

Calendar

[Have a safe day!](#)

Tuesday, Oct. 13

3 p.m.

[FermiLINK Q&A session](#) - One

West

3:30 p.m.

DIRECTOR'S COFFEE
BREAK 2nd Flr X-Over
THERE WILL BE NO
ACCELERATOR PHYSICS
AND TECHNOLOGY
SEMINAR TODAY

Wednesday, Oct. 14

3:30 p.m.

[DIRECTOR'S COFFEE](#)

[BREAK](#) 2nd Flr X-Over

4 p.m.

Fermilab Colloquium - One
West

Speaker: Tijana Rajh, Argonne
National Laboratory

Title: Nanoscience and
Nanotechnology: From Energy
Applications to Advanced
Medical Therapies

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

Campaigns

[Take Five](#)

[Tune IT Up](#)

Weather

 Partly sunny
48°/37°

[Extended Forecast](#)

[Weather at Fermilab](#)

Current Security Status

[Secou Level 3](#)

Wilson Hall Cafe

Feature

White honored for research, collaboration and outreach



Fermilab's Herman White stands with the KTeV stacked ring veto counters that he helped to build in 1994. White coordinated the assembly of each piece of the experiment in the KTeV hall.

Herman White likes to be the man behind the scenes; the guy who gets things done, but doesn't like to take any credit.

Still, White will have his moment in the spotlight this February when the American Physical Society hands him the 2010 Edward A. Bouchet Award, a prestigious prize that recognizes a distinguished minority physicist who has made significant contributions to physics research.

The APS highlighted White's work on the Kaons at the Tevatron (KTeV) experiment, public service and his history of mentoring.

"This really is a well-deserved award," said Fermilab's Greg Bock, who worked with White on KTeV in the 1990s. "Herman is just a very nice guy. He's been here for a long time, and he is well-respected by all of his colleagues and well known and respected away from the laboratory."

During his 35-year career, White has helped to design, commission and analyze data from some of the world's most well-known particle physics experiments, including E701 neutrino

Director's Corner

NNN09



[Meeting attendees at the International Workshop on Next Generation Nucleon Decay and Neutrino Detectors.](#)

The International Workshop on Next Generation Nucleon Decay and Neutrino Detectors, NNN09, took place in Estes Park, Colorado, Oct. 8-10. This was the tenth in a series of meetings that have taken place annually around the world, focusing on experiments that go beyond the reach of current projects and the theoretical work that motivates and describes such advances. An additional purpose of these meetings is to build international collaborations. The meeting had strong participation from the U.S., Japan and Europe. I gave the closing talk at the conference.

The subject of massive neutrino and nucleon decay detectors is central to the Fermilab program over the next decade. The level of activity in the world on the subject is quite large. In Japan, JPARC has just started operations and will deliver a neutrino beam to the Super Kamiokande detector starting this fall. There are plans to upgrade the machine power to 750 kW in the next several years, a power similar to the upgrade of the Main Injector for the NOvA project at Fermilab. Beyond that, depending on the measurement of one of the neutrino oscillation parameters, θ_{13} , physicists discuss further upgrades to 1.6 MW beam power and massive megaton-class detectors.

In the U.S., the funding has been approved by both DOE and NSF to prepare the design of the beamline at Fermilab and the design of large detectors at the Deep Underground Science and Engineering Laboratory (DUSEL) at the Homestake Mine in South Dakota. The designs will take place over the next two years. Before the groundbreaking, we will have the measurement of θ_{13} in hand.

Tuesday, Oct. 13

- Bagel sandwich
- Tomato bisque soup
- Lemon pepper club
- Beef fajitas
- Korean garlic chicken
- Grilled chicken Caesar salad
- Assorted slices of pizza
- Rio Grande taco salad

[Wilson Hall Cafe Menu](#)

Chez Leon

Wednesday, Oct. 14 Lunch

- Broiled tilapia with Thai coconut curry sauce
- Basmati rice
- Julienne of peppers
- Pear and ginger crisp

Thursday, Oct. 15 Dinner

- Spring mix salad with ruby grapefruit and toasted almonds
- Lamb chops with herb and olive crust
- Orange scented rice pilaf with fennel
- Vanilla ice cream with espresso-caramel sauce

[Chez Leon Menu](#)

Call x3524 to make your reservation.

Archives

[Fermilab Today](#)

[Result of the Week](#)

[Safety Tip of the Week](#)

[CMS Result of the Month](#)

[User University Profiles](#)

[ILC NewsLine](#)

Info

oscillation experiment, SciBooNE and KTeV, which highlighted White's technical skills.

There wasn't enough room to build the KTeV experiment in one space, so White coordinated the staging of each piece all over the laboratory site and the move of components from all over the world to the KTeV hall when it was finished.

"That was one of the bigger jobs - bringing the pieces together and making them all fit," Bock said. "In that role, Herman had to interact with every individual in that collaboration. It takes a special, even-handed person to make it all work, and Herman did a great job at that."

[Read more](#)

In brief

New traffic safety course for Fermilab drivers



A slide from the new traffic safety presentation showing how distracted driving can lead to a traffic accident. In this crash, a driver hit a sand barrier in front of the Wilson Street guardhouse while dialing a cell phone. Fermilab discourages the use of cell phones while driving on site.

Drivers on Fermilab roads can often expect to encounter icy curves, bicyclists, hazardous weather and geese.

