

At PPPL THIS WEEK

WEDNESDAY, MARCH 27

GFDL Events and Seminars
12 p.m. ♦ Geophysical Fluid Dynamics Laboratory (GFDL)

Smagorinsky Seminar Room
Diagnosis of Seasonally Dependent Predictability in Observations and CM2.5

Xiaosong Yang (UCAR)

www.gfdl.noaa.gov/events

(Gov't, University or 2 other forms of I.D. needed)

THURSDAY, MARCH 28

Hamilton Colloquium Series
4:30 p.m., P.U., Jadwin Hall, A10

From Einstein's intuition to quantum bits: a new quantum age?

Alain Aspect, Institut d'Optique, Palaiseau, France

UPCOMING EVENTS...

April 8-12

9 a.m. - 5 p.m. ♦ Princeton Center for Theoretical Science
407 Jadwin Hall

Stability, Energetics, and Turbulent Transport in Astrophysical, Fusion, and Solar Plasmas: Unifying Theoretical and Computational Tools

Guest speakers include Stewart Prager

April 15-19

Lab-wide clean-up for Earth Week

April 18

PPPL Celebrates Earth Day

Displays, speakers and prizes and free lunch for audience members

April 28

Communiunity Festival of the Arts

1 - 6 p.m. ♦ Downtown Princeton

Inside...

Final S.O.S.
page 2

Safety Survey Results ..
page 3

Café @ PPPL Menu
page 4

Security goes high tech at PPPL as Wi-Fi moves outside



By Jeanne Jackson DeVoe

Emergency Services Officers at PPPL can hop online anytime they're on patrol for everything from researching hazardous chemicals to filling out forms thanks to a newly-installed Wi-Fi system that covers most of the great outdoors at the Laboratory.

The outdoor Wi-Fi will also be good news for PPPL employees who want to catch some rays on a warm summer day and still stay caught up with their paperwork or respond to email messages.

"I'm looking forward to people using it in the summer," said Ashwini Borkar, the systems and network engineer who oversaw the project. "All these people are going to get a lot of good out of it."

The 18 antennas or wireless access points are small white devices attached to PPPL's buildings that are 20 feet off the ground. They're

continued on page 2



PPPL's new outdoor Wi-Fi system has made it possible for security officers like Sean Galie to use their iPads for research, paperwork and communications while they're on patrol on the PPPL grounds.

Celebrating upgrade achievements



More than 50 members of the NSTX-U project team gathered with Laboratory leaders to celebrate completion of both the first quadrant of the new center stack that will form the heart of the upgrade, and installation of the neutral beam cap. Festivities in the control room annex included cakes and other refreshments, plus photos of shirts emblazoned with the words "NSTX-U Project Team" that more than 130 people who have contributed to the upgrade over the years will receive. "It took the talents and skills of many people to turn concept into reality," said Ron Strykowski, project leader for the upgrade.

Outdoor Wi-Fi

continued from page 1

waterproof and have a built-in heater so they can operate in any type of weather. Most of the antennas are on a secure network that can only be accessed by PPPL employees with only two devices in front of the LSB building providing outdoor Wi-Fi to visitors.

The outdoor Wi-Fi system was installed by Powers Electric from October through mid-February with the help of \$190,000 funding from the U.S. Department of Energy, Office of Science and Office of Health, Safety and Security. The funds were aimed at helping PPPL take advantage of a DOE security software program called "Night Owl," which creates a virtual map of the Laboratory's 88-acre campus that can display everything from upcoming events to the weather and alerts officer armed with iPads to any trouble spots.

"What is huge about the Wi-Fi project is when our officers are patrolling outside we're going to be able to get real time information from officers at the scene," said Fran White, head of the Site Protection Division. "It will allow us to make much better decisions in the event of an emergency."

Having a detailed overview of what's going on at PPPL is tremendously useful for officers. The maps show everything from where security vehicles are parked to where construction is taking place. It even displays the location of wild turkeys and indicates whether directors are at PPPL or traveling.

One recent incident demonstrated the advantages of the Night Owl program. When PPPL received a report that there were two armed individuals in the area nearby, the Communications Center expanded the map to show the location of the men and Plainsboro Police on the Night Owl map so any officer on site would see it and sent out email and radio bulletins to officers on patrol. In the end,



One of the outdoor antennas. The antennas are waterproof and have their own heating systems to operate in any weather.



