

At PPPL THIS WEEK

MONDAY, SEPTEMBER 12

Theory Special Seminar

W. Arter (Culham)

10:45 p.m. - 12:15 p.m. • T-169

FRIDAY, SEPTEMBER 16

DIII-D Science Meeting

1:00 p.m. - 2:30 p.m. • B-233



What's Happening on the Princeton University Campus?

[CLICK HERE](#)

www.princeton.edu/main/news/events/



GFDL Events and Seminars

www.gfdl.noaa.gov/events

(Gov't, Univ. or 2 other forms of I.D. needed for entry.)

LINKS LINKS LINKS

View **PPPL WEEKLY HIGHLIGHTS** at
[http://www-local.ppl.gov/director/
highlights/2011-highlights.htm](http://www-local.ppl.gov/director/highlights/2011-highlights.htm)

Download the **NEW PPPL LOGO** at
<http://www-local.ppl.gov/identity.cfm>



Lee Honored for Work in Plasma Simulations

By Patti Wieser

Wei-Li Lee, a Principal Research Physicist in the Theory Department at PPPL, has received the 2011 John Dawson Prize for Numerical Simulation of Plasmas. The prize recognizes Lee for his “seminal contributions to computational plasma science,” specifically for his work in gyrokinetic simulations in plasma physics.

Lee received this lifetime achievement award at the International Conference on Numerical Simulation of Plasmas (ICNSP), held September 7-9 in Long Branch, N.J. Lee is the 2011 recipient of the ICNSP award, which was created in 2003.

“We are all delighted that Wei-Li Lee has received this most well-deserved prize,” said William Tang, Director of PPPL’s Fusion Simulation Program. “Dr. Lee is internationally recognized as the founder of the very prominent Gyrokinetic Particle Simulation method — a powerful approach which has made possible modern particle-in-cell global simulations of magnetically-confined plasmas in realistic 3-D toroidal systems. This innovative technique for studying plasma turbulence has led to exciting new discoveries with successful applications on leadership class computing platforms worldwide.”

Lee’s work in numerical simulations involves employing algorithms and computer codes to help in understanding the complex behavior of magnetized fusion plasmas, and the turbulence that affects plasma stability and confinement.

Lee received a bachelor’s degree from the National Taiwan University, a master’s degree from Duke University in North Carolina, and a Ph.D. from Northwestern University in Illinois. After working as an accelerator physicist at Fermi Laboratory in Batavia, Ill., for four years, he joined PPPL’s Theory Department in 1974. He became a Fellow of the American Physical Society’s Division of Plasma Physics in 1992 and is the author of numerous scientific papers in magnetic fusion and accelerator research. ■



Hurricane Irene and PPPL — A Model for Preparation?



By Fran White - Head, PPPL Site Protection

So what does one do when an unwanted visitor is coming to visit? Get sick? Make an excuse? Leave town? Another strategy is to take a deep breath, get a support group together, prepare for the worst, and hope for the best! And, that's exactly what PPPL did to prepare for Hurricane Irene.

President Obama called Hurricane Irene "historic." Governor Christie told us "Get off the beach in Asbury Park." Why? Weather service experts described Hurricane Irene as a life threatening "monster in the Atlantic." It was also the first hurricane to hit New Jersey in seven years.

Hurricane Irene had a long visit. Across the state, flooding was extensive, downed trees and closed roads were everywhere, and power outages — some lasting for days — were widespread. In the end, the entire state was declared a federal disaster area. Locally, PPPL received 8.24 inches of rain and wind gusts of up to 54 mph.

However, PPPL was ready for this unwanted visitor. Pre-storm preparations began the last week of August with twice-daily weather reports, staff weather alert messages, and lots of behind-the-scenes action to ensure that essential staffing, materials, equipment, and supplies were identified and in place. Notification lists were updated, facilities inspected, emergency plans reviewed, and personnel put on call.

On Friday, August 26, a series of pre-storm briefings with operations, facilities, A/C power, D-Site supervi-

sors, Information Technology, DOE, and facility managers allowed for last-minute problem solving and resource deployment — including extra sump pumps, hoses, generators, and spillage containment materials. Communications strategies were developed. Managers toured and inspected the site, and noted potential vulnerabilities. We consulted with main campus emergency personnel to make sure nothing was missed. Most importantly, PPPL Deputy Director for Operations Adam Cohen asked everyone to stay home, minimizing the number of personnel in harm's way.

During the storm, we had fully staffed Emergency Services platoons and mandated two-person patrols to enhance safety. We redoubled internal and external patrols to ensure that issues were discovered before they became emergencies. We conducted B-Site patrols every two to three hours.

Officers prevented several major flooding events (aided by key managers who were contacted throughout the night) and even used the fire truck to remove trees that fell on the Lab roadway to keep roadways open. Power stayed on and all systems functioned as planned. The single major casualty was the Canal Pump House, which was flooded by Carnegie Lake.

A bit of luck prevailed when storm winds dissipated to tropical status, decreasing the fear of falling trees, additional power outages, and potential facility damage.

