

## Calendar

### Friday, November 10

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-over

**4:00 p.m.** Joint Experimental Theoretical Physics Seminar - 1 West

Speaker: F. Margaroli, INFN Bologna

Title: CDF's Top Mass and Cross Section

Results in the All-Hadronic Decay Channel

**8:00 p.m.** Fermilab International Film Society - Auditorium

*Le Dîner de cons (The Dinner Game)*

Adults \$5

### Saturday, November 11

**8:00 p.m.** Arts Series presents Rebel

Baroque Ensemble - Auditorium

[Baroque and Beyond: Chamber Music of the Late Baroque and Rococco](#)

### Monday, November 13

**2:30 p.m.** Particle Astrophysics Seminar

- Curia II

Speaker: D. Babich, Harvard University

Title: The Inhomogeneous Nature of Reionization

**3:30 p.m.** DIRECTOR'S COFFEE

BREAK - 2nd Flr X-Over

**4:00 p.m.** All Experimenters' Meeting -

Curia II

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

## Weather

## What's in a name? Quintessence



[What is making the universe expand faster and faster?](#)

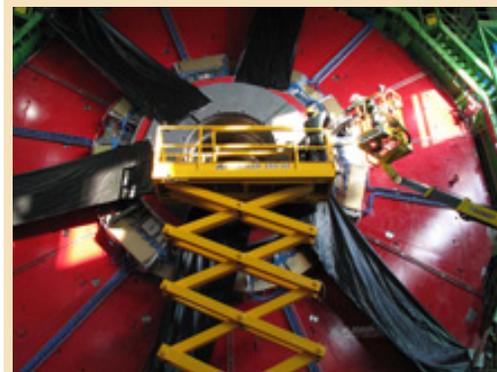
In classical thought the universe contained four elements: earth, air, fire and water. Aristotle added a fifth, quintessence, which literally means fifth element. He believed this element filled the universe beyond the terrestrial sphere. Unlike the elements associated with earth, quintessence, or ether, was non-changing. However, says Fermilab theoretical physicist Chris Hill, "Aristotle was not a very good particle physicist."

The physics community accepted the idea of quintessence until the end of the 19th century. The first strong evidence against ether came from the Michelson-Morley experiment, 1887, for which Michelson received the 1907 Nobel Prize.

In the late 1980s, "quintessence" experienced a revival. Cosmological data indicated that--to the surprise of everyone--the expansion of the universe was accelerating. This implies much of the energy in the universe is in a form that is self-repulsive. As a tongue-in-cheek description of this self-repulsive

## ILC NewsLine

### Thinking small to make the big things work: MDI



[CMS might provide valuable lessons for future ILC detectors.](#)

The ILC detectors come with many question marks attached. What will they look like? Will they be permanently installed or rolled into the beam with a system that lets one detector take data while the other enjoys a maintenance makeover (called "push-pull")? Despite all these questions, a group of experts on machine-detector interface, the MDI panel, is already thinking about cavern size, heavy-load cranes and cable leads in the return yokes. With the detectors for the LHC nearing completion, the MDI panel visited CERN in October to find out about the dos and don'ts of detector integration.

[Read More](#)

### Fermilab in 2007 Guinness Book of World Records

We may not have the world's longest fingernails or the world's oldest man--but according to the 2007 *Guinness Book of World Records*, Fermilab does have the most powerful beam of neutrinos. You can read the entry [here](#).



Rain 45°/31°

[Extended Forecast](#)[Weather at Fermilab](#)**Current Security Status**[Secou Level 3](#)**Wilson Hall Cafe****Monday, November 13**

- Minestrone
- Chicken & Mushroom Cheese Steak
- Baked Chicken Enchiladas
- Pot Roast
- Garden Turkey
- Assorted Slice Pizza
- Szechwan Green Bean with Chicken

[Upcoming Menu](#)**Chez Leon****Wednesday, November 15****Lunch**

- Calzone of Bacon, Cheese and Cabbage
- Marinated Vegetable Salad
- Coffee-Chocolate Coupe

**Thursday, November 16****Dinner**

- Tortilla Soup
- Swordfish and Vegetable Kebobs
- Lemongrass Rice
- Cassata

[Chez Leon Menu](#)

Call x4598 to make your reservation.

**Search****Search the Fermilab Today Archive****Info**

energy, physicists revived the term "quintessence." In 1988 a team of Fermilab theorists, including Josh Frieman, Chris Hill, Rocky Kolb, the late Dave Schramm and Al Stebbins, along with colleagues elsewhere, pioneered these concepts, publishing a series of papers indicating that this mysterious energy may be related to neutrinos. "It's exciting that neutrinos may be related to dark energy--maybe even dark matter," said Hill. "We never called it quintessence, but the name stuck."

--D.A. Venton

**Photo of the Day**

**You must click on this image:** AD's Denton Morris took this picture near Wilson Hall on Wednesday, November 8, during the transit of Mercury across the sun. He used Todd Johnson's (far right) solar scope to safely watch the action. "Seeing a planet dwarfed by the immense size of the sun and realizing that it's all happening right over our heads is quite humbling," wrote Morris. If you click the image, you can see the view through the telescope. (Mercury is the dark spot.)

**In the News****Rebel Baroque Ensemble tomorrow night, 8:00 p.m.**

This Saturday night at Fermilab, the Rebel Baroque Ensemble will perform a modern approach to 18th-Century Baroque. Hailed by the *New York Times* as "sophisticated and beguiling," the New York-based ensemble has earned an international reputation for their performances of works by J.S. Bach, Handel, Telemann, Blavet, Quantz, and C.P.E. Bach. You can see them in the Ramsey Auditorium this Saturday, November 11, at 8 p.m. Ticket information is available on the [Arts Series Webpage](#).

**Announcements****Flexible benefits open enrollment**

Are you interested in participating in the flexible benefits plan for 2007? Annual enrollment for the flexible benefits plan begins on November 13 and ends on November 30. Flexible benefit plans allow you to pay for dependent care expenses or allowable medical and dental expenses not reimbursed under your plan with before-tax dollars. Enrollment materials will be sent to your mail station. You may also obtain the materials from the Benefits [web page](#).

**ILC Detector Test Beam Workshop**

Registration is now open for the ILC Detector Test Beam Workshop that will take place at Fermilab January 17 to 19,

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

Send comments and suggestions to [today@fnal.gov](mailto:today@fnal.gov)

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## ***National Public Radio,*** **November 7, 2006:** **Short of 'All,' String Theorists** **Accused of Nothing**

A provocative branch of physics called string theory might explain everything in the universe, such as how matter came into being and why space and time exist. Or, the theory might explain nothing. But for more than 30 years, it has captivated some of the best minds in physics. This intellectual feud that has spilled into the greater world--and onto a soccer field in Santa Barbara, Calif. There, physicists who spend their days pondering a universe that has nine or 10 dimensions of space, or who suspect that our universe is just one of jillions, get a chance to experience a true-to-life, three-dimensional ball.

[Read More](#)

2007. The workshop will assess the current and future needs for test beams for the ILC detector R&D program, and provide input to facility managers and users, and to the World-Wide Study group for the development of a road map. You can learn more and register [here](#).

### **Classifieds**

New [classified ads](#) have been posted on Fermilab Today.

### **[Upcoming Activities](#)**

