

At PPPL
THIS WEEK

WEDNESDAY, JUNE 27

GFDL Events and Seminars

12 p.m. - 1:15 p.m. ♦ GFDL
Smagorinsky Seminar Room

Impact of Resolution, Parameterization and Coupling on the Representation of Tropical ISOs in GCMs at GFDL - Plus: A Weather Balloon Adventure

Bill Stern

www.gfdl.noaa.gov/events

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

FRIDAY, JUNE 29

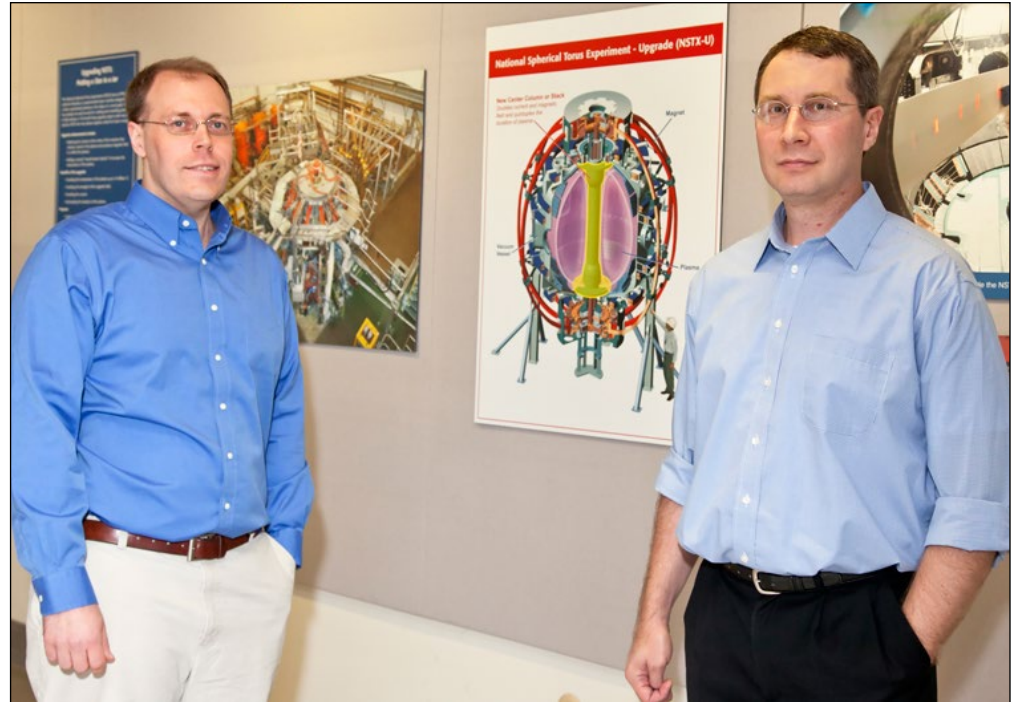
**Annual PPPL Service
Awards Presentation**

10 a.m. ♦ M.B.G. Auditorium

DIII-D Science Meeting

1 p.m. ♦ B-233

PPPL Wins R&D 100 Award



Award winners: (left to right) Jon Menard, the NSTX program director, and Vlad Soukhanovskii, who designed and led the experiments.

By Kitta MacPherson

A group of scientists, including a team working at the U.S. Department of Energy's Princeton Plasma Physics Laboratory, is being honored with a prestigious award for aiding the development of a device representing a key advance for fusion energy.

The editors of R&D Magazine have bestowed an "R&D 100" Award upon researchers for seminal theoretical work and two experimental studies that led to the creation of the "snowflake power divertor." Dmitri Ryutov, a theorist at the Lawrence Livermore National Laboratory (LLNL), proposed the idea and led the theoretical effort. Four physicists who confirmed the validity of the approach through experiments on PPPL's experimental fusion machine, the National Spherical Torus Experiment, were also honored for their efforts, including: Vlad Soukhanovskii (LLNL), who designed and led the experiments; Jon Menard, the NSTX program director (PPPL); Egemen Kolemen (PPPL); and Joon-Wook Ahn (Oak Ridge National Laboratory). Soukhanovskii and Ahn are on long-term assignments at PPPL.

"This key invention and result could not have been realized without the contributions of the seminal theoretical work and the two experimental studies," said Stewart Prager, the director of PPPL. Prager characterized the snowflake divertor as "a breakthrough for fusion."



**Charlie Gentile on Twitter
This Thursday, June 28**

Charlie Gentile, one of the minds behind the MINDS anti-terrorism nuclear detection device, will be featured on a Twitter Tweetup hosted by the U.S. Department of Energy this Thursday, June 28, from 1 p.m. to 2 p.m. Charlie will answer questions about MINDS put to him by followers of the DOE's #LabChat site on Twitter. Assisting Charlie will be PPPL Webmaster Chris Cane and PPPL Science Writer John Greenwald.



