

At PPPL
THIS WEEK

THROUGH WEDNESDAY, DECEMBER 19

**Princeton University/PPPL
Food Drive**
Donation Box in LSB Lobby

MONDAY, DECEMBER 17

High Energy Theory Seminar
2:30 p.m. ♦ IAS,
Bloomberg Lecture Hall
Ted Jacobsen, University of Maryland

WEDNESDAY, DECEMBER 19

PPPL Colloquium
4:15 p.m. ♦ MBG Auditorium

Progress and Challenges
in Cosmology

Jeremiah Ostriker, Princeton University
Refreshments at 4 p.m. in the LSB Lobby

[Click here for link](#)

FRIDAY, DECEMBER 21

Holiday Party Luncheon
Noon ♦ LSB Lobby and Café

UPCOMING EVENTS

Dec. 24 - 25/Dec. 31 - Jan. 1
Lab Closed - University Holiday

Dec. 26 - 28
Lab Closed

Jan. 1, 2013

HAPPY NEW YEAR

Jan. 5, 2013

Science on Saturday
9:30 a.m. ♦ MBG Auditorium
James Olsen, Princeton University

**PLEASE NOTE: The next issue
of the PPPL Weekly will be on
Jan. 7. The deadline will be on
Jan. 2.**

INSIDE...

- **Burn Training**
page 5
- **United Way**
page 6

All-hands Meeting:

**DOE official discusses role of NSTX
in fusion's future**

By Jeanne Jackson DeVoe and John Greenwald

PPPPL is crucial to the progress of magnetic fusion over the coming decades and the success of ITER will be a key milestone along the road, Ed Synakowski, the associate director of the Office of Science, for Fusion Energy Sciences at the Department of Energy, told PPPL staff at an all-hands meeting on Dec. 12.

Synakowski, a PPPL researcher for 17 years, outlined his vision of fusion to a packed audience. He assured staff that the Laboratory received good marks on the Lehman Review, a critical DOE review of the NSTX upgrade project, and had done so despite "a tough year," in which PPPL faced possible budget cuts and coped with a skid steer accident in which an employee was injured.

**"Technical achievement" of NSTX
upgrade is critical**

The "technical achievement" of the NSTX makes it easier for him to argue on behalf of the national fusion program, Synakowski said. "The fact that you've done well in the upgrade is very critical," Synakowski told the staff. "Your success is woven with my success and our success."



Ed Synakowski, the associate director of the DOE's Office of Science, for Fusion Energy Sciences, talks to staff in an all-hands meeting on Dec. 12.

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New DOE guidelines require planning

By Jeanne Jackson DeVoe

PPPPLers attending conferences should plan ahead and leave plenty of time to make sure the U.S. Department of Energy (DOE) approves the conference in order to follow guidelines issued earlier this month and outlined in a new memorandum by the agency in early December.

The new rules are aimed at ensuring that any funding for conferences is spent wisely with a minimum of waste. The intent is "to ensure that the Department's spending on conferences and related activities is limited to that which is appropriate, necessary, and managed in a manner that minimizes expense to taxpayers," according to the Dec. 6 memo from the DOE to laboratory directors.

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Synakowski visit

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Synakowski said his experience as a researcher has made him appreciate the value of collaboration. “One of the perspectives I bring to the job is grounded in this experience,” he said. “We need to break out of scientific and political isolation. The challenge in the Office of Science is we have an opportunity to engage more broadly across offices within the Office of Science.”

“That cooperation is necessary scientifically, because fusion’s challenges are so scientifically rich and deep,” he said, “and can also help politically because it will encourage other communities to have a stake in fusion’s success, which can be critically important in tough budget times.”

Cooperation key to success

Cooperation is vital to the success of the U.S. magnetic fusion program, and PPPL’s program in particular, Synakowski argued, especially in regard to the ITER program. “This institution has a great opportunity in this regard,” he said.

Looking ahead over the next decade, “the U.S. really needs to hit the ground running and be competitive with international research when ITER begins operations in the 2020s,” Synakowski said. “In 10 years, this team needs to be capable of asserting world leadership in burning plasma science” that is “grounded in a highly impactful domestic research endeavor,” he said.

A “transformational” computational effort

The elements of Synakowski’s vision also included a “transformational” computational effort over the next 10 years that would provide validated predictions regarding magnetic fusion, Synakowski said. “You have to evolve to the point that we have a different kind of confidence than we previously have because you need that sort of confidence if you’re going to predict major new steps that are darned hard to predict and hard to support,” he told the audience.

