

## Calendar

[Have a safe day!](#)

**Friday, March 9**  
**3 p.m.**

DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
**3:30 p.m.**

[Joint Experiment-  
Theoretical Physics  
Seminar](#) -

One West  
Speakers: Fabrizio  
Margaroli, University of  
Rome, and Christian  
Schwanenberger,  
University of Manchester  
Title: New Results from  
CDF and D0 for the Winter  
2012 Conferences

**Saturday, March 10**  
**8 p.m.**

[Fermilab Art Series](#)  
Performer: Eileen Ivers  
and Immigrant Soul  
Tickets: \$29/15

**Monday, March 12**  
**2:30 p.m.**

[Particle Astrophysics  
Seminar](#) - One West  
Speaker: Craig Booth,  
University of Chicago  
Title: Feedback and  
Galaxy Formation from  
Small Scales to Large;  
Insights from Extremely  
Large Cosmological  
Simulations

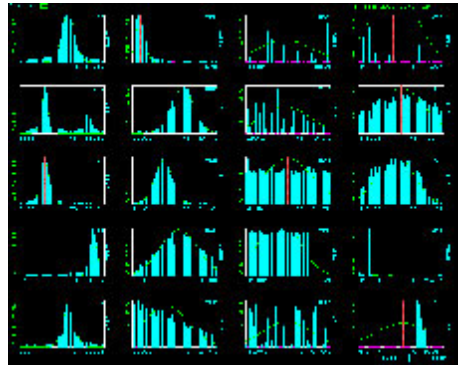
**3:30 p.m.**

DIRECTOR'S COFFEE  
BREAK - 2nd Flr X-Over  
**4 p.m.**

All Experimenters'  
Meeting - Curia II  
Special Topic: Modeling of  
the Booster Cavity with an  
Eye to Improving  
Reliability; EDIT School  
Experience; T-979: Fast  
Quartz Cherenkov-  
Counter Timing; T-979:  
SiPM Time Resolution  
with DRS4 Readout

## Milestone

## SeaQuest sees muons



Operators are starting to see muons in the SeaQuest hall.

On Wednesday, March 8, the muon beam from the Main Injector was delivered on target for the SeaQuest experiment. While there's still some work to be done before the beam is ready for production, this achievement marks an important milestone for the SeaQuest experiment.

## Special Announcement

## HEPAP meeting webcast

The winter [meeting](#) of the High Energy Physics Advisory Panel will take place on Monday and Tuesday in Washington, D.C. Both days of the meeting will be [webcast](#). HEPAP advises the Federal Government on the national program in experimental and theoretical high-energy physics research.

## From WDRS

## Summer hiring changes

For this year's general summer hiring program, we are making a few changes to the process. The changes will not affect the intern programs. The changes are designed to democratize the program while preserving the preference given to employee-referred candidates – particularly the children of employees. The laboratory benefits from employing children of employees who know and respect laboratory culture, and employees benefit from their children's employment at a time when employment

## Physics in a Nutshell

## And so, ad infinitum: Smallest of the small

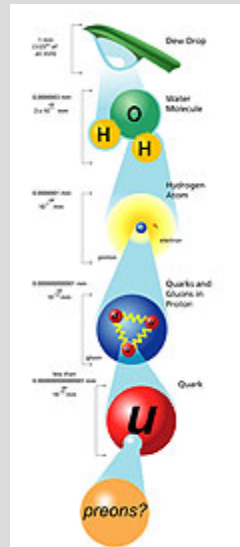
*Big fleas have little fleas, Upon their backs to bite 'em, And little fleas have lesser fleas, and so, ad infinitum.*  
—Augustus De Morgan

Suppose you were the size of the universe - you would see a bunch of luminous, point-like dots surrounding you. If you shrank, you'd identify these points as galaxies, each with a rich structure and each filled with a new bunch of point-like dots. As you shrink more, you'd see that these new dots were not points, but stars.

If you pressed the supershrink button on your shrink ray, you'd zoom down through the size of humans, through cells, molecules, atoms, atomic nuclei, protons and neutrons and finally down to the size of the quarks and leptons that constitute the knowledge frontier of the super small. Over the past hundred years or so, a series of objects like atoms were thought to be the smallest building block of matter, only to have subsequent research show that we were wrong.

The [Standard Model](#) exemplifies the micro world of particle physics. Two classes of particles, called quarks and leptons, are thought to be the smallest building blocks of the universe. They have no size and contain nothing in them, but, if mixed correctly, they can build atoms, us, the entire universe.

After about a century of progressively finding something smaller than what we thought was the smallest, why should



Scientists are searching for particles smaller than the familiar ones of the Standard Model.