R&D 100 Award

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A major scientific and technological hurdle for the design of fusion energy machines is finding a way to distribute the hot plasma exhaust of hundreds of megawatts over a sufficiently large wall surface area. When heat escapes from the confined plasma, it can erode the machine's walls and contaminate the plasma.

The snowflake divertor offers the potential to solve this problem that occurs at the interface between the hot fusion plasma and

the material walls surrounding it by reshaping the magnetic fields in such a way that excess heat is diverted. The device employs a previously unknown configuration of the divertor magnetic field whose shape is reminiscent of a snowflake. The resulting magnetic field lines spread the exhaust over a larger wall area and reduce the exhaust heat flux to manageable levels.




Joon-Wook Ahn



Egemen Kolemen

Experiments that employed a snowflake divertor on NSTX and on another experimental fusion facility known as TCV in Lausanne, Switzerland, confirmed that the divertor works. In a major upgrade project underway at PPPL, researchers will be installing a second snowflake divertor on the NSTX-U that will be used in future experiments.

Established by the editors of R&D Magazine, the annual R&D 100 Awards


identify the 100 most significant, newly introduced research and development advances in multiple disciplines. The awards were established in 1963. Some of the winning products have included the flashcube (1965), the automated teller machine (1973), liquid crystal displays (1980), the anticancer drug Taxol (1993), and high definition television (1998). 

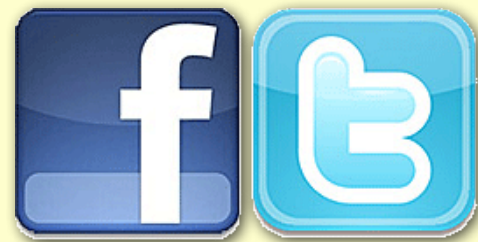
PPPL's Flame Video Awarded

PPPL received an honorable mention award — placing 15th out of 500 entries — for its video response to the Flame Challenge posed by actor Alan Alda.

Science Education Head Andrew Zwicker, along with Aliya Merali, received the award for the video answer to “What is a Flame” — a contest sponsored by the Center for Communicating Science at Stony Brook University, part of the State University of New York. When Alda, a founding member of the center, asked the question more than 65 years ago, a teacher gave him a disappointing answer: Oxidation.


Zwicker and Merali came up with a better way to communicate the nature of a flame. “Out of more than 500 entries considered by our 11-year-old judges, your answer was rated as one of the top 15 submitted by scientists. So that’s quite an achievement,” Alda said in a letter to PPPL’s winners.

For PPPL’s winning entry [CLICK HERE](#). 



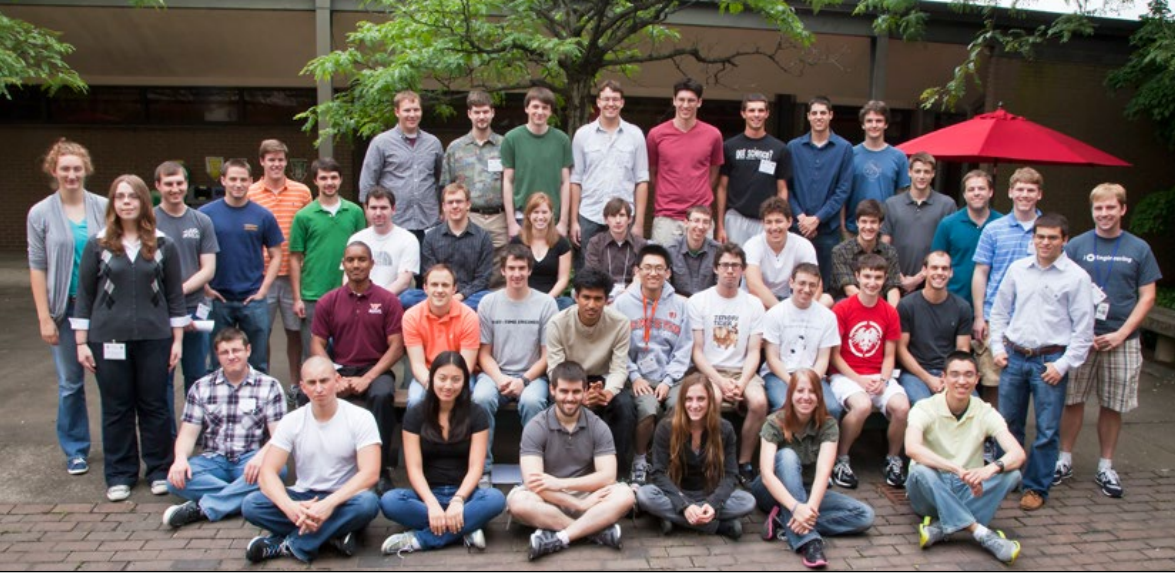
Social Media Now Available at PPPL

Facebook and Twitter, which have been unavailable in the Laboratory since 2007, will now be accessible starting this week. “Social Media are now recognized as an essential tool in organizations’ marketing and communications programs,” said Chief Information Officer Steve Baumgartner.

