

HOTLINE

The Princeton Plasma Physics Laboratory is a United States Department of Energy Facility

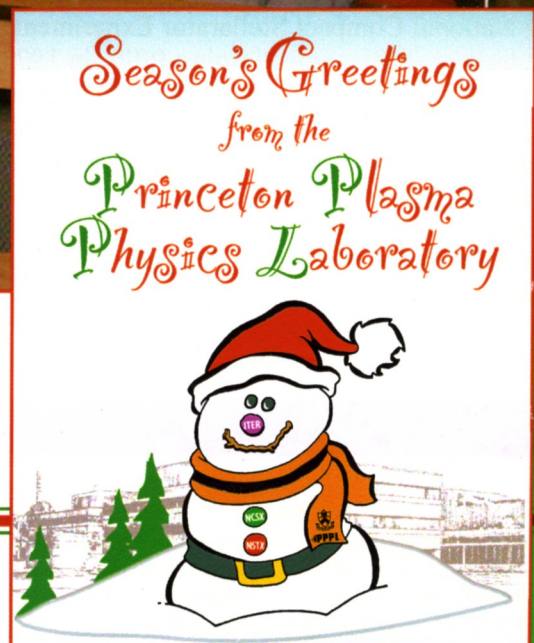
Goldston Gives State-of-the-Lab Address



PPPL Director Rob Goldston draws a standing-room-only crowd in the MBG Auditorium while presenting his annual State-of-the-Laboratory address to the staff on November 20. The PowerPoint® talk is available in PDF format on the PPPL Employee Services Home Page (internal web site) by going to The Director's Office site (<http://www-local/director/index.shtml>).



The PPPL Holiday Card, designed by Cynthia Murphy and Greg Czechowicz, is available electronically on The Director's Office site. **Happy Holidays!**



PPPL Bestows Honors on Four Researchers



Taik Soo Hahm



Philip Heitzenroeder



Charles Kessel



Jonathan Menard

PPPPL honored four researchers — Taik Soo Hahm, Philip Heitzenroeder, Charles Kessel, and Jonathan Menard — during a ceremony following the State of the Lab on November 20. Menard, a physicist, and Heitzenroeder, an engineer, received the Kaul Prize for Excellence in Plasma Physics Research and Technology Development. Hahm, a physicist, received the PPPL Distinguished Research Fellow Award and Kessel, an engineer, is this year's PPPL Distinguished Engineering Fellow.

Kaul Prize Recipients

Menard, an experimental plasma physicist who works primarily on the National Spherical Torus Experiment (NSTX), was recognized for his ground-breaking work on the stability and sustainment of spherical torus (ST) plasmas. Menard joined PPPL's research staff in 1999 after conducting post-doctoral research at the Lab. His research interests include stability properties of spherical torus plasmas, advanced operating scenarios in the ST, plasma startup, and plasma wave physics.

Heitzenroeder received the Kaul Prize for "leadership in the development of advanced manufacturing technologies for stellarator components." Heitzenroeder is involved in the National Compact Stellarator Experiment (NCSX) being built at PPPL. Since joining PPPL in 1972, he has contributed to the engineering design of many of PPPL's fusion research devices and has served in a number of management positions. He is presently the Head of the Mechanical Engineering Division.

Princeton University awards the Kaul Prize to recognize a recent outstanding technical achievement in plasma physics or technology development by a full-time, regular employee of PPPL. It includes a cash award of \$5,000 for each individual. Nominations for the award are submit-

ted to the Prize Selection Committee, which includes the Princeton University Provost, the Chair of the Princeton University Research Board, the PPPL Director, PPPL Deputy Director, and PPPL Chief Scientist. This is the ninth time the prize has been given. Former PPPL Director Ronald C. Davidson endowed the Kaul Prize by giving to Princeton University a portion of the gift he received as the 1993 recipient of the Award for Excellence in Science, Education, and Physics from the Kaul Foundation.

PPPL Distinguished Fellows

Hahm received the Research Fellow Award in recognition of his fundamental contributions to the understanding of plasma turbulence and confinement in toroidal systems and for his leadership in promoting worldwide collaborations of experiment, theory, and simulation. Hahm is the Head of the Transport and Turbulence Science Focus Group at PPPL and is the group leader in analytic theory at the Lab's Theory Department. He joined PPPL's research staff in 1986.

Kessel was recognized for his pioneering contributions to the field of plasma engineering and simulation. He was among the first to identify specialized plasma configurations, which have become the basis of advanced tokamak design. His work continues to be at the leading edge of toroidal confinement scenario modeling worldwide. He is a Principal Engineer at PPPL, and has been at the Laboratory since 1987.

The Distinguished Research and Engineering Fellow Program, funded by the U.S. Department of Energy, was created to recognize members of the Laboratory's research staff, as well as engineering and scientific staff, for their accomplishments. Fellows receive one-time gifts of \$5,000 and qualify for priority in regard to their research and engineering programs. ●

Hotline

Editor/Writer: Patti Wieser
Photographer: Elle Starkman

Graphic Artist: Greg Czechowicz
Layout: Patti Wieser and Greg Czechowicz

The **HOTLINE** is issued by the Princeton Plasma Physics Laboratory, a research facility supported by the United States Department of Energy. It is primarily an internal publication. Correspondence and requests to reprint material should be directed to the Editor, PPPL **HOTLINE**, P.O. Box 451, Princeton, NJ 08543; Interoffice correspondence should be addressed to MS-38, LSB Bldg., C-Site; fax 609-243-2751; telephone 609-243-2757; e-mail pwieser@pppl.gov.

