

# HOTLINE

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

## PPPL's Charles Neumeyer Named Outstanding Engineer of the Year

Charles Neumeyer, lead project engineer for NSTX, has been named "Engineer of the Year" by the Professional Engineering Society of Mercer County (PESMC).

Neumeyer received the citation during a PESMC awards banquet on February 26. According to the PESMC, the group chose Neumeyer based on his "achievements with the National Spherical Torus Experiment (NSTX) and on having a distinguished career in fundamental research dealing with multiple technologies that hold great promise for the future."

As NSTX project engineer, Neumeyer was responsible for integrating the many physics and engineering requirements and developing the overall engineering design of the NSTX. He was also responsible for leading the integrated testing phases which led to the first plasma (hot, ionized gas) operation ten weeks ahead of schedule and the demonstration of full plasma operation at one million amperes of plasma current more than nine months ahead of schedule. The success of this program is due, in large part, to Neumeyer's breadth of knowledge and dedication to the tasks at hand.

PPPL Director Rob Goldston said, "Charlie came to this job with a 'can-do' attitude. He told me that he could do everything short of levitating the device using his power supplies — and indeed he has done everything that was needed and more. Furthermore, the good results we have achieved with NSTX, based on his systems, seem to have levitated the scientists and engineers working on the project, they are so excited!"

Neumeyer came to PPPL in 1976. He received a bachelor's degree in electrical engineering from the University of Virginia in 1975 and a master's in electrical engineering from the Polytechnic Institute of New York in 1987. His career has included work at PPPL and in industry, with specialization in the field of high-power electrical and electromagnetic systems for advanced technology research, including fusion energy, superconducting magnetic energy storage, high-energy physics, and magnetically levitated transportation systems.



Charles Neumeyer

Upon receiving the award, Neumeyer said, "I gratefully accept this award on behalf of all of the physicists, engineers, and technicians who have worked so hard for decades to advance the technology of fusion energy, and most recently to make the NSTX project a success. It conveys to me, and my colleagues at PPPL, the message that the work we are engaged in is indeed viewed by the community as important and worthwhile." ●

# Employees Recognizing Employees

Staff Members Honor Co-workers Through the Laboratory's Employee Recognition Program



*PPPL Director Rob Goldston (far left) and Deputy Director Rich Hawryluk (far right) pose with the recipients of the Employee Recognition Awards. From left are Goldston, Jon Menard, Dennis Mueller, Dolores Lawson, Steve Davis, Autumn Percival, Phyllis Roney, Ray Gernhardt, James Morgan, Sylvester Vinson, Joanne Savino, Fred Simmonds, Ben LeBlanc, Jim Conover, Pete Szaro, Dave Neuman, Sally Connell, Joe Bartzak, Bob Parsells, Bob Delany, and Hawryluk. Not pictured are Mike Anderson, Dave Cylinder, Joel Hosea, Raffi Nazikian, and Carol Phillips.*

Somebody noticed. In fact, several people took note of those of their fellow workers who “significantly contributed to a productive and harmonious work environment” in 1999. On February 29, those special contributors received Employee Recognition Awards from PPPL Director Rob Goldston during a ceremony in the Lyman Spitzer Building Lobby.

The 1999 recipients are Mike Anderson, Joe Bartzak, Sally Connell, Jim Conover, Dave Cylinder, Steve Davis, Bob Delany, Ray Gernhardt, Joel Hosea, Dolores Lawson, Ben LeBlanc, Jon Menard, James Morgan, Dennis Mueller, Raffi Nazikian, Dave Neuman, Bob Parsells, Autumn Percival,

Carol Phillips, Phyllis Roney, Joanne Savino, Fred Simmonds, Pete Szaro, and Sylvester Vinson.

## Deemed Outstanding

Said PPPL Director Rob Goldston, “The Employee Recognition Program was established to recognize those PPPL employees whose combination of professional achievements and personal characteristics have been deemed outstanding by their co-workers. I congratulate the recipients on their overall contributions to the Laboratory and for their efforts toward encouraging a congenial and respectful work environment.”

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## HOTLINE

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## Congratulations, 1999 Employee Recognition Award Recipients!

