

Calendar

Monday, August 14

PARTICLE ASTROPHYSICS

SEMINARS WILL RESUME IN THE FALL

3:00 p.m. Hadron Collider Physics

Summer School Open Lecture -

Auditorium

Speaker: M. Strassler, University of

Washington

Title: Beyond the Standard Model - 1

3:30 p.m. Director's Coffee Break - 2nd

floor crossover

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

Curia II

4:30 p.m. Hadron Collider Physics

Summer School Open Lecture -

Auditorium

Speaker: T. Sjöstrand, CERN/Lund

University

Title: Theory of Hadronic Collisions - 3

Tuesday, August 15

2:15 p.m. Hadron Collider Physics

Summer School Open Lecture -

Auditorium

Speaker: M. Strassler, University of

Washington

Title: Beyond the Standard Model - 2

3:30 p.m. Director's Coffee Break - 2nd

floor crossover

THERE WILL BE NO ACCELERATOR

PHYSICS AND TECHNOLOGY

SEMINAR TODAY

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

Weather

Physicist sails a tenacious 13th Mackinac Island race



Peter Cooper (far right) and crewmates after a race on Lake Michigan last June. *

During a moonless night on Lake Michigan, Peter Cooper says, it's hard to see a hand in front of your face-- especially during a thunderstorm. "What you can see is the mast and sail of the boat in front of you tipping over," Cooper said. "That's when you start taking the sails down." The Fermilab physicist encountered such a storm two weeks ago during the 333-mile Race to Mackinac, the world's longest freshwater sailboat race.

A senior scientist at the Computing Division, Cooper has sailed competitively for 25 years and finished his thirteenth "Mac" race. He sailed aboard Tenacity, a 34-foot Olson racer-cruiser, with co-owners Bill Hood and Dick O'Connell, and finished 80th out of 137 small sailboats. Because not all sailboats are created equal, Cooper believes it was a decent finish. "We understood perfectly well that we'd end up near the middle," Cooper explained.

Sailing Tenacity or any sailboat, Cooper says, is a lot like running an experiment.

Safety Tip of the Week

Fermilab daycare



Fermilab daycare administrator Patti Hedrick (far right) tries to "blend in" with the kids.

Fermilab operates a daycare center that has about 70 children and 14 teachers. According to facility administrator Patti Hedrick, "we have addressed the obvious hazards since safety is a priority at the lab and we have had time to work things out." Below are some of the measures the center staff has taken to avoid injuries. You may find their ideas useful in your work or home environments, especially if you have children.

- Traffic - Drop off and pick up kids in the parking area in front of the center. Follow traffic rules and watch for children. The adjoining street has a 5 mph limit and a stop sign.
- Sponge-freeze bruises - What's the latest advice for safely applying cold to an injury? Put a damp sponge in a Ziplock bag and freeze it. No goo will

Chance of Showers **81%/59°**[Extended Forecast](#)[Weather at Fermilab](#)**Current Security Status**[Secou Level 3](#)**Wilson Hall Cafe****Monday, August 14**

- French Quarter Gumbo
- French Dip with Horseradish Cream Sauce
- Santa Fe Pork Stew
- BBQ Roasted Quartered Chicken
- Chicken Ranch Wrapper
- Turkey Breast on Homemade Focaccia
- Assorted Slice Pizza -Sweet n' Sour
- Chicken with an Egg Roll

The Wilson Hall Cafe accepts Visa, Master Card, Discover and American Express.

[Wilson Hall Cafe Menu](#)**Chez Leon****Wednesday, August 16****Lunch**

- Chicken Sate' w/Peanut Sauce
- Marinated Oriental Salad
- Coconut Cake

Thursday, August 17**Dinner**

Closed

[Chez Leon Menu](#)

Call x4598 to make your reservation.

Search

"You have a plan, but as they say, 'no military plan survives engagement,' and no sailing plan survives the wind and the water," he said. "You have to take what nature gives you and deal with it."

Cooper joked that Tenacity's crew never has to buy parts because they have everything imaginable. "During this race we carried nine or 10 sails and used all but three," Cooper recalled. But on 22,300 square miles of unpredictable surface water, those parts come in handy. "Most of the time you're sailing the boat, but some of the time it's sailing you," Cooper said. "Evil stuff can happen." As for the mid-race storm, the sea-worthy scientist said it didn't trouble him at all. "I slept right through it," Cooper said. "It's a line of thunderstorms that gets my attention."

--Dave Mosher

*From left, front row: Dick O'Connell, Sean Mattingly, Larry Zabrowski and Peter Cooper. Back row: Brian Devries, Tim Streiff and Mike Walczak.

In the News**Scientific American, August 11, 2006:****The Geometer of Particle Physics**

Alain Connes's noncommutative geometry offers an alternative to string theory. In fact, being directly testable, it may be better than string theory

If there is a mathematician eagerly waiting for the Large Hadron Collider near Geneva to start up next year, it is Alain Connes of the Collège de France in Paris. Like many physicists, Connes hopes that the Higgs particle will show up in detectors. The Higgs is the still missing

leak out.

- Tornados - There is an in-ground tornado shelter near the daycare center. Children and staff conduct drills when the alarms go off on the first Tuesday of every month.

- Backs - Daycare teachers have few work injuries, with most being minor. The only exception is back injuries from lifting children. The [Back Works](#) training program has essentially eliminated this problem. Job-specific suggestions from an onsite review by the Back Works instructor were especially helpful.

- Additional safety training - Besides Back Works, the daycare teachers complete CPR, first aid, blood borne pathogen and fire extinguisher training.

[Safety Tip of the Week Archive](#)**Photo of the Day**

More kid stuff: PPD's Leticia Shaddix snapped this picture of her grandson, William Zearfaus, at a recent picnic. (Click image for larger version.)

Accelerator Update

Search the Fermilab Today Archive**Info**

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

Send comments and suggestions to today@fnal.gov

[Fermilab Today archive](#)

[Hurricane Relief Page](#)

[Fermilab Today PDF Version](#)

[Fermilab Result of the Week archive](#)

[Fermilab Safety Tip of the Week archive](#)

[Linear Collider News archive](#)

[Fermilab Today classifieds](#)

[Subscribe/Unsubscribe to Fermilab Today](#)

crowning piece of the so-called Standard Model--the theoretical framework that describes subatomic particles and their interactions. For Connes, the discovery of the Higgs, which supposedly endows the other particles with mass, is crucial: its existence, and even its mass, emerges from the arcane equations of a new form of mathematics called noncommutative geometry, of which he is the chief inventor.

Connes's idea was to extend the relation between geometric space and its commutative algebra of Cartesian coordinates, such as latitude and longitude, to a geometry based on noncommutative algebras. In commutative algebra, the product is independent of the order of the factors: $3 \times 5 = 5 \times 3$. But some operations are noncommutative.

[Read More](#)

August 9 - 11

- Two stores provided 42 hours and 30 minutes of luminosity.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements**Delays on Fermilab's Batavia Road**

On Tuesday, August 15, a crack-filling project will begin on Batavia Road between Eola Road and the east gate. There will be flagmen and single lane closures. "Motorists can expect brief delays for a couple of days," said Roads and Grounds' Mike Becker.

Hear the Fermi Singers at noon

The Fermi Singers will perform today from 12:00 - 12:30 p.m. in the Wilson Hall second-floor crossover. This will be the final performance for this year's summer student singers, and the program will include works from Brahms to Billy Joel.

[Upcoming Activities](#)