Ashwini Borkar, the systems network engineer who oversaw the outdoor Wi-Fi project, shows off a map of the antennas or wireless access points. She is holding a device that can detect attempts to hack into the PPPL Wi-Fi system.

the armed individuals turned out to be hunters but the episode demonstrated how useful the alert would be in a true emergency, White said.

Eventually, Night Owl will provide maps that will give officers an instant snapshot of what is going on at PPPL at any given moment. For example, when PPPL holds its open house, tentatively scheduled for June 1, the map would be updated constantly throughout the day.


Using the Internet for routine matters relieves pressure on the communications center, which could potentially get overwhelmed in an emergency, White added. Officers can fill out reports on the Internet rather than writing out reports on paper in the office. "Instead of having to kill lots of trees with our paper work, we can use these," Officer Sean Galie said, holding up his iPad.

Communicating via the Internet can also be useful when officers want to avoid using their radios due to security concerns. Officers at the security booth can call for backup over the Internet, for example, without members of the public overhearing the request.

Outdoor Wi-Fi has proven very useful for officers who want to quickly do research on anything from hazardous chemicals to medical information. "This is almost like our roving reference book," says Galie.

The outdoor Wi-Fi also improves security at PPPL because it extends to the edge of PPPL's property. This enables the system to detect any rogue access points that signal someone is trying to hack into the Lab's computers.

An added benefit is that the antennas (outdoor access points) provide better coverage inside the Lab, where there are 85 access points. "We're getting positive feedback," Borkar said. "These access points outside still send signals indoors so these dead spots are also getting lit up so basically we're getting coverage there as well."

Borkar said she is looking forward to seeing people use the system outside when the weather gets warmer. "These gadgets nowadays are high tech so everybody needs Wi-Fi," she said. "I'm looking forward to getting feedback and I'm sure in the summer it will be more useful." 

Positive results in first quarter Safety Culture Survey



By **Jerry Levine** - Head, PPPL Environment, Safety, Health and Security

As we are getting ready to send out the second quarterly safety culture survey next month, I want to bring you some information on the first quarter survey conducted in January. You will recall that we are following up the extensive May 2012 Safety Culture Survey with smaller more focused quarterly surveys, each of which will poll a cross section of 25 percent of the staff. Of the staff members asked to participate in the first quarter 2013 survey, 65 percent responded. This is a good return and compares favorably with the response rates for similar surveys at our sister labs. Of course, the survey would be even more meaningful if everyone participated!

We have analyzed the first quarter survey and the overall results are very positive. I hesitate to provide much detail because the results reflect a small percentage of staff and I want to avoid influencing future participants. I can say

that the survey results so far indicate confidence in senior management's commitment to safety, belief in personal safety responsibility and reliance on the responsibilities of others and staff willingness to raise safety questions and concerns, and belief that they will be taken seriously. There are also areas where improvement is felt to be needed, including clearer lines of acceptable/unacceptable behavior, overly burdensome procedures for routine work, and too lengthy investigations of abnormal events. I will provide more information when the annual survey cycle is completed and everyone has had a chance to give his or her input.

Thanks to all who have participated (and who will participate) in our safety culture surveys. Your input is valued and will ultimately help us make PPPL a safer place to work.



Final Science on Saturday lecture



Josh Kohut, of the Center for Coastal Physical Oceanography at Rutgers University, shows off an underwater robot "glider" used to collect data about marine environments during his March 16 talk on "a Robot's View of Our Ocean Planet," the final lecture of the Science on Saturday series.

College Club tours PPPL

Nearly 50 students and teachers from the Bergen County Community College STEM club took a tour of the Laboratory on March 18, given by Henry Carnevale, Robert Sheneman and Robert Ellis. (Photo courtesy of Bergen County Community College STEM).



Put down that cell phone when you're at the wheel



A reminder that using cell phones while driving a car or operating machinery is against PPPL's policy. Talking or texting on the phone while driving is also against the law in New Jersey and is subject to a \$100 fine. The penalties may increase if the New Jersey Legislature passes a bill that would give New Jersey one of the toughest laws in the country against using a cell phone while driving.

To avoid the temptation of talking or texting while driving, you can turn off your phone's ringer on the drive home and shut off the notification chime. If you must text or dial, pull off the road to do so, and avoid calling or texting anyone else whom you know is driving.