The NSTX upgrade will be essential to a “dedicated assessment of the viability of ST (spherical tokamak) related science,” Synakowski said. “So that by decade’s end, we have a measure of the attractiveness, or not, of that class of science as measured against the standard tokamak as a vehicle for fusion nuclear science research. With such a measure, we can make an informed decision about what our next-step machine has to look like, and what its optimal mission space should be.”

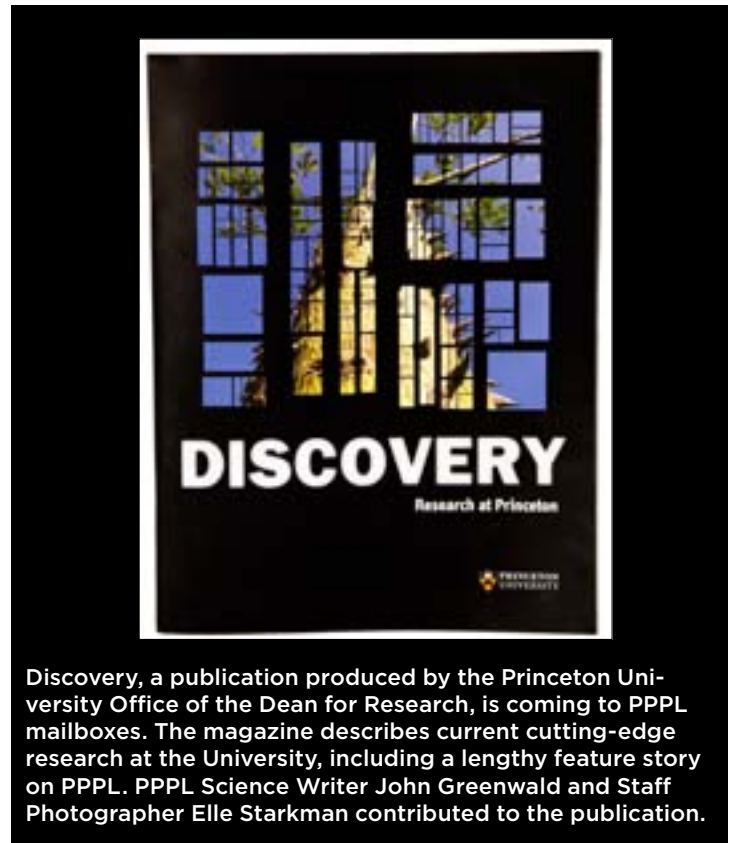
He said he envisions a magnetic fusion DEMO by 2050. “The goal is to have the technical basis for defining the mission, and understanding the technical risks, of a facility that would be the centerpiece of a fusion nuclear science program,” he said.

Cautious optimism on budget

Looking into the future, however, he referred to the budget with cautious optimism. Citing the hard work and challenging discussions regarding the budget, he indicated that the Administration has affirmed its commitment to ITER in the last year, and also its commitment to a balanced research portfolio. The overall fusion budget will depend in part on the directions the U.S. chooses for investment in scientific research in a most challenging budgetary time, he said, and this discussion is taking place at the highest levels within the Administration.

Physicist Charles Skinner argued that fusion is the only alternative energy that could provide continuous power and should not be lumped together with other alternative sources such as solar and wind power. But Synakowski said the Administration is dedicated to having a portfolio of alternative energy options. “I really do think that we need to support the Administration’s view that it is very unlikely there is going to be one shining knight that comes in and saves the picture,” he said.

Summing up his talk, Synakowski noted that “the Office of Science views the success of its programs through the lens of national labs. So what goes on here is critically important to its views of what is possible in fusion and what the state of the art is.”



Discovery, a publication produced by the Princeton University Office of the Dean for Research, is coming to PPPL mailboxes. The magazine describes current cutting-edge research at the University, including a lengthy feature story on PPPL. PPPL Science Writer John Greenwald and Staff Photographer Elle Starkman contributed to the publication.



DOE guidelines

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“Aggressively seek to reduce costs”

The memorandum urges all conference goers to “aggressively seek to reduce costs,” by selecting federal venues or negotiating with venues about meeting space, carpooling or taking public transportation, registering early, bringing his or her own audiovisual equipment if necessary and “carefully limiting attendance to only those necessary in support of DOE mission activities.”

PPPL has been modifying its procedures in response to several DOE revisions of the conference policy since May when the DOE issued the initial memorandum stressing the importance of curtailing conference costs and improving controls over conferences. Some of the procedures have changed several times between May and the Dec. 6 memorandum, which updated previous requirements and offered specific procedures for reporting conference data to the DOE.

