

Calendar

[Have a safe day!](#)

Monday, Feb. 15

2:30 p.m.

[Particle Astrophysics Seminar](#)

- One West

Speaker: Richard Carrigan, Fermilab

Title: Starry Messages: Searching for Signatures of Interstellar Archaeology

3:30 p.m.

DIRECTOR'S COFFEE BREAK - 2nd Flr X-Over

4 p.m.

All Experimenters' Meeting - Curia II

Special Topic: Muon Collider Ring Magnet Progress

Tuesday, Feb. 16

3:30 p.m.

DIRECTOR'S COFFEE BREAK - 2nd floor X-over

4 p.m.

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

Speaker: Gabriele Bassi, University of Liverpool and Cockcroft Institute

Title: Monte Carlo Mean Field Treatment of Coherent Synchrotron Radiation Effects with Application to Microbunching Instability in Bunch Compressors

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

[Upcoming conferences](#)

Campaigns

[Take Five](#)

[Tune IT Up](#)

Feature

At the LHC, one island down, billions to go



Members of the CMS collaboration from U.S. institutions show off the experiment's first published paper on Feb. 8.

If the Large Hadron Collider at CERN is a vessel embarking on its maiden voyage to explore a New World of discovery, last week the CMS experiment documented the first island it found in uncharted territory.

On Feb. 8, the CMS collaboration published the [results](#) of the first analysis of data from the highest-energy particle collisions ever achieved.

Members of the CMS collaboration from U.S. institutions recognized this achievement over coffee and pastries in the LHC Physics Center at Fermilab last Monday morning, at the same time their counterparts were celebrating at CERN and elsewhere.

Juggling a cup of coffee in one hand and the published paper in the other, Ian Shipsey, a physicist at Purdue University and LPC co-coordinator, could barely contain his excitement.

"Hundreds of years ago, we built ships to discover brand new continents," he said. "The LHC and CMS are like those great ships, and we measured our first island. It's a tiny island, but it is a harbinger of what lies ahead in a region of energy that we have never gotten to before."

The first collisions occurred in the LHC on Nov. 23, 2009. Three weeks later, scientists achieved a record-breaking 1.18 TeV of energy per beam, or 2.36 TeV in total. The four LHC experiments recorded around 100,000 collisions at this energy, providing data for the first published results.

"Our findings provide the first information on the characteristics of charged particle

ES&H Tips of the Week - Cyber security



Phishers capitalizing on Toyota recall



[Read your e-mail carefully to avoid falling prey to phishing attempts.](#)

We replaced my wife's SUV with a new Toyota minivan a few weeks ago. We removed all the seats and replaced them with dog kennels, dog beds, a booster seat for the little dog and platforms for the others. Conversion to a mobile dog kennel got rid of that new car smell quick.

We lost that new car thrill even quicker during the next few days as the largest recall of Toyotas in history unfolded. Timing is everything.

E-mail scam artists know this rule. As the news story changes, the phishers are busy crafting new messages to trick us. Whether it's the disaster in Haiti, the Toyota recall or the upcoming tax season, someone is crafting a message right now designed to separate you from your money or your identity.

Before I had quite adjusted to the news about the recall, I got a friendly e-mail that appeared to come from the dealer that sold us the vehicle, thanking me for buying a new car from them and describing the recall. I read the entire e-mail, and near the end I noticed a mistake: The message thanked me for shopping at a dealership in Atlanta. If it had not been for that mistake, I probably would have fallen for this phishing e-mail.

Please read e-mails carefully and look for small mistakes that tip you off to phishing. One simple defense against phishers is to never click on a link you receive in an e-mail.

H1N1 Flu

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

Weather



Chance of snow
26°/14°

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

Current Security Status

[Secon Level 3](#)

Wilson Hall Cafe

Monday, Feb. 15

- Breakfast: 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, Feb. 17

Lunch

- Spicy honey-brushed chicken
- Garlic-roasted potato wedges
- Tossed salad
- Sticky toffee pudding

Thursday, Feb. 18

Dinner

- Crab cakes w/ tomato cream sauce
- Spice-crusted pork tenderloin w/ andouille sausage gravy
- Horseradish mashed potatoes
- Fried okra
- Cappuccino-fudge cheesecake

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

production at higher energies than ever before created in the laboratory," said Guido Tonelli, spokesperson for the CMS experiment. "The results confirm previous measurements and support expectations for the new energy regime. They are important to help us model the experimental background for future measurements at even higher energies."

CERN scientists expect the next LHC run to begin at the end of February. The next major milestone for the CMS experiment will likely be witnessing their first high-energy collisions at 3.5 TeV per beam.

-- Elizabeth Clements

Feature

Want to learn more about physics? Ask a scientist



Ask-a-Scientist contributor Herman White (left) and founder Peter Garbincius work to keep members of the public engaged through the monthly program.

Fans from near and far pack their cars, program their GPS units and discuss what they'll talk about and what to expect when they get to their destination. But these fans aren't caravanning to see their favorite rock band; they're headed to Fermilab's Ask-a-Scientist program.