Grad Student Dorfman Wins Stix Prize

Graduate student Seth Dorfman spent more than a week in Italy during the summer, attending the Theory of Fusion Plasmas Conference in Varenna and stopping at Padova to present a seminar on magnetic reconnection.

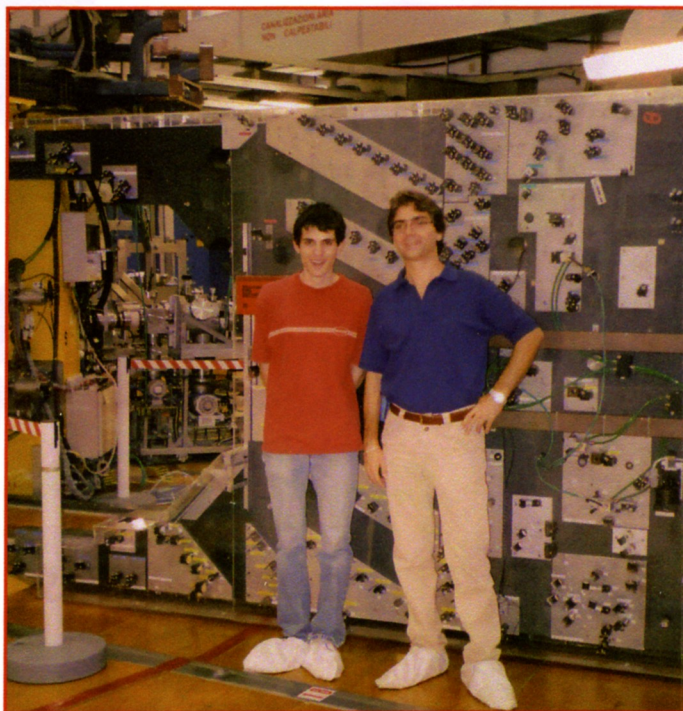
His trip was made possible through a fund in memory of physicist Thomas Stix. Dorfman is the fourth recipient of the Thomas H. Stix '54 Plasma Physics Prize, which he received last spring as a first-year graduate student in Princeton University's Program in Plasma Physics. Previous recipients are Prateek Sharma, Wei Liu, and Steffi Diem.

Dorfman used the \$2,000 prize for travel expenses to Italy for the conference, seminar, and to tour the Reverse Field Pinch experiment at a research facility outside Padova.

Stix, who died in 2001, was the founder and longtime director of graduate studies for the University's Program in Plasma Physics and a leader in the development of plasma physics. In 2002, a fund was created in his memory to establish a prize for first and second-year graduate students studying plasma-related topics. The prize would enable international travel for conferences or research. The trip was the first for Dorfman outside the U.S.

At Varenna, Dorfman attended talks and poster sessions, presented a poster, and talked to people about their research. "The one-on-one interactions were perhaps the most illuminating, as I had an opportunity to ask questions and 'customize' the presentation to my interests," the prize winner said.

Dorfman received a bachelor's degree in physics from the Massachusetts Institute of Technology in 2005 before coming to PPPL to work on magnetic reconnection for his first-year graduate student project. This year he is concentrating on related theory work. His research advisor is PPPL's



Seth Dorfman (left) tours the Reverse Field Pinch experiment at a facility outside Padova with Gianluigi Serianni, who hosted Dorfman for the visit.

Hantao Ji and PPPL Chief Scientist Bill Tang is advising him on his theory project.

Dorfman has had a lifelong interest in math, but said he began looking for a field where research could be applied on a shorter time scale. Fusion research fit the bill.

"I'm interested in advancing basic plasma science in order to make fusion a reality," said Dorfman. ●

United Way Campaign is in Full Swing at PPPL



PPPL kicked off its United Way Campaign on November 14 with presentations in the MBG Auditorium by United Way of Greater Mercer County representative Rod Robertson and Steven Rosen, Executive Director of the Millhill Child & Family Development Corp. in Trenton. The meeting for staff included a tricky-tray raffle. At left, PPPL United Way Committee members (from left) Jennifer Jones, Kim Mastromarino, Joanne Bianco, and Rose Fuchs-Smith pull tickets for the raffle.

The Lab's campaign goal for this year is \$30,000. Anyone who gets his or her pledge card to Committee Chairperson Fuchs-Smith by 10 a.m. on December 20, will be included in the Grand Prize drawing for a \$200 American Express check. Send your pledge cards to Rose at MS-38.

Please give generously. ●



Princeton Plasma Physics Laboratory

Holiday Party

Friday, December 22

12:00 NOON - LSB LOBBY AND CAFETERIA

Free Lunch

Oven Roasted Marinated Pork Loin ♦ Sausage + Peppers

Baked Ziti ♦ Meatballs Marinara

Herb Roasted Red Bliss Potatoes

Pasta Gardenia Salad ♦ Caesar Salad ♦ Garden Salad

Seasoned Winter Vegetable Medley

Assorted Mini Dinner Rolls

Soda ♦ Water ♦ Coffee ♦ Homemade Desserts

Open to Everyone Working at the Lab!

WORLD FAMOUS PPPL SKIT

BEGINS AT 1:00P.M. IN THE AUDITORIUM

GIFT RAFFLE

AFTER THE SKIT IN AUDITORIUM - YOU MUST BE PRESENT TO WIN

Interested in contributing a dessert? Contact Kim Mastromarino

extention 2101

kmastrom@pppl.gov