“Tools like Facebook and Twitter could have tremendous value in increasing the efficiency and furthering the mission of PPPL,” Baumgartner said, “and like any tool they need to be used wisely and safely.” 

Summer Students

PPPL hosted 24 National Undergraduate Fellowship (NUF) and 15 Science Undergraduate Laboratory Internship (SULI) students for a one-week introduction to fusion and plasma physics course beginning June 11. The students are paired with research mentors at PPPL and other fusion institutions for the summer. In addition, two students who will work at Lehigh University took the course.



Summer Intern at Communications

Emily Silber, a junior at Connecticut College majoring in English and anthropology, is an intern in the Communications Office this summer. Silber plans to study abroad in Rome at the John Cabot University for the fall semester, where she will be taking advanced photography, journalism and literature courses, as well as classes about Italian culture. Her multifaceted abilities allow her to contribute to Communications in the areas of photography, writing, and design. ☺



PPPL BLUEFISHING TRIP

aboard the 80ft. Charter Boat SUZIE GIRL

FRIDAY, JULY 27, 2012 at 5 p.m. (Rain or Shine)

Belmar Marina, 905 Hwy. 35, Belmar, N.J.

COST: \$70 (INCLUDES POLES, BAIT, FOOD, BEVERAGES, FISH CLEANING)

CONTACT: Andy Carpe ext. 2118 / acarpe@pppl.gov or

Bob Tucker ext. 3190 / rltucker@pppl.gov

RESERVE YOUR SPOT NOW!!! BOAT FILLS UP FAST.

All money due by July 16 — No Refunds.



PPPL Café Menu

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

MONDAY JUNE 25

TUESDAY JUNE 26

WEDNESDAY JUNE 27

THURSDAY JUNE 28

FRIDAY JUNE 29

COMMAND PERFORMANCE
CHEF'S FEATURE



CHICKEN FANTASIA OVER PASTA

The XL Steak, Onion and Cheese Omelet

Vegetable Soup 🍅

Teriyaki Chicken Steak Wrap with Fries

Create Your Own Toasted Hoagie

PANINI

Turkey Club Wrap Griller



CREATE YOUR OWN ... SPICY CHICKEN BURRITO

Banana Walnut Pancakes with Bacon

Cream of Mushroom

Breakfast For Lunch: Omelet Bar with Fries

Grilled Chicken, Roasted Eggplant, Red Peppers

Ham, Muenster Cheese, Bacon, Tomato, Mayo



LASAGNA AND GARLIC BREAD

Hungry Man Breakfast - 2 Eggs, Meat, Pancake, Potato

Zuppa Toscana 🍅

Santa Fe Grilled Chicken Wrap with Spiral Fries

Classic Toasted Italian Hoagie

Grilled Vegetables, Provolone



PARMESAN ENCRUSTED TILAPIA, POTATO

Bacon, Ham, Sausage, Egg & Cheese on Torpedo Roll

Maryland Crab 🍅

Freshly Stuffed Bacon and Cheddar Burger

Chicken Caesar Wrap

Cheeseburger w/ Tomato, BBQ, Cheddar, Bacon



EGGPLANT PARMESAN TOWERS

Breakfast Cupcakes (2)

Turkey and Corn Chowder

California Turkey Cheeseburger with Fries

Louisiana Crab Salad on a Multi Grain Roll

Pepperoni Pizzanini

MENU SUBJECT TO CHANGE WITHOUT NOTICE

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

WEEKLY

Editor: **Patti Wieser** ♦ Copy Editor/Graphic Designer: **Gregory Czechowicz**
Photographer: **Elle Starkman** ♦ Webmaster: **Chris Cane**

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.

Send to: pwieser@pppl.gov ♦ Comments: commteam@pppl.gov ♦ PPPL WEEKLY is archived on the web at: <http://www.pppl.gov/ppplweekly.cfm>

NOTE: Due to the Independence Day holiday, the next issue of the PPPL WEEKLY will be published on Monday, July 9, 2012.