"They come from Iowa, Indiana, Wisconsin and downstate Illinois – anywhere within a six- or seven-hour drive. They've even come from as far away as Florida," said Herman White, a volunteer in the Ask-a-Scientist program for the past few decades. "They just get in the car and drive, like they would for a football game or a concert."

The program, founded by Fermilab scientist Peter Garbincius, started evolving in the late 1980s. It now has a solid fan base and always attracts new interest.

"We often have repeat customers, who return on their own or with their neighbors or out-of-

Navigate to the link by going directly to a legitimate site. For example, in my case, I could type Toyota.com directly into my browser and navigate to areas of that site describing the recall.

-- Mark Leininger, computer security manager

Safety Tip of the Week Archive

Special Announcement

After-hours phone service outage 1-2 a.m. on Feb. 18

The laboratory will briefly experience a dialing outage from 1-2 a.m. on Thursday, Feb. 18. AT&T maintenance activity will affect the ability to dial and connect to off-site numbers, as well as to receive calls from off-site numbers, including cell phones. These services will be unavailable for up to 30 minutes between the hours of 1 and 2 a.m. Thursday. This activity will have no impact, however, on our internal campus (extension-to-extension) dialing -- you may continue to dial other 4-digit extensions including the laboratory's emergency number, x3131.

Accelerator Update

Feb. 10-12

- Four stores provided ~22.5 hours of luminosity
- TeV safety system testing completed
- Store 7597 quenched
- Store 7601 aborted

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

Announcements

Latest Announcements

[Employee discount offered at Batavia Rosati's](#)

[Kyuki-Do Martial Arts classes begin Feb. 15](#)

[Hiring summer students for 2010](#)

[Harlem Globetrotters special ticket price - April 15](#)

[Fermilab Blood Drive today and Feb. 16](#)

[Staff appreciation massages offered Feb. 16](#)

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[CMS Result of the Month](#)

[User University Profiles](#)

[ILC NewsLine](#)

Info

[Fermilab Today](#)

is online at:

www.fnal.gov/today/

Send comments and

suggestions to:

today@fnal.gov

Visit the Fermilab

[home page](#)

town visitors," Garbincius said.

During one Sunday each month between 50 and 200 people attend a short lecture by a member of the Fermilab community on topics including elementary particle physics, accelerators, astrophysics and engineering. Attendees also get a tour from Lederman Science Education Center staff. They view the Cockcroft-Walton accelerator, Linac Gallery and Main Control Room. Finally, they crowd onto Fermilab's 15th floor, eager to pick the brains of some of the world's highest-energy physicists one-on-one.

"They ask you everything about science," White said. "It is kind of interesting to be put in that position. One person asked me if an electron was captured in an atom because it has a personality and feels closer to a charged particle."

But no matter how strange the question, nearly all attendees have questions connected to science.

"We make science less mysterious and more approachable," White said. "We share a little bit of ourselves and particularly help distinguish fundamental research from applied science."

To be successful in any outreach program, White said, you have to connect what you do to what the audience knows or what they want to know.

"This is an opportunity to meet the public face-to-face and present the human side of our work at the laboratory," White said. "They get a different perspective about the lab when they talk to a person than they can get from brochures."

The Ask-a-Scientist program is now seeking Fermilab scientists or users from all levels to volunteer for upcoming sessions. Anyone interested can contact [Garbincius](#) or [Nancy Lanning](#), who coordinates the lectures.

"Everybody ought to try being part of this program," White said. "It is a great skill to be able to talk to the public, and this helps you develop that skill."

Learn more about the [Ask-a-Scientist](#) program.

-- *Rhianna Wisniewski*

[2010 standard mileage reimbursement rate](#)

[Chicago Bulls Discount Tickets Available Online](#)

[Introduction to Argentine Tango series of classes - FREE](#)

[Qi Gong, Mindfulness and Tai Chi Easy for Stress Reduction](#)

[Engineers Week activities - Feb. 15-19](#)

[Unleash those stomach butterflies - Toastmasters](#)

[BLAST! The Movie: intro, film and Q&A - Feb. 19](#)

[Ukrainian egg decorating class - Feb. 22](#)

[Weight Watchers at Work begins new session](#)

[Applications accepted for awards in URA Visiting Scholars program](#)

[Blood drive sign-up](#)

[Fermilab Family Open House - Feb. 21](#)

[Ask HR Sessions to be held at the Computing Division and Wilson Hall](#)

[Conflict Management and Negotiation Skills offered March 3 and 10](#)

[Adobe Acrobat Professional 9.0 Level 1 class offered March 4](#)

[March 5 deadline for The University of Chicago Tuition Remission Program](#)

[On-site Housing for summer 2010 - March 8 deadline](#)

[Adaptive Leadership: Coaching for Individual Differences class - March 9](#)

[Excel Power User / Macros class offered March 11](#)

[FRA Scholarship 2010](#)

[Additional Activities](#)

[Submit an announcement](#)