

# HOTLINE

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

## PPPL Honors Inventors at Patent Dinner

**L**ewis Meixler recently conducted research about when PPPL researchers are most creative and made an astonishing discovery: September.

Meixler, Chair of the Lab's Committee on Inventions, began his research after wondering whether extended daylight during the summer or less outdoor distractions during the winter boosts creativity. Equating inventiveness with creativity, Meixler looked at the Lab's invention database to see when each invention disclosure was filed. He plotted the total number of invention disclosures filed during the past 25 years, looking at the months of disclosure.

"Not only is there a definite pattern, but the peak in creativity jumps dramatically in the single month of September, which happens to be the last month of our fiscal year," Meixler told the attendees at the twenty-fourth annual Patent Awareness Program Recognition Dinner. "I'm sure this has nothing to do with September being the cutoff date for an invitation to the next Patent Dinner."

Meixler, who peppered his comments with humor, showed a chart mapping creativity over the course of a year, as well as over the decades. Meixler was master of ceremonies at the dinner, held June 7 at Princeton University's Prospect House. The Laboratory honored 36 inventors from PPPL, as well as from other institutions that collaborate with the Lab. The honorees had disclosed inventions during Fiscal Year 2005.

Following Meixler's remarks, PPPL Deputy Director Rich Hawryluk presented the certificates and plaques to the inventors. *The honorees and their inventions are listed on page 2.*

Congratulations, honorees! ●

### The Committee on Inventions

David Cylinder, Philip Efthimion, Terry Greenberg, Pamela Hampton, Richard Hawryluk, Stephen Jardin, Henry Kugel, Lewis Meixler (Chair), Charles Skinner, Hironori Takahashi, Michael Williams, and Ed Winkler.



The inventors at the Patent Dinner are above.

## Patent Issued in Fiscal Year 2005

### Method and Apparatus for Diamond Wire Cutting of Metal Structures

*Geoff Gettelfinger, Robert Parsells, Erik Perry, and Keith Rule*

## Patent Applied for in Fiscal Year 2005

### Radio Frequency Electric Field Pasteurization Chamber

*Andrew B. W. Bigley, Christopher Brunkhorst, and David J. Geveke*

## Inventions Disclosed in Fiscal Year 2005

### Device for Joining Fiberglass Tape to Kapton Tape

*Christopher Hause and John Trafalski*

### Flex Bus Removal/Insertion Tool

*Michael Anderson, John DeSandro, Thomas Meighan and Frank Terlitz*

### Vessel Eddy Current Measurement for NSTX

*David A. Gates, Robert J. Marsala and Jonathan E. Menard*

### Software for MINDS Detector Analysis

*William M. Davis, Dana Mastrovito, and Kenneth Silber*

### Universal Networked Timer

*John Lawson, Gary Oliaro, Paul Sichta and John Wertenbaker*

### Alpha Channeling in Mirror Machines

*Nathaniel J. Fisch*

### Method to Cool Atoms and Molecules using Asymmetric One-way Barriers

*Nathaniel J. Fisch, Qian Niu and Mark G. Raizen*

### Self-cooling Liquid Metal Target for Dissipating High Heat Loads

*Robert Kaita, Richard Majeski, and Leonid Zakharov*

### “Barber-Pole” Helical Anisotropic Resistive Conductor Magnet Windings

*Charles L. Neumeyer and Robert D. Woolley*

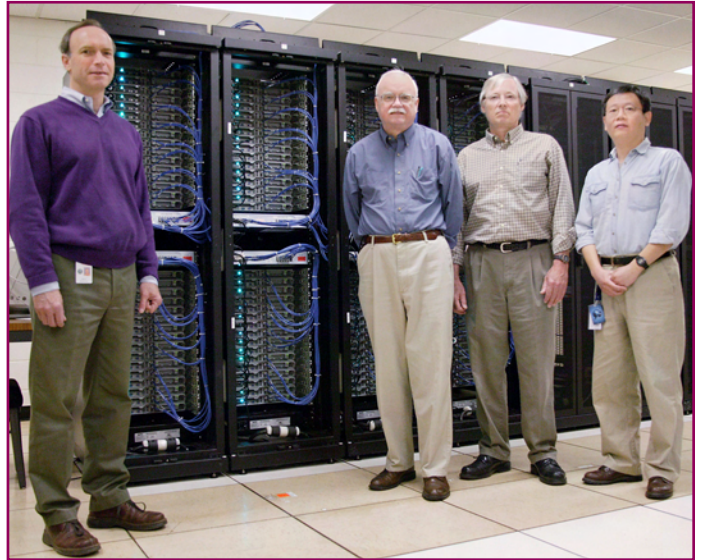
### Ferromagnetic Annular Flux Channel

*Charles L. Neumeyer and Robert D. Woolley*

### Collisionality Control of Electron Thermal Transport in Fusion Reactors

*Jessica Baumgaertel, Robert Budny, Martha Redi, Gregory Rewoldt, and Daniel Stutman*

## Computing Clusters Installed



**PPPL's Computer Center welcomed a new science computing cluster this spring. Dubbed "Kestrel Cluster," the new hardware is 300 percent faster than its predecessor, has 264 billion bytes of memory, and is expected to save \$80,000 per year in electricity costs. Serving PPPL's Theory, Experimental, and Collaborations staffs, the general purpose computer cluster is used for fusion simulations and modeling. It replaces the Falcon Cluster. From left are cluster team members Paul Henderson, Bob Persing, Ken Tindall, and Kevin Ying in front of Kestrel.**



## Travel Tips

### Lodging Per Diem

Ready to make a reservation in the hotel of your dreams? If the room rate is higher than the per diem or if you don't know what the per diem is, please contact the Travel Office. According to PPPL travel policy, the Travel Office may make reservations in excess of the allowable per diem if circumstances require, but lodging arrangements made by individual employees are not permitted to exceed the published federal lodging allowance.