**Mike Anderson**  
**Joe Bartzak**  
**Sally Connell**  
**Jim Conover**  
**Dave Cylinder**  
**Steve Davis**  
**Bob Delany**  
**Ray Gernhardt**  
**Joel Hosea**  
**Dolores Lawson**  
**Ben LeBlanc**  
**Jon Menard**

**James Morgan**  
**Dennis Mueller**  
**Raffi Nazikian**  
**Dave Neuman**  
**Bob Parsells**  
**Autumn Percival**  
**Carol Phillips**  
**Phyllis Roney**  
**Joanne Savino**  
**Fred Simmonds**  
**Pete Szaro**  
**Sylvester Vinson**

### Recognition

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Following the awards ceremony, a luncheon was held in honor of the recipients in the overlook area to the NSTX Control Room.

**“I congratulate the recipients on their overall contributions to the Lab and for their efforts toward encouraging a congenial and respectful work environment.”**

**—Rob Goldston**

Four years ago, the Director’s Advisory Committee on Women and the Quality Improvement and Renewal Committee at PPPL developed the awards to recognize those employees who have “outstanding achievements and personal characteristics.”

Several employees are recognized each year. Those honored are selected from nominations submitted by other employees. All full-time staff at all



*The Employee Recognition Award recipients enjoyed a lunch held in their honor at the overlook area to the NSTX Control Room. From left are nomination committee member Andy Carpe with recipients Ray Gernhardt, Sylvester Vinson, and Pete Szaro.*

levels are eligible for nomination. The 1999 selection committee includes Michael Bell, Andy Carpe, Bobbie Forcier, Rosemarie Fuchs, Erik Perry, Ken Tindall, and Al von Halle. ●

# Lab Honors Bretz for Science on Saturday Work



Norton Bretz

By Patti Wieser

Organizing talks for the Lab's Science on Saturday lecture series can be a worrisome task.

Just ask PPPL physicist Norton Bretz, who recently stepped down as Chairperson of the series. A persistent thought nagged him prior to every talk: What if the speaker doesn't show up?

During his eight years as Chairperson or Co-chairperson, his concern was for naught. All the speakers arrived without fail. The only scare occurred when one of the presenters came to the Lab and sat down in the Auditorium, waiting to be introduced. Bretz, thinking she hadn't arrived yet, kept talking to the audience and stalling. Finally, he said, "The speaker should be here any minute." She popped up in the front row and said, "I'm here."

On March 4, the Laboratory honored Bretz for his Science on Saturday efforts. John DeLooper and Chris Ritter presented a plaque to him with the citation, "In appreciation of your commitment and dedication to PPPL's Science on Satur-

day Program from 1992-2000." Bretz, who is retiring from the Laboratory next January, stepped down as Chairperson of the series when this year's program concluded in March.

Bretz said his goal was to offer a varied group of speakers and topics. "There are a lot of possibilities for keeping this series diverse. Science enters into many aspects of our lives, and there are many different personal styles with which people practice science. One of the speakers this year is an entrepreneur fashion designer, Jhane Barnes, who uses computers and mathematical models to generate fabric patterns, and the chairman of the Princeton University Music Department, Professor Paul Lansky, spoke last year about composing and creating music with computers. Some scientists look like car mechanics, others like students, and still others like classical professors, and they present science in many different ways," he said.

By offering talks in astrophysics, math, biology, earth science, computer technology, ecology, chemistry, and physics, the audience, composed mostly of students, is exposed to a variety of scientific topics and sees a wide range of opportunities in the sciences. When Bretz became involved in Science on Saturday, the talks were more technical and physics-based. "I've tried to broaden this a bit, and Larry Lagin did, too," he said. Lagin, a former PPPL'er, was Chairperson when Bretz became involved in Science on Saturday, and has since started a similar program at Lawrence Livermore National Laboratory. "We've tried to have as diverse a collection of talks as possible."

The Chairperson said the series has been popular since its inception a decade and a half ago. PPPL scientists, Fred Dylla, Dennis Manos, and members of the Lab's Science Education Program started it as a free, wintertime series geared toward high school students, but open to everyone. The age of attendees ranges from 8 to 80, and often parents, siblings, and teachers accompany students to the talks. Bretz noted that some of the parents continue to attend long after their children have trotted off to college. Presently, Janardhan Manickam co-organizes the talks with Bretz, assisted by Science Ed staff.

When choosing a speaker, one plus is if the presenter is a parent. "People with kids are good candidates because they know the audience and have a natural connection to the age group," he explained. Throughout the year, Bretz collects suggestions for speakers from friends and colleagues, and considers scientists he hears about through newspaper articles and periodicals.