Lesson learned? Take a deep breath, muster support, prepare for the worst, and hope for the best. Great job! ■



Colloquium Series Kicks Off with Talk by LHD Director Yamada

Hiroshi Yamada, Director of the Large Helical Device (LHD) at the National Institute for Fusion Science (NIFS) in Japan, presented a talk, "The Alternative and Complementary Role of the LHD in Fusion Science," at PPPL on Tuesday, September 6, in the MGB Auditorium. Professor Yamada gave the colloquium as part of the Magnetic Fusion Energy Roadmapping Conference hosted by PPPL at Princeton University.

The LHD confines net-current free plasmas only by external superconducting helical coils. In his abstract, Professor Yamada states, "The intrinsic advantage of a helical system enables us to explore a very unique operational regime of fusion plasmas. LHD aims at two goals, which are the establishment of a physics basis for a helical DEMO reactor and a comprehensive understanding of toroidal plasmas. The plasma parameters have been progressing towards fusion-relevant regimes, and commonality and difference to tokamaks have been discussed in diversified physics, where 3-D physics should be highlighted."

BLOOD DRIVE

SEPTEMBER 30, 2011

8:00AM - 2:00 PM

The Mobile Van will be located in the Lower End Parking Lot on Friday, September 30th between 8:00 am and 2:00 pm.

If you are willing and able to donate, please schedule an appointment by calling OMO at extension 3200.



It's All on Sale at the Plasma Hutch!

Come to Human Resources (B173) before they're all gone!

T-Shirts - \$5 (sorry, no X-Large)

Collared Shirts - \$10

Travel Mugs - \$5 (just a few)

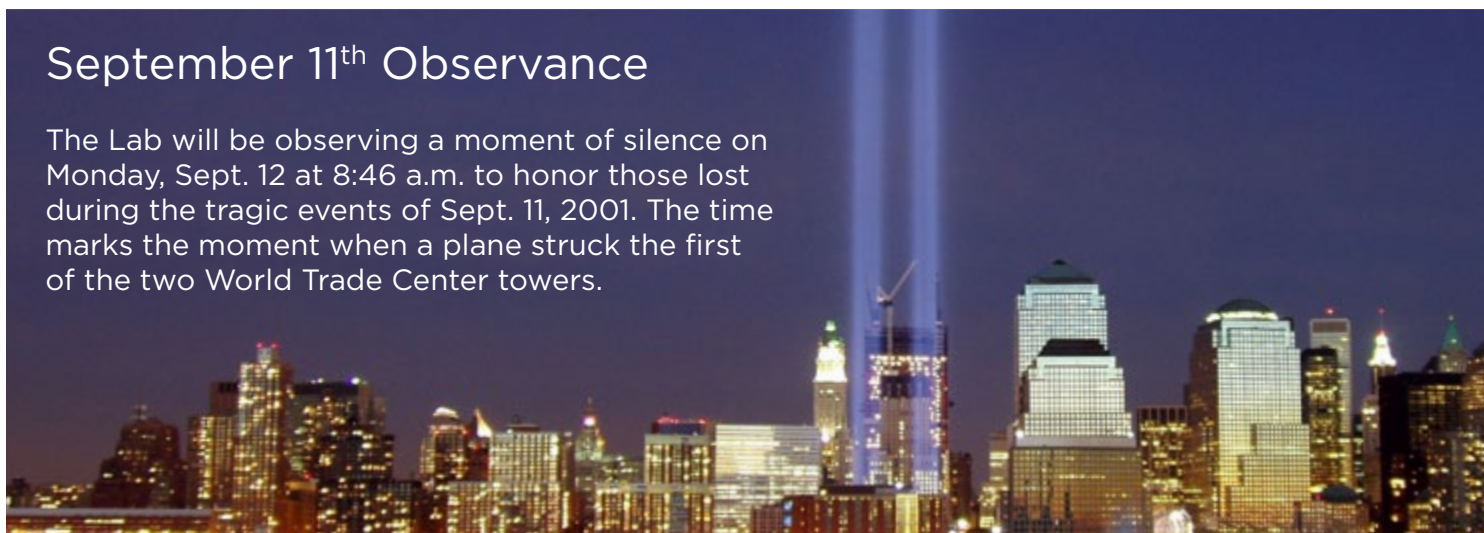
Travel Clocks - \$5 (just a few)

Holiday Ornaments - \$1



September 11th Observance

The Lab will be observing a moment of silence on Monday, Sept. 12 at 8:46 a.m. to honor those lost during the tragic events of Sept. 11, 2001. The time marks the moment when a plane struck the first of the two World Trade Center towers.



MONDAY, SEPTEMBER 12
Turkey Stuffed Peppers



TUESDAY, SEPTEMBER 13
Chicken Tikka Masala



WEDNESDAY, SEPTEMBER 14
Chicken Caesar Salad



THURSDAY, SEPTEMBER 15
Patio Grill Service



FRIDAY, SEPTEMBER 16
Panko Crusted Flounder



THIS WEEK'S SNACKS!

TUESDAY, SEPTEMBER 13
Brownies & Ice Cream

THURSDAY, SEPTEMBER 15
Real Fruit Smoothies

MENU SUBJECT TO CHANGE WITHOUT NOTICE

WEEKLY

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