Save the Date for Earth Week April 15 to 19

PPPL will celebrate Earth Week April 15 to 19 with activities throughout the week. Volunteers are needed for a grounds clean-up on Wednesday, April 17 from 10:30 a.m. to noon. There will be a free lunch for the first 20 volunteers. Please email Joanne Bianco at jbianco@pppl.gov to sign up.

There will also be a Laboratory-wide clean-up throughout the week.

On April 18, PPPL will celebrate Earth Day with displays, prizes and speakers on "The Face of Climate Change," and free pizza for audience members. 🍕



Faculty & Staff Ally Project

Supporting LGBT Students, Staff, and Faculty

THURSDAY, MARCH 28, 9:30 A.M. - NOON
PRINCETON UNIVERSITY, FRIST CAMPUS CENTER
MULTIPURPOSE ROOM A

Understanding and Addressing Microaggressions

THURSDAY, MARCH 28, 2 - 4 P.M.
PRINCETON UNIVERSITY, FRIST CAMPUS CENTER
MULTIPURPOSE ROOM A

More information about the presenter and register at www.princeton.edu/training.

Tune in to colloquiums at your desk with live streaming

Want to listen to the Wednesday afternoon colloquium but can't tear yourself away from your desk? Now you can tune in to the colloquium through a live stream available to employees at http://mediacentral.princeton.edu/id/0_o9krporj.








Simply tune in at 4:15 p.m. on most Wednesdays and you can watch while you work! The live stream through Princeton University's Kaltura media management system may also allow members of the public to tune in to the colloquium and Science on Saturday lectures in the future. Sadly, virtual cookies and coffee are not available. ☹️



Café at PPPL Menu

BREAKFAST 7 a.m. • 10 a.m.
CONTINENTAL BREAKFAST 10 a.m. • 11:30 a.m.
LUNCH 11:30 a.m. • 1:30 p.m.
SNACK SERVICE until 2:30 p.m.

Mark Gazo, Chef Manager

	MONDAY MARCH 25	TUESDAY MARCH 26	WEDNESDAY MARCH 27	THURSDAY MARCH 28	FRIDAY MARCH 29
COMMAND PERFORMANCE CHEF'S FEATURE	 HOT OPEN-FACED ROAST BEEF SANDWICH	 CHICKEN FRANCAISE	 BRATWURST & SAUERKRAUT	 CAROLINA CHICKEN & PORK BRUNSWICK STEW	 GRILLED SALMON
EARLY RISER	Two Eggs with Corned Beef Hash	Broccoli & Cheddar Omelet	Two eggs with Grilled Kielbasa	Apple Raisin Pancakes	Bacon Cheddar Muffin
COUNTRY KETTLE	Cream of Broccoli ✓	Chicken Rice	Tomato Tortellini ✓	Turkey Gumbo	Tomato Zucchini ✓ 🍎
GRILLE SPECIAL	Kielbasa & Sauerkraut Torpedo with Fried Pierogies	Sloppy Joe on a Kaiser Roll served with Chips	Catfish Po' Boy with Fries	Italian Turkey Sausage, Peppers & Onion Torpedo	Balsamic Roasted Veggie Wrap with Cheese and Chips ✓
DELI SPECIAL	Turkey, Swiss & Coleslaw on Rye Bread	Italian Hoagie Wrap	Southwestern Style Chicken Salad Wrap	Ham & Cheese Croissant	Tuna & Egg Club Sandwich ✓
PANINI	Grilled Chicken Wrap with Bacon & Honey Dijon	Pork, Spinach, Roasted Pepper & Provolone Ciabatta	Roast Beef with Roasted Onion, Swiss & Horseradish Panini	Chicken Cutlet, Ham, Swiss & Ranch Panini	Eggplant Parmesan Ciabatta ✓

MENU SUBJECT TO CHANGE WITHOUT NOTICE

[CLICK HERE FOR A PRINTABLE WEEKLY MENU](#)

WEEKLY

Editor: **Jeanne Jackson DeVoe** ♦ Layout and graphic design: **Gregory J. Czechowicz**
Photography: **Elle Starkman** ♦ Web: **Chris Cane** ♦ Admin. support: **Pamela Hampton**

The PPPL WEEKLY is published by the PPPL Office of Communications on Mondays throughout the year except for holidays. Deadline for calendar item submissions is noon on Thursday. Other stories should be submitted no later than noon on Wednesday. Comments: commteam@pppl.gov ♦ PPPL WEEKLY is archived on the web at: <http://www.pppl.gov/ppplweekly.cfm>