicago.

"The Tevatron definitely has a chance," says Greg Landsberg of Brown University in Providence, Rhode Island, who works on one of the LHC's detectors.

With the LHC due to restart only in November at CERN near Geneva, Switzerland, the Tevatron has been gaining ground in the search for the Higgs, the particle thought to give mass to other elementary particles. At last week's Lepton Photon conference in Hamburg, Germany, Tevatron physicists said that by early 2011 they will have recorded enough data to allow them to either find or rule out the Higgs as predicted by the standard model.

[Read more](#)

From *symmetrybreaking*

Turkey plans an accelerator center

Over the last ten years, Turkish physicists have been working diligently to build a national accelerator center, which would serve as a core science facility and offer increased opportunities for Turkish students. It would be the first accelerator facility in the country, and only the second in the Middle East.

After much planning, excitement is building over the construction of the first phase of the project, a testing and research facility called the Turkish Accelerator and Radiation Laboratory at Ankara, or TARLA for short. Scheduled to be completed in 2012, it will be an Infrared Free Electron Laser, capable of producing an intense laser beam of infrared light for research in a wide variety of sciences ranging from physics to chemistry to biology and medicine.

[Read more](#)

[Bowlers wanted Wednesday nights](#)

[Thai Village restaurant discount](#)

[Robotics for Fermilab employees' children - Sept. 9, 12](#)

[Argentine Tango - through Sept. 9](#)

[Scrapbooking Open House - Sept. 14](#)

[New Lo Cardio Class - Sept. 14 - Nov. 16](#)

[New Tai Chi For Health class - Sept. 14 - Nov. 16](#)

[MathWorks and Avnet demonstration Sept. 23](#)

[URA Visiting Scholars Program now accepting applications](#)

[Bristol Renaissance Faire discount tickets](#)

[Six Flags Great America discount tickets](#)

[Raging Waves Waterpark online discount ticket program](#)

[Mosaico Hispanico - celebrating Hispanic music and dance - Sept. 19](#)

[English Country Dancing - Sept. 20](#)

[Sign up for fall Science Adventures classes](#)

[Office 2007 New Features class offered in September](#)

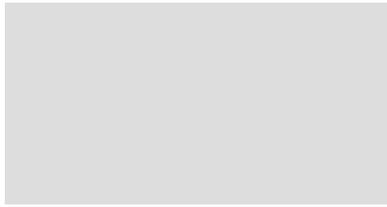
[Buttered Rum performs on Fermilab Arts Series Oct. 24](#)

[Fred Garbo Inflatable Theatre - at Fermilab Arts Series - Nov. 7](#)

[Process piping \(ASME B31.3\) class offered in October and November](#)

["The Night Before Christmas Carol" at Fermilab Arts Series - Dec. 5](#)

[Additional Activities](#)



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Classifieds

Find new [classified ads](#) on *Fermilab Today*.