The biggest effect of the regulations on PPPL staff members is that they will have to plan months in advance of conference dates. Staff members will have to explain the benefit of a conference and their role at the conference and they will have to increase efforts to keep travel expenses to a minimum whenever possible. Staff should be aware that managers or an authorized person, such as a cost center authorizer, must still approve all travel.

Managers must ensure that a staff member’s attendance at a conference furthers DOE’s mission, said Tony Bleach, head of Accounting and Financial Controls Division. “DOE wants the Laboratory and all laboratories to ensure that we’re sending individuals to conferences that are important to the mission and when we do go to conferences, they also want us to control the costs,” he said.

All conferences entered into a DOE database

Under the new requirements, each DOE facility must enter all upcoming conferences into a database and state when the conference is taking place, how many people are attending and give a total estimated cost. The database will compile that information to get a total cost of the conference for all DOE laboratories. If the total cost among all the laboratories is more than \$100,000, the Deputy Secretary of Energy must approve the conference. If the cumulative cost is \$500,000 or more, Energy Secretary Steven Chu must approve it.

When there are large conferences sponsored by the DOE that cost more than \$100,000 cumulatively for national laboratories, the PPPL Travel Office will have to submit the actual attendance and expenses for the conference to the database, whether it is a domestic or foreign conference.

The database will provide a nationwide picture of costs and attendance for conferences sponsored by the DOE or attended by those funded at DOE laboratories with the aim of monitoring and curtailing conference costs.

DOE sets a lock-out date

The database requirement creates a much earlier deadline to plan for conferences because the information must be submitted by a “lock-out” date set by the DOE as a hard deadline by which each facility must request approval for a certain number of people to attend a given conference and the total cost. Once the DOE approves the conference and the lock-out goes into effect, the Laboratory cannot increase the number of people attending the conference although one for one substitutions can be made. The lock-out date will be at least 60 days from the date of the conference but may be much earlier, such as one week after the abstract submission date for that conference, which is often several months before the conference takes place.

Bleach said PPPL would develop a new set of conference guidelines based on the latest DOE regulations. Because DOE could lock out requests for conference approvals one week after the abstract submission date, PPPL will likely change its policy to require staff to put in requests to attend conferences one week before the abstract submission deadline.

The new procedure will give staff members enough time to get conferences approved before they start incurring expenses. However, it will require all staff members to think about their conference and travel plans for the coming year and to avoid making last-minute plans whenever possible.

Bleach gives this example of a timeline for an upcoming conference: If a staff member or several people were planning to attend the 11th International Symposium on Fusion Nuclear Technology Conference in Barcelona from Sept. 16 to Sept. 20 next year, PPPL would want them to contact the travel office by Jan. 8, one week before the abstract submission deadline of Jan. 15 and two weeks before the likely DOE lock-out date of Jan. 22.

The travel office will be sending out monthly emails or “conference data calls” asking staff members if they plan to attend conferences over the next several months and informing them about upcoming conferences already scheduled. Staff members who plan to attend can simply email Lynda Lauria, PPPL’s travel manager, to inform the Travel Office of their plans.

Planning for a conference will save money because the travel office may be able to find better deals and control costs, Lauria said. “Planning so far in advance can lead to a decrease in costs and also a high level of client satisfaction because they’re likely to get what they want,” Lauria said.

When is a meeting considered a conference?

Because DOE has tightened its oversight of conferences and expenses, PPPL’s travel office has been requesting additional information from travelers to determine whether the event meets the new criteria for a conference.

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DOE guidelines

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The DOE defines conferences under the Federal Trade Regulation as a “meeting, retreat, seminar, symposium, or event that involves attendee travel.” Under that definition, almost any meeting involving travel could be considered a conference even if it’s local.

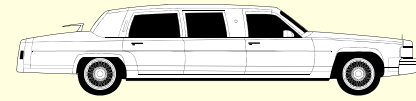
How do you tell if an event or meeting could be considered a conference? The DOE offers guidelines to help facilities determine what constitutes a conference. A meeting could be a conference if it meets any of these criteria:

- Multiple agencies or groups are involved.
- There are non-governmental participants.
- It requires registration.
- It requires a registration fee.
- There is an extensive published agenda.
- There are scheduled speakers and panels.
- The event is held in a commercial facility such as a hotel or conference center.