### Tipping

Before you tip your limo driver, keep in mind that the full cost of the trip, including a gratuity, will be directly billed to PPPL. An extra tip will be at the traveler's discretion and may not be reimbursed. ●

## Hotline

Editor/Writer: Patti Wieser      Graphic Designer: Greg Czechowicz  
Photographer: Elle Starkman      Layout: Patti Wieser and Greg Czechowicz

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## Spotlight



**Name:** Virginia Finley

**Position:** Head, Environmental Compliance for the Materiel and Environmental Services Division, with responsibility for monitoring water quality on site, and for environmental report writing and permit compliance. Finley is the Chair of the PPPL Environmental Review Committee and has served as a mentor to many students at PPPL. She has been a member of the Director's Advisory Committee on Women, the Director's Minority Advisory Committee, the Grievance Committee, and served as President of the Prospect House Board at Princeton University. She presently is the Sexual Harassment Officer.

**Quote:** "I love learning. That's what I like best about PPPL, you never stop learning," she says. Finley joined the PPPL staff 15 years ago after working for a dozen years at a utility company and taking a three-year break from the work force to have daughters Jocelyn and Megan with her husband, Joe. Prior to being employed by the utility company, she received a bachelor's degree in biology and a teaching certificate from Goucher College in Towson, Maryland, a master's degree in biology from Rutgers University, and taught middle school science for two years.

**Other interests:** Outside work, Finley focuses on family, volunteering, jogging, and gardening. A year ago, she and her daughter Megan began volunteering for the Recording for the Blind and Dyslexic (RFB&D) organization.

"This really helps people who can't read or who have difficulty reading, and it makes us feel good to be able to help them," she says. "I've always read a lot, even as a kid, and I've always volunteered." She noted her candy striper days as a New Jersey high school student and a recent volunteer stint at the Stony Brook-Millstone Watershed Association, where she tested the water for bugs.

At the RFB&D office in Plainsboro, Finley spends an hour and a half each week in a recording studio reading high school and college level science textbooks. She also has read first-grade readers — much more of a challenge — she says, than science textbooks. "Since first graders are learning to read, the readers for a recording have to be read perfectly. Those are challenging assignments, but kind of fun."

Mostly, she reads high school and college level science textbooks. It takes an hour and a half to do eight pages. The print is small, the pages are large, and diagrams must be described, she explains. In addition, some terms in the science books can be difficult to pronounce. "It's a good thing I studied Latin," quips Finley. "Reading at RFB&D keeps me on my toes."



Her experiences have been so rich that she tries to convince others to volunteer. "It's a good group of people at RFB&D," she says.

She became interested when she saw an RFB&D notice on a bulletin board at PPPL a few years ago. Recovery from a car accident stalled her involvement, but once back on her feet, she contacted the organization.

Volunteering has always been important to her, and she impresses on her daughters the importance of making a contribution to the community. "I feel that I am so fortunate in my own situation with work, career, and family, and I'd like to help people less fortunate," she notes. RFB&D fits the bill and reinforces two things that have always been central to her life — reading and education.

When she's not working, spending time with her family, or volunteering, she hits the track or tinkers in the garden. Finley enjoys running and walking, and joined her sister in the DianaRun 5K — her first 5K — on June 17 to benefit a scholarship in memory of a local high school student who died in a car crash.

A home gardener, Finley brings her gardening skills to PPPL by serving on the beneficial landscaping group at the Laboratory. The group's latest project is to improve the courtyard outside the Furth Library. "The goal is to better the environment for the enjoyment of PPPL employees. Suggestions and support are welcome," she says. ●

*The Recording for the Blind and Dyslexic (RFB&D) provides more than 140,000 people with print disabilities with the books they need to learn and succeed. Volunteers are needed to help record these books. For information about becoming a volunteer, call RFB&D's headquarters office at (609) 750-1830, send an e-mail to [volunteer@rfd.org](mailto:volunteer@rfd.org) or visit the organization's web site at [www.rfd.org](http://www.rfd.org). The local RFB&D office is at St. Joseph's Seminary in Plainsboro.*

# A Carnival of a PPPL Picnic



*The PPPL Carnival Picnic 2006 drew nearly everyone at the Lab to the front lawn Wednesday, June 21, for games, food, fortune telling, and fun. A special thanks goes to the following team of PPPL'ers who helped make the carnival-inspired picnics such a success—from planning, organizing, building, setting up, cooking, overseeing the games and entertainment, providing the signs and photography, and cleaning up: Joe Bartzak, Steve Baumgartner, Shannon Belloni, John Bennevich, Joanne Bianco, Tony Bleach, Tom Bogdan, Ray Camp, Andy Carpe, Jim Chrzanowski, Ewa Ciesla, Bob Clark, Shawn Connolly, Tim Conwell, Greg Czechowicz, Eliot Feibush, Joe Franchino, Rose Fuchs, Bill Gervasi, Teresa Gillars, Tim Hagar, Linda Harmon, Ronald Hatcher, Paul Henderson, Charