

## Calendar

### [Have a safe day!](#)

Monday, April 12  
 THERE WILL BE NO  
 PARTICLE ASTROPHYSICS  
 SEMINAR TODAY  
 3:30 p.m.  
 DIRECTOR'S COFFEE  
 BREAK 2nd Flr X-Over  
 4 p.m.  
 All Experimenters' Meeting -  
 Curia II  
 Special Topic: T-932:  
 Prototype CMS Pixel  
 Luminosity Telescope (PLT) at  
 MTest; T-979: Si-PMs in MTest

Tuesday, April 13

10:30 a.m.

### [Research Techniques Seminar](#)

- Curia II

Speaker: Satish Dhawan, Yale  
 University

Title: How to Deliver Oodles of  
 Current to HEP Detectors in  
 High Radiation and Magnetic  
 Fields?

3:30 p.m.

DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

4 p.m.

### [Accelerator Physics and Technology Seminar](#) - One

West

Speaker: Guoxing Xia, Max-  
 Planck Institute, Munich

Title: Ion Effects in the Electron  
 Damping Ring of the ILC

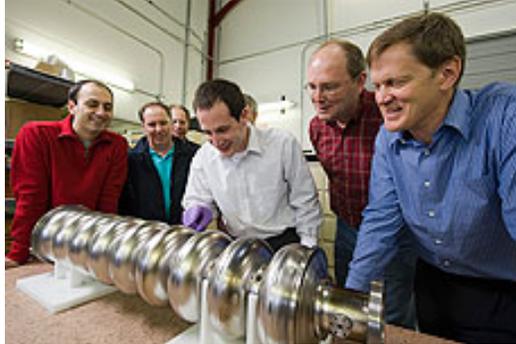
[Click here](#) for NALCAL,  
 a weekly calendar with  
 links to additional  
 information.

### [Upcoming conferences](#)

## Campaigns

## Feature

### American companies gain SRF skills



Fermilab employees and representatives from Niowave Inc. and Roark Welding & Engineering Co. examine a cavity delivered to Fermilab recently. From left: Leonard Ristori, Fermilab engineer; Dwight Osha, Roark engineering manager; Brian Deimling, Niowave director of fabrication; Ahren Kolka, Niowave project manager; Mark Champion, head of Fermilab SRF Development Department; Terry Grimm, Niowave CEO.

Companies in the United States are rapidly learning to build the superconducting radio-frequency cavities Fermilab needs for future accelerators such as the proposed Project X and the International Linear Collider.

"One of our goals at Fermilab is to develop cavity vendors in North America," said Mark Champion, head of SRF development at the laboratory.

Niowave Inc., based in Michigan, and Roark Welding & Engineering Co., based in Indiana, delivered on March 30 the first two of an order of six 1.3-GHz Tesla SRF cavities that meet specifications for the proposed ILC. These same cavities can be used for parts of Project X, the proposed intense proton source at Fermilab. Only one other North American company, Advanced Energy Systems in New York, has the capacity to make SRF cavities that meet Fermilab's specifications.

The two companies are also working together on 10 spoke-resonator cavities for Project X, as well as RF cavities for accelerators used outside the laboratory in hospitals and at X-ray sources.

Niowave and Roark formed a partnership to combine the SRF know-how of Niowave with the fabrication and electron-beam welding

## ES&H Tips of the Week - Health

### Tips for a better night's rest



[Follow the tips in this column to get better sleep.](#)

Although most people do not give sleep much thought, how to get quality sleep preoccupies a minority of others. If you are one of these people, you can mitigate or eliminate many external and internal contributors to poor quality sleep once you identify them.

Here are some common tips to improve your sleep hygiene, what sleep specialists call the habits that contribute to a healthy, restful sleep.

- Avoid caffeine intake late in the day.
- Think cave, or cool and dark, in terms of your preferred sleep environment. If you need to leave the darkened room, avoid intense light sources such as a TV or computer. That will help you get to or return to sleep easier.
- Keep a consistent sleep schedule, even on non-work days.
- Avoid naps longer than an hour.
- Watch TV in rooms other than the bedroom. The light and noise coming from the TV can interfere with the body's clock and the content can stimulate the mind. Both of these things can make your body think your bedroom isn't a place to relax and sleep.
- Develop a ritual of activities that precede sleep, which includes avoiding strenuous mental or physical work for the hour before intended sleep.
- Avoid alcohol consumption near bedtime. It can lead to early waking.

Shift workers should follow much of the same advice. Some studies support a more

[Take Five](#)[Tune IT Up](#)[H1N1 Flu](#)

For information about H1N1, visit Fermilab's flu information [site](#).

[Weather](#)

 Partly sunny  
65°/48°

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

[Current Security Status](#)[Secon Level 3](#)[Wilson Hall Cafe](#)

Monday, April 12  
- Croissant sandwich  
- Spicy beef & rice soup  
- Corned beef reuben  
- Roast pork loin  
- Spaghetti w/meat sauce  
- Chicken Oriental wrap  
- pineapple  
- Assorted sliced pizza  
- Pacific Rim rice bowl

[Wilson Hall Cafe Menu](#)[Chez Leon](#)

Wednesday, April 14  
Lunch  
VEGETARIAN MEAL  
- Lasagna rolls w/red pepper sauce  
- Sugar snap peas  
- Cinnamon apple cake

Thursday, April 15  
Dinner  
- Spinach & strawberry salad  
- Flank steak w/balsamic glaze  
- Walnut crusted potato & bleu cheese cakes  
- Steamed broccoli  
- Chocolate mousse pie

[Chez Leon Menu](#)

Call x3524 to make your

capabilities of Roark.