Meetings that are not considered conferences

There are several types of meetings that are not considered conferences including:

- Meetings necessary for PPPL to carry out “statutory oversight function” such as investigations, inspections, audits or site visits.
- Meetings to “consider the DOE’s internal agency business matters” related to PPPL, such as the annual OFES FWP meeting, a project review meeting or a project kick-off meeting.
- Meetings with international collaborators for projects that fall under bilateral and multinational cooperation agreements, such as the ITER project meetings, Max Planck Princeton Center or JET.
- Formal classroom training at government facilities such as the National Training Center.
- Federal or commercial classroom training required as part of a certification program related to an employee’s position.



- Other meetings related to PPPL government business such as advisory committees, federal advisory committees and funding opportunity announcement review board meetings.

Traveling internationally requires additional steps

Those traveling abroad on PPPL business should also plan to submit their travel forms to the office as soon as possible. Staff members and managers should be aware that PPPL is requiring more detailed information about all international travel, Bleach explained. They should therefore take some care to fully explain the purpose of the conference, the benefit to the DOE’s mission and the justification for the trip. See PPPL’s travel website (travel.pppl.gov) for foreign travel guidelines.

The FTMS form must be submitted at least 30 days in advance for non-sensitive countries and 40 days in advance for sensitive countries. The FTMS form specifically asks conference goers to explain how the trip benefits the U.S. fusion program and PPPL activities related to the program. PPPL travelers should fully explain the itinerary and how the trip relates to PPPL programs and projects and the benefit of the trips as well as the possible consequences of not making the trip. Separate approval for conferences is still required.

Car service rules to be modified

PPPL has been advising staff members not to take a car service to or from the airport when they are traveling for conferences or other purposes. Now the Laboratory is likely to issue a policy restricting the use of a car service by individuals and requiring them to drive and park at the airport or take public transportation except in certain conditions. Using alternate forms of transportation could lead to substantial savings, Bleach said.

The Travel Office may still allow car service when there are two or more passengers traveling to the same destination if the cost would be the same as using alternate transportation. Staff members who have a disability or other medical conditions that preclude alternate transportation or who are traveling late at night or very early in the morning may still be permitted to use a car service. ☞

New cafeteria prices coming in January

By John Greenwald

Due to a federal requirement to eliminate the government subsidy of cafeteria operations, prices in the PPPL cafeteria will rise by an average of 8 percent in January. But they will remain generally lower than prices at comparable local eating places, according to a PPPL survey.

The new prices will result in a 38 percent cut, calculated on an annual basis, in the subsidy that absorbs the loss that

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Cafeteria prices

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Brock & Co. incurs while operating PPPL's cafeteria. The reduced subsidy will be financed by "non-contract funds" provided by Princeton University. "Even with the new pricing, our survey suggests that the cafeteria's prices will be attractive relative to elsewhere in the area," said Ed Winkler, the Laboratory's chief financial officer.

PPPL will evaluate the impact of the new prices after the first four months of 2013, said Mike Viola, who heads the Laboratory's Facilities and Site Services Division. At the same time, Brock will work to lower its costs through measures such as a reduction in advertising, noted chef and cafeteria manager Mark Gazo, a 20-year veteran of the restaurant business who began his job here on Oct. 31.

PPPL compiled a list of average menu prices at local eateries to see how they compared with cafeteria prices that will take effect in January. The survey covered 13 moderately priced eating places, including dining spots in the Forrestal Village food court, nearby deli places and pizzerias, and Dunkin' Donuts and McDonald's outlets. The results found that PPPL cafeteria prices will remain generally lower than prices in the local area.

Cafeteria dining should thus remain a bargain. "Although a slight price increase is inevitable at this time," said Gazo, "I and the entire cafeteria staff are committed to continuing and improving the great dining experience that you have been accustomed to while spending your hard-earned money." ☞

2013 Science on Saturday

Princeton University Plasma Physics Laboratory Lecture Series

Popular Science on Saturday lecture series begins Jan. 5

Science on Saturday, a series of lectures given by scientists, mathematicians and other professionals in cutting-edge research, begins on Jan. 5 and continues through March 16 (with no session on Feb. 23).

The first lecture will be by physicist James Olsen, of Princeton University. Other scheduled lectures include experts in mathematics, oceanography, computer science and nanotechnology. The topics of the lectures, which are geared toward high school students, include: "A crash course in Einstein," a lecture on outer space, "A robot's view of our ocean planet," a talk about how computers can help cure cancer and a lecture on "the role of mathematics in understanding tsunamis." The popular lecture series draws more than 300 students, teachers, parents and community members. ☞

A weekend of fire training

PPPPL's Emergency Services Unit officers attended Live Burn Training at Mercer County Fire Academy on Saturday and Sunday, Dec. 1 and 2, where part of the training involved practical training exercises at the Burn Tower 4th floor. Firefighters in full gear, including breathing apparatus, practiced extinguishing fires, ventilation techniques, hooking up equipment and other firefighting techniques. ☞



Above left to right, Capt. Kevin Rhoades and Officers Aaron Green and Dan Goresh carry equipment into the building.