Less known is where those hazards exist and the safest ways to avoid them. A new online traffic safety course gives drivers the inside scoop on problem spots, common causes of accidents and general safe-driving tips. This course is recommended for all employees and users and will eventually become a requirement for all people who drive for work at Fermilab.

Chuck Morrison, Fermilab Security Department, said completing the course will help drivers, motorcyclists, cyclists and pedestrians prevent avoidable accidents.

"Every accident we have here is preventable," Morrison said. "Lately we've seen an increase in accidents that involve backing up

The Long Baseline Neutrino Experiment (LBNE) is a central feature of the Particle Physics Project Prioritization Panel (P5) recommendations for the U.S. program. The program would start operations with the Main Injector beam developed for NOvA and ultimately be upgraded with Project X, providing a 2 MW beam.

In Europe, there was a recent workshop to define the European neutrino program as input for future planning. A large collaboration, LAGUNA, is analyzing seven sites across Europe at varying distances from CERN, at various depths and using different detector technologies. In the meantime, CERN is building an upgrade to their LHC injection chain with all the hooks necessary to upgrade the facility to an intense source of protons that could produce powerful neutrino beams.

Clearly the planning in the U.S. is well ahead, with a site proposed and with funding available for the designs. It is important to start building the international framework that would bring strong participation from partners around the world. Clearly the regional programs that will attract that sort of collaboration are those that will be anchored by the most powerful neutrino beams. In this context, Project X is a critical component for us to attract strong international collaboration.

Accelerator Update

Oct. 9-12

- Five stores provided approximately 56.75 hours of luminosity
- Linac power supply problems
- Booster power supply problems

The integrated luminosity for the period from Oct. 5 to Oct. 9 was 45.03 inverse pico barns.

[Read the Current Accelerator Update](#)

[Read the Early Bird Report](#)

[View the Tevatron Luminosity Charts](#)

In the News

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

Send comments and
suggestions to:
today@fnal.gov

Visit the Fermilab
[home page](#)

improperly. We only had seven in 2008 and this year we've already had 10."

Knowing the rules of the road can also help drivers avoid car accidents or a written warning from Fermilab security officers. Drivers can also avoid condition-related accidents, such as sliding on snow or hydroplaning, by driving below the posted speed limit during hazardous conditions.

Morrison said drivers should spend about 20 minutes reviewing the [safety presentation](#) and then complete the Traffic Safety Awareness [course test](#).

— *Chris Knight*

Feature

Creators of Star Wars fan film celebrate trailer premier



Cast and crew of the Star Wars fan film "Forgotten Realm" gathered in Kuhn Village barn Saturday to celebrate the premier of the film's trailer. Filming for the movie is finished, but special effects, sounds and editing will take another year. Fermilab's Darren Crawford, who wrote and directed the movie, said about 25 Fermilab employees have been involved in the movie since filming began in 2006. Crews shot some of the film at Fermilab locations.



More than meets the eye: How the CCD transformed science

From *Wired*, Oct. 7, 2009

The 2009 Nobel Prize for Physics went, in part, to the inventors of the charge-coupled device George Smith and Willard Boyle this week. Their innovation, sketched out in 1969, is now the imager in millions of digital cameras and telescopes.

The very first prototype, pieced together months after Smith and Boyle laid out its working principles, is pictured above.

A charge-coupled device, in most applications, translates light into an electronic signal. Photons of light striking an array of capacitors create an electrical charge proportional to their intensity, which the charge-coupler transforms into voltage. That signal can be digitized and transformed by the dull magic of high-performance computing into Hubble's images.

[Read more](#)

Announcements

Latest Announcements

[Children's Halloween party - Oct 23](#)

[Claim your bikes outside Wilson Hall](#)

[NALWO Seminar - An Introduction to Neurofeedback - Oct. 14](#)

[Dealing With Difficult People Lunch and Learn - Oct. 14](#)

[Fermilab Toastmaster can help you find your voice - Oct. 15](#)

[Applications of High-Intensity Proton Accelerators workshop - Oct. 19-21](#)

[Access 2007: Intro class - Oct. 20](#)

[Interpersonal Communication Skills class - Oct. 21](#)

[Children's Halloween Party - Oct. 23](#)

[Buttered Rum performs at Fermilab Arts Series - Oct. 24](#)

[Director's Award nominations accepted until Oct. 26](#)

After the premier, attendees shared a cake decorated with the logo for the film. The movie takes place between Episode III and IV of the Star Wars series. Crawford said when they finish post-production in 2010, the movie will be about two hours long. They hope to debut the movie at a festival for Star Wars fan films. Click [here](#) to watch some behind the scenes footage shot in 2007.

[Conflict Management and Negotiation Skills - Oct. 28, Nov. 11](#)

[Facilitating Meetings That Work - Nov. 4](#)

[Fred Garbo Inflatable Theatre at Fermilab Arts Series - Nov. 7](#)

[Process Piping \(ASME B31.3\) class offered in October and November](#)

["The Night Before Christmas Carol" at Fermilab Arts Series - Dec. 5](#)

[Scottish Country Dancing Tuesday evenings at Kuhn Village barn](#)

[International folk dancing Thursday evenings at Kuhn Village barn](#)

[Annual Enrollment now running](#)

[Discounted Fright Fest tickets available](#)

[Additional activities](#)

[Submit an announcement](#)