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

[Upcoming conferences](#)

**Campaigns**

[Take Five](#)

**Weather**



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

**Current Security Status**

[Secon Level 3](#)

**Wilson Hall Cafe**

**Friday, March 9**

- Breakfast: Chorizo burrito
- Smart cuisine: Italian vegetable soup
- Chicken fajita sandwich
- Southern fried chicken
- Smart cuisine: Mediterranean baked tilapia
- Eggplant parmesan panini
- Assorted sliced pizza
- Assorted sub sandwiches

[Wilson Hall Cafe Menu](#)

**Chez Leon**

**Friday, March 9  
Dinner**

- Mushroom duxelle
- Sea bass w/ braised leeks and mustard sauce
- Thai rice pilaf
- Steamed asparagus
- Tiramisu

**Wednesday, March 14  
Lunch**

- Cornish game ens w/ mushroom sauce
- Wild rice
- Caramelized carrots
- Pina colada cheesecake

[Chez Leon Menu](#)

opportunities for youth are scarce.

The following changes will be made:

- Ending the practice of name requesting candidates on personnel requisitions.
- Stopping generic job postings. We will now post each job specified with individual duties and knowledge, skills and abilities (KSAs).
- Evaluating candidates based on their responses to KSA based screening questions.
- We will not consider candidates who do not submit responses to screening questions.
- HR will refer only the top three candidates ranked for each job to the hiring manager.
- If there are no employee-referred candidates available or if no employee-referred candidates meet the qualifications, then outside candidates will be considered.

These changes will be implemented on a pilot basis for 2012 with evaluation upon the conclusion of the summer hiring season. Employees are encouraged to provide [feedback](#) on their experience with the new process.

Hiring managers are encouraged to submit their Summer Personnel Requisitions as soon as possible, but no later than April 20 . The summer employment announcement will be posted on the Employment website upon receipt of an approved Summer Personnel Requisition form. The SPR form will be available [here](#) on Monday, March 12. Under the "Request Things" heading, click "Summer Personnel Request." Please [contact](#) Jason Johnson (x5810) with questions regarding the summer hiring program.

*From [symmetry breaking](#)*

## Daya Bay experiment makes key measurement, paves way for future discoveries



The Daya Bay site in southern China. Photo: Lawrence Berkeley National Laboratory

An international collaboration of physicists working on a neutrino

anyone think that these quarks and leptons are the final word? The answer is complex.

[Read more](#)

—Don Lincoln

**Special Announcement**

### Daylight-saving - March 11



It's time to spring forward! Daylight-saving time begins this weekend. Don't forget to set your clocks ahead one hour Saturday night

before going to bed. The shift to daylight-saving time also serves as a reminder to install new batteries in warning devices such as smoke detectors and hazard warning radios.

**Special Announcement**

### Presenting Eileen Ivers and Immigrant Soul - March 10



Eileen Ivers

Eileen Ivers and Immigrant Soul will perform on Saturday, March 10, at 8 p.m. in Ramsey Auditorium. Tickets are \$29 for adults and \$15 for minors. This sensational fiddle player will

be joined by dancers from the Trinity Irish Dance Company, including the 2011 Irish Boys Dance Champion.

For more information, please visit the Fermilab Art Series [website](#).

**Announcements**

#### Latest Announcement

[Service Desk website changing - March 19](#)

[Fermilab Arts Series presents Eileen Ivers & Immigrant Soul - March 10](#)

[Barn dance - March 11](#)

[Access 2010: Intro. - March 14](#)

[Fermilab Garden Club spring meeting - March 14](#)

Call x3524 to make your reservation.

## Archives

[Fermilab Today](#)

[Director's Corner](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[CMS Result of the Month](#)

[User University Profiles](#)

[ILC NewsLine](#)

## Info

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experiment in southern China announced today they have made a difficult measurement scientists have been chasing for more than a decade.

The results of the Daya Bay neutrino experiment open an important window into understanding the behavior of neutrinos, and now the race is on to determine the implications. Two American experiments, one proposed and one under construction, seem well positioned to take the next steps.

### The problem of morphing

Whether or not they travel faster than light, neutrinos are perplexing particles. In the 1960s, scientists studying neutrinos produced in the sun discovered that a portion of them seemed to disappear as they made their way toward Earth.

[Read more](#)

—*Kathryn Grim*

[Take the Take Five Winter Challenge - March 19](#)

[Fermilab Lecture Series presents "The Intensity Frontier" - March 23](#)

[School's Day Out - March 26-30](#)

[FRA scholarship applications due April 1](#)

[Python Programming class - April 16-18](#)

[Abri Credit Union is now selling books of stamps](#)

[Fermilab Management Practices courses are now available for registration](#)

["5 Treasures" Qigong for stress relief](#)

[Indoor soccer](#)

[Atrium construction updates](#)

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[Submit an announcement](#)

### Classifieds

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