(Photo by Jamie Alkhateeb)



At left, Officer Bob Walker is surrounded by smoke as he surveys fire conditions during an exercise.

(Photo by Howard Caruso).

Just two more days to donate food to help feed the hungry

You have just a few more days to bring in donations to help feed the hungry in our area by bringing your canned goods and nonperishable food to the donation box in the LSB Lobby from now through Dec. 19 and contributing to the Princeton University Food Drive. ☞





PPPL
Holiday Party Luncheon

FRIDAY, DECEMBER 21
12:00 NOON - LSB LOBBY AND CAFETERIA

- Roast Turkey/Roast Pork Loin Carving Station • Tossed Green Salad •
- Assorted Cheese Platters • Bread Display Table •
- Vegetable Crudite • Fruit Tray • Assorted Passed Hors D'oeuvres •
- Italian Sausage and Peppers • Mashed Potato Bar with Toppings •
- Pasta Station with Various Toppings • Coffee, Tea, Soft Drinks •

Open to Everyone Working at the Lab!


WORLD FAMOUS PPPL SKIT
IN THE AUDITORIUM

GIFT RAFFLE (donations made by PPPL Council)
AFTER THE SKIT IN AUDITORIUM - YOU MUST BE PRESENT TO WIN

*Interested in contributing a dessert? Contact Kim Mastromarino
kmastrom@pppl.gov*



COLLOQUIUM




Progress and Challenges in Cosmology

JEREMIAH OSTRIKER
Princeton University

Wednesday, December 19

4:15 p.m. (Coffee/Tea at 4 p.m.)
M.B. Gottlieb Auditorium, Lyman Spitzer Building

PPPL'ers contribute to United Way



Thank you to all the PPPL'ers who contributed \$18,620 to the PPPL and Princeton University United Way as of Dec. 14. Your contributions will help numerous organizations in Mercer county, including groups that mentor at-risk high school students in Trenton, provide housing for homeless people and help seniors and a group that helps people with disabilities stay in their homes. Although the drive is over, you can still send in your contributions, so keep those donations coming!

PPPL Café 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.

	MONDAY DEC. 17	TUESDAY DEC. 18	WEDNESDAY DEC. 19	THURSDAY DEC. 20	
COMMAND PERFORMANCE CHEF'S FEATURE					 <p style="font-size: 1.2em; font-weight: bold; margin-top: 20px;"><i>Happy Holidays!</i></p> <p style="font-size: 0.9em; margin-top: 5px;"><i>Join us for the PPPL Holiday Party Luncheon at 12 noon</i></p>
POTATO AND CHEESE PIEROGIES	EGGPLANT PARMESAN LASAGNA	BAKED MACARONI AND CHEESE	BBQ CHICKEN WITH CORN ON THE COB		
EARLY RISER	Greek Omelet with Spinach, Tomato & Feta Cheese	Cranberry Pancakes	Steak, Egg and Cheese Quesadilla	Ham, Egg and Cheese Bagel	
COUNTRY KETTLE	Italian Wedding Soup	Beef Barley	Turkey Chili with Beans	Pasta e Fagioli	
GRILLE SPECIAL	Chicken Tenders and Fries with Honey Mustard	Corned Beef Reuben on Rye with Cole Slaw	Chicken Cutlet, Ham, Swiss and Dijonnaise Baguette with Fries	Italian Hot Dog with Onion Rings	
DELI SPECIAL	Peppered Ham and Muenster Cheese on a Kaiser Roll	Chicken Salad and Bacon Wrap	Six Foot Hoagie	Roasted Vegetables and Feta Cheese Torpedo	
PANINI	3 Cheese and Ham Griller on Ciabatta Bread	Turkey, Bacon, Tomato, Pesto Mayonnaise Baguette	Crispy BBQ Chicken Sandwich	Meatloaf and Cheddar Cheese Torpedo	

MENU SUBJECT TO CHANGE WITHOUT NOTICE

CLICK HERE FOR A PRINTABLE WEEKLY MENU

WEEKLY

Editor: **Jeanne Jackson DeVoe** ♦ Graphic Design: **Gregory Czechowicz**
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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>