

Calendar

[Have a safe day!](#)

Friday, July 2
8:30 a.m. - 5 p.m.

[XVI International Symposium on Very High Energy Cosmic Ray Interactions](#) (ISVHECRI 2010) - One West

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

4 p.m.
[Joint Experimental-Theoretical Physics Seminar](#) - One West
Speakers: Eun-Joo Ahn, Fermilab
Ralph Engel, Karlsruhe Institute of Technology
Title: Xmax Distributions with Auger and Their Interpretation (in conjunction with the [XVI International Symposium on Very High Energy Cosmic Ray Interactions](#))

Monday, July 5
HAPPY INDEPENDENCE DAY!

Tuesday, July 6
12 p.m.

[Summer Lecture Series](#) - One West
Speaker: Harrison Prosper, Florida State University
Title: The Standard Model and Beyond

3 p.m.
Special Lecture - Curia II
Speaker: Eric Prebys, Fermilab
Title: The Art of Applying to Graduate School

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

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

H1N1 Flu

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

Weather



Sunny
82°/58°

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

Milestone

Jackie Coleman retires after more than three decades at Fermilab



Jackie Coleman at a Physics Advisory Committee meeting in 1994.

When Jackie Coleman retires from the Directorate's Program Planning Office this summer, she will be taking a key part of Fermilab's memory with her. Coleman's contribution to the Fermilab community, however, will not be forgotten.

Coleman came to Fermilab in 1971 as Jacqueline Gifford, a summer worker just out of high school. At the time, the laboratory was known as the National Accelerator Laboratory. Coleman's mother was working at the laboratory at the time, in the Purchasing Department. At Fermilab Coleman met her husband, Rick, a physicist who works with the Accelerator Division.

When Coleman became an official laboratory employee in September 1972, she received the ID number 1389. During nearly 38 consecutive years here, Coleman has worked with hundreds of individuals, including users and staff across the laboratory.

Coleman has been a mainstay of the Directorate's Program Planning Office. She has effectively guided a succession of leaders and members of the office through the details of keeping the laboratory's experimental research program operating smoothly.

In addition to her irrefutable organizational and administrative skills, Coleman remains the ultimate go-to person for many questions on Fermilab's history, including who was in what position when, how to get in touch with former Fermilab personnel, and experiment running schedules from the 1970s.

Today will be Coleman's last full working day before she takes vacation. Her retirement will give her more time to spend with her horses, dogs and fruit trees. The directorate is planning a retirement party for Coleman in mid-July, where all who have worked with her can wish her well.

--Daisy Yuhas, with the assistance of Jeff Appel and Roy Rubinstein

In Brief

Stay safe this Fourth of July



Recovery Act

Recovery Act helps family business

Few families have been as directly affected by the American Recovery and Reinvestment Act as the Bohrs.

This year Fermilab construction projects funded by the Recovery Act have been a major source of income for the Bohr family construction company, Don Bohr and Sons.



Larry Bohr

"There's not much money being spent in the private sector," said Larry Bohr, whose father started the business. "Most of our work has come from places like Fermilab or the park district."

Recently Bohr has been working as a subcontractor for Aurora-based Pandecon Inc. to install Wilson Hall's new back-up generator with two of his brothers, his son and his son-in-law, along with three other employees. Bohr's wife and mother handle the company's office work.

Fermilab has dedicated about \$730,000 in Recovery Act funds to the construction project, which includes installation of the generator and other improvements to the west side of Wilson Hall.

The nine Bohr brothers and sisters grew up about two miles from the laboratory. Larry Bohr's first project at Fermilab was to build the foundation for the Bubble Chamber once it retired to the lawn outside of SiDet. Bohr still lives within a couple of miles of his childhood home.

"This will be my 36th year of doing this," he said. "I couldn't ask for a better crew. These guys have been together so long, everyone knows what's going on."

Not all of the brothers work in the business their father started, but they have all stayed in the construction field.

Bohr has begun to think about introducing the next generation to the family trade. His oldest grandson, Brandon, who is going on 7 years old, is already a fan of concrete.

-- Kathryn Grim

In the News

Ultra-precise test confirms photons are bosons

From *Physics World*, July 1, 2010

Physicists in the US have carried out an extremely precise test of the one of the cornerstones of modern physics – the idea that the two types of fundamental particle, bosons and fermions, follow two distinct kinds of statistical behaviour. The laser-based experiment confirmed that photons behave according to Bose–Einstein statistics, narrowing the odds that photons could in fact be fermions by about a factor of 1000 compared with previous tests.

Physics tells us that fundamental particles

Current Security Status

[Second Level 3](#)

Wilson Hall Cafe

Friday, July 2

- Breakfast: Chorizo burrito
- Chunky vegetable soup w/ orzo
- Buffalo chicken wings
- Cajun breaded catfish
- Teriyaki pork stir-fry
- Honey mustard ham & Swiss panini
- Assorted sliced pizza
- Carved turkey

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, July 7

Lunch

- Cornmeal-crust catfish
- Green beans w/ hot-pepper vinegar
- Creamy coleslaw w/ bacon
- Sweet potato pie

Thursday, July 8

Dinner

- Pasta carbonara
- Stuffed fillet of sole w/ crabmeat
- Sautéed spinach
- Pecan rum cake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

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Stay safe this Fourth of July.

Every year in the United States, we celebrate the Fourth of July with community parades, picnics, barbecues and fireworks - the things of which happy memories are made. But sadly, Independence Day also includes tragic events resulting from the use of fireworks.

According to the National Fire Protection Association and the Consumer Product Safety Commission, the use of fireworks causes an estimated 30,100 fires annually and was responsible for approximately 7,000 injuries in 2008.

Please ensure that your family and friends have a happy and safe summer holiday by following these safety tips:

- Attend public fireworks displays. The safest way to enjoy fireworks is by watching displays conducted by community-hired professional pyrotechnicians.
- Don't allow kids to play with fireworks. Sparklers can reach 1,800 degrees Fahrenheit (982 degrees Celsius) — hot enough to melt gold.
- Steer clear of others — fireworks have been known to backfire or shoot off in the wrong direction. Never throw or point fireworks at someone, even in jest.
- Don't allow kids to pick up pieces of fireworks after an event. Some may still be ignited and can explode at any time.
- Think about your pet. Animals have sensitive ears and can be extremely frightened or stressed on the Fourth of July. Keep pets indoors to reduce the risk that they'll run loose or get injured.

-- Chuck Kuhn, Fermilab Fire Department battalion chief

In the News

New muon detector could find hidden nukes

From *Wired Science*, July 1, 2010

A prototype of a device that could someday detect nukes through layers of steel just passed its first test. The detector, which uses technology that was developed for particle physics experiments at the Large Hadron Collider, can tell the difference among iron, lead and other heavy metals.

By detecting the signature of heavy elements that could be used to build nuclear weapons, the new machine could someday find nuclear contraband hidden in shielded vehicles.

[Read more](#)

come in two basic varieties: bosons, which have integer values of intrinsic angular momentum or "spin", and fermions, which have half-integer spin. Bosons include force-carrying particles such as the photon, W and Z and follow Bose–Einstein statistics. An important consequence of this is that many identical bosons are free to occupy the same quantum state, leading to phenomena such as Bose–Einstein condensates and lasing.

Fermions include the fundamental matter particles such as quarks and electrons and obey Fermi–Dirac behaviour. Identical fermions can never exist in the same quantum state, giving us the shell structure of atoms and, with it, chemistry.

[Read more](#)

Announcements

HR announcement

[Format change for new personnel requisition form](#)

[Deadline approaching for requests for fall 2010 & spring 2011 onsite housing](#)

[All supervisors: Do you need help preparing for performance reviews?](#)

[Submit timecards today](#)

[Yoga begins July 6](#)

[Time to complete accomplishment reports](#)

[Session 3 preschool & youth swim lesson registration due today](#)

[Day Camp payments due](#)

[Web of Science citation database online trial](#)

[Adult water aerobics - Mondays](#)

[Adult swim lessons - Mondays](#)

[Walk to Health class began June 7](#)

[Butts & Guts class began June 7](#)

[10,000 Steps-a-Day walking program](#)

[Introduction to LabVIEW course - July 13](#)

[Embedded Design with LabVIEW FPGA and CompactRIO seminar - July 13](#)

[Interaction Management Coaching Forum - July 27](#)

[Submit an announcement](#)

Classifieds

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