Terry Grimm, CEO of Niowave, said that in 2001 he was in the right place at the right time to set up his company, a spin-off from the physics department of Michigan State University.

"Not only do we have a laboratory here at Michigan State, but the auto industry here is in a difficult time period," Grimm said. "We're bringing jobs to the area, so they've very receptive. And they're high-tech jobs."

For its part, Roark performed all of the welding with its high-quality electron-beam welder, which produces cavity welds that are extremely clean and smooth. The company primarily manufactures and welds engine components for aircraft including B-1 bombers, commercial jets, helicopters and even NASA spacecraft.

"Usually our products function at 1,000 to 1,400 degrees Fahrenheit," said Dwight Osha, Roark's engineering manager. "This is the opposite; these cavities are designed to operate at less than minus 450 degrees."

-- *Kathryn Grim*

[In Brief](#)**EAP offers April Webinars**

Many people make personal goals at the beginning of a new year. Fermilab's Employee Assistance Program offers a series of Webinars in April that focus on tools and strategies people can implement to get started on those goals.

- Tuesday, April 13, from 11 a.m.- noon CDT, "Building Self Esteem in Children"
- Wednesday, April 14, from 1-2 p.m. CDT, "Building Self-Esteem in Children"
- Thursday, April 22, from 1-2 p.m. CDT, "The Effects of Migraines"
- Thursday, April 29, from 5-6 p.m. CDT, "Technology and Family Life"

A seminar titled "Positive thinking packs a punch" also took place from noon-1 p.m. CDT on Tuesday, April 6. All Webinars are archived so they can be viewed at a later date if the scheduled date/time is not convenient.

Anyone interested in virtually attending the live event can register through the Fermilab [EAP Web site](#) with the User ID "Fermilab" and the password "eap". The event is one of the monthly one-hour Webinars offered by

extended nap for those on shift work, essentially splitting the sleep period in two to balance sleep and social needs.

Medical issues also can disturb sleep, so if these measures don't help, check with your doctor.

-- *Brian Svazas, MD*

[Safety Tip of the Week Archive](#)[Accelerator Update](#)

April 7-9

- Three stores provided ~45.25 hours of luminosity
- Controls problems caused loss of stack
- Large helium compressor tripped off at CHL

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

[Announcements](#)

[Sam's Club offer for Fermilab Employees join through today](#)

[Ask HR - 15th floor comes to day care today](#)

[Cross-step waltz workshop, Sunday, April 11, Kuhn Barn](#)

[Free staff appreciation massage - April 13 and 16](#)

[Thursday Phillips Park golf league](#)

[Celebrate National Humor Month](#)

[Undergraduate summer interns](#)

[Ask HR - 15th floor comes to DZero Assembly Building conference room - April 14](#)

[Fermilab blood drive - April 19-20](#)

[The Recipe Exchange potluck lunch - April 16](#)

[AutoCAD Intermediate classed - June 22 - 24](#)

[AutoCAD Fundamentals class - June 6 - 8](#)

[FORE! The 2010 golf season is about](#)

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Fermilab's Employee Assistance Program.

[In the News](#)

## Rappers with a beef – particle physics style

From ***New Scientist's Culture Lab***,  
April 9, 2010

Fermilab is getting up in CERN's grill. They may not have the particle collider energy record anymore, but they do have their own rap video that poses that deepest of questions: Where the Higgs at?

Good question. Despite 10 years of searching at Fermilab's Tevatron particle accelerator, the Higgs - a hypothetical particle believed to give other particles their mass - is still missing.

Now that CERN's Large Hadron Collider is up and running, Fermilab's odds of winning the Higgs race are shrinking fast. Even at half-power, the LHC is more than three times as powerful.

Still, Steve "Funky49" Rush isn't just frontin'. The Tevatron isn't out of the running yet. Right now, the LHC and its experiments are a bit like a young racehorse - only just bolted off the starting line and still a bit unruly. While its physicists tame it and start to pick up the pace, the Tevatron is still trotting along, miles ahead in terms of data gathered.

[Read more](#)[to hit you](#)[SciTech summer camps start June 14](#)[Butts & Guts class - sign up now](#)[Blackberry Oaks Monday night golf league](#)[Employee discount at Batavia Rosati's](#)[Country House discount for Fermilab employees](#)[Harlem Globetrotters special ticket price - April 15](#)[Qi Gong, Mindfulness and Tai Chi easy for stress reduction](#)[Argentine Tango through April 28 - student discount available](#)[Calling all softball players](#)[Fermilab Management Practices Seminar classes begin in April](#)[Job Descriptions and Employment class - April 21](#)[Behavioral Interviewing class - April 28](#)[ANSYS Mechanical Application classes - in May](#)[Interaction Management class - May 5, 12, & 19](#)[Performance Review class - May 26](#)[Fermilab Functions class - June 2, 8, & 10](#)[Submit an announcement](#)