In the fall, he reviews the possibilities and creates a list of potential speakers, careful not to cover one discipline or topic twice. He then begins calling speakers and getting commit-

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# Student Teams Vie in Science Bowl at PPPL

Concentration, tension, and excitement mingled in rooms across the Laboratory on February 26 as twenty-four high school teams competed in the New Jersey Regional Competition of the National Science Bowl®. For the seventh year, PPPL hosted the annual double-elimination tournament sponsored by the U.S. Department of Energy. Throughout the day-long event, students answered multiple-choice or short-answer questions in biology; chemistry; physics; astronomy; mathematics; and general, earth, and computer sciences in their quest to take home the top prize — an all-expense paid trip to Washington, D.C., to participate in the Tenth Annual National Science Bowl®.

“Since its inception, the New Jersey Regional Science Bowl® has been an exciting and challenging event, and it rewards those who share a love of learning and a genuine enthusiasm for math and science. Testing the knowledge and creativity of some of the finest students from local high schools, this annual event highlights the discipline and commitment to personal excellence that have earned these students the right to compete in one of the premier academic competitions,” said PPPL Science Bowl Coordinator James Morgan.

East Brunswick High School won the competition, beating out 23 other teams from 22 high schools in New Jersey and Pennsylvania. U.S. Representative Rush Holt, who represents New Jersey’s 12th Congressional District, served as a guest moderator during the final round in which East Brunswick defeated Millburn High School. Millburn and West Windsor-Plainsboro South placed second and third, respectively. The three winning teams received trophies and East Brunswick will head to the nation’s capital in May for the national competition. Each team was made up of four students, a student alternate, and a teacher who served as an advisor and coach.

Many Lab employees and members of the community volunteered at the regional science bowl, serving as timekeepers, scorekeepers, moderators, and science judges. A special thanks goes to everyone who helped in making the day a success and congratulations to East Brunswick High School! ●



Two teams compete in the Science Bowl® at PPPL.

## Thank You, Volunteers

<b>Rick Cargill</b>	<b>Tobin Munsat</b>
<b>Lisa Carlucci</b>	<b>Masa Ono</b>
<b>Troy Carter</b>	<b>Karen Ossmann</b>
<b>Challey Comers</b>	<b>Franco Paoletti</b>
<b>Bill Davis</b>	<b>Mark Pescatore</b>
<b>Gloria Del Corso</b>	<b>Carol Phillips</b>
<b>Michael Del Corso</b>	<b>Michael Pieja</b>
<b>John DeLooper</b>	<b>Andrew Post-Zwicker</b>
<b>Charles Dumont</b>	<b>Adam Rosenberg</b>
<b>Elizabeth Foley</b>	<b>John Schmidt</b>
<b>Sunil Goda</b>	<b>Charles Skinner</b>
<b>Terry Greenberg</b>	<b>Jeffrey Spaleta</b>
<b>Linda Harmon</b>	<b>Daren Stotler</b>
<b>Matthew Harrison</b>	<b>Gregg Wielage</b>
<b>David Johnson</b>	<b>Patti Wieser</b>
<b>Margaret Kevin-King</b>	<b>Irving Zatz</b>
<b>Tom McGeachen</b>	

## Bretz

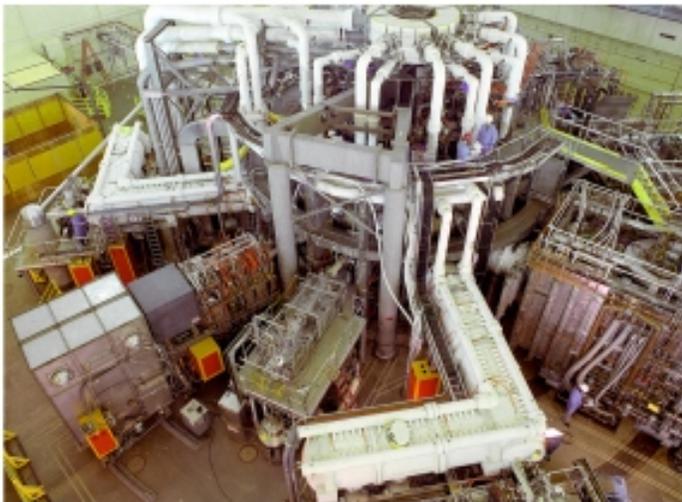
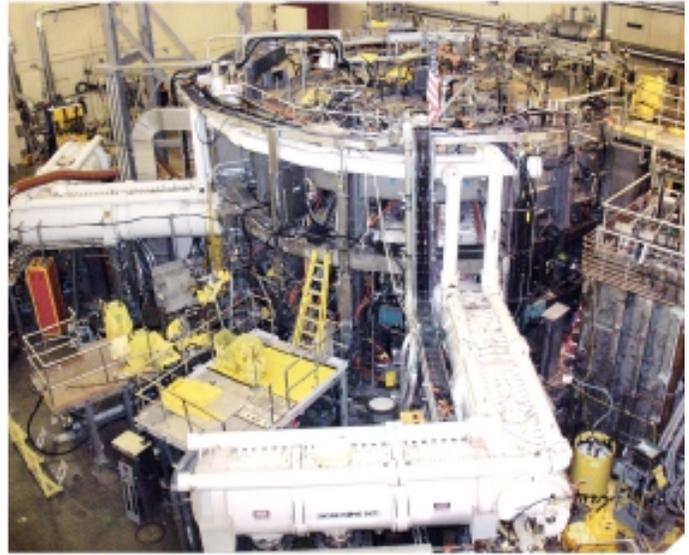
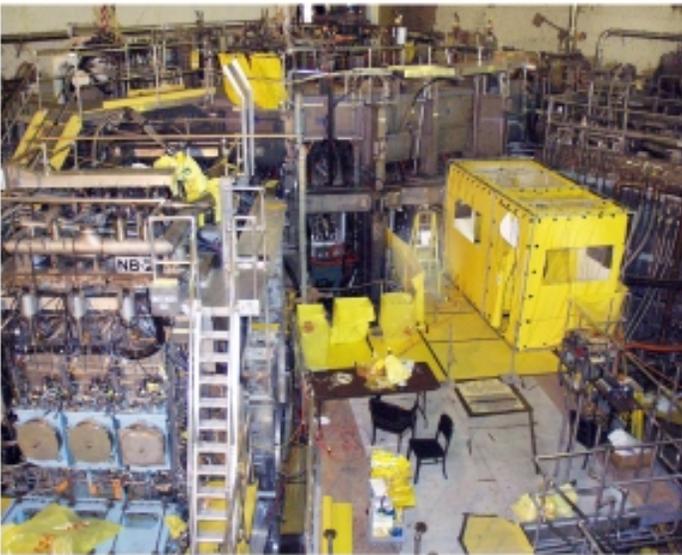
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ments. Once a speaker confirms, Bretz continues contact through e-mails. Occasionally, speakers have scheduling conflicts or cancel. Bretz adjusts the schedules to accommodate the speaker or finds a new speaker. His duties as Chairperson are as varied as the talks. He has served as chauffeur — one of the speakers does not drive — found replacements for cancellations, arranged for special props such as a floor for the “Physics and the Dancer” talk, juggled the schedule, and kept a “back

up” speaker, PPPL’s Don Monticello, on-call. “Don has never had to give his relativity talk to the Science on Saturday group — but he’s been ready,” Bretz mused, adding that snow has been the lone reason for canceling a talk so far.

Bretz’s involvement with the series is personally rewarding. “I like to do this because it is an opportunity for me to talk to people I wouldn’t normally get to talk to and to see first-hand their research,” he said, adding that the series is also beneficial to the community. “Saturday mornings are an important time for people with families and during each of the talks, the Auditorium is filled with students and their families.” ●

# Part by Part... Employees Dismantle TFTR



*In October, the Laboratory began the disassembly and removal of the Tokamak Fusion Test Reactor (TFTR) device to make room for a future fusion energy experiment. The project is expected to be completed in three years at a cost of \$47.9 million. Clockwise, from bottom left, are TFTR (circa 1989) prior to the start of disassembly and removal; the platform with a two-room tent for a vacuum vessel entry; the northeast door opening to the Mock-up Building; the removal of shielding blocks from the northeast door; the TFTR Test Cell in March; and the southeast corner with heating and cooling manifolds removed. — Photo collage by Elle Starkman.*

# Science Lessons

## Women of the Lab Tour NSTX; Researchers Provide Hands-on Demonstrations at Expos

Science basics are passed on inside the Laboratory, as well as outside. At right, PPPL engineer Al von Halle (standing) and his son, Thomas (with glasses), demonstrate how to balance a ping-pong ball on a stream of air during the New Jersey State Museum's Super Science Weekend in Trenton in January. PPPL set up an exhibit and offered a variety of hands-on demonstrations. Lab volunteers, in addition to von Halle, included Lisa Carlucci, John DeLooper, Tony DeMeo, Rich Hawryluk, Phil Heitzenroeder, Dave Johnson, Bob Kaita, Richard Majeski, James Morgan, Masa Ono, Franco Paoletti, Charles Skinner, Daren Stotler, Mike Williams, Ken Young, Gretchen Zimmer, and Stewart Zweben. Approximately 450 individuals visited the PPPL booth.

Below, women of the Lab tour the NSTX Test Cell in March for Women's History Month. The Director's Advisory Committee on Women organized the tour, which was led by NSTX Heads Masa Ono (at rear) and Martin Peng (at right). ●

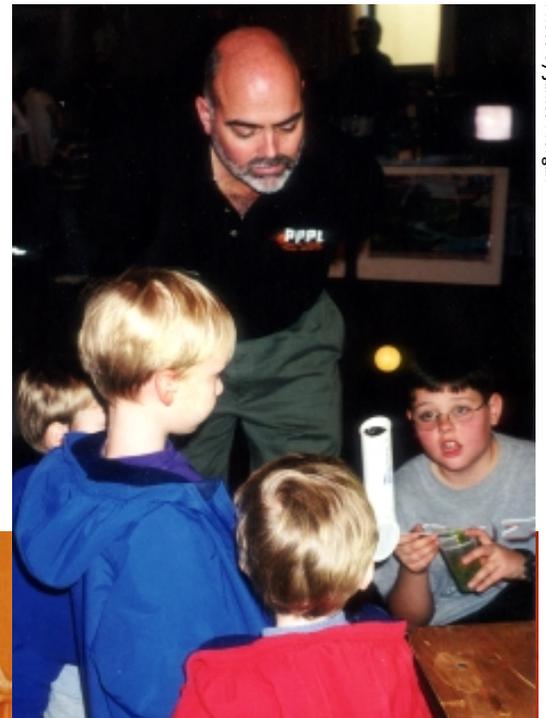
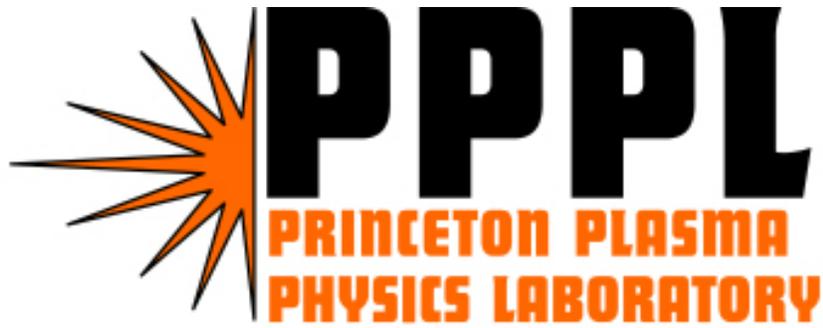


Photo by James Morgan



Photo by Erik Perry



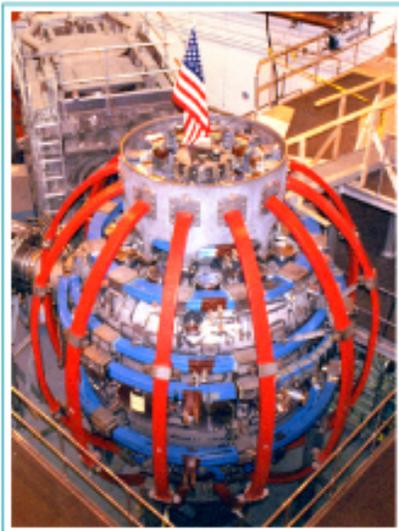
The U.S. Department of Energy's  
**Princeton Plasma Physics Laboratory**

# OPEN HOUSE

**Saturday, June 3**

from 10 a.m. to 4 p.m.

**Come and see the newest experimental fusion device,  
the National Spherical Torus Experiment.**



- ✦ *Tours of the Laboratory.*
- ✦ *Hands-on science demonstrations.*
- ✦ *Energy and plasma-related exhibitors.*
- ✦ *Emergency services equipment.*
- ✦ *Food and fun.*
- ✦ *Something for everyone.*



The Princeton Plasma Physics Laboratory  
is located off U.S. Route 1 in Plainsboro  
on the Forrestal Campus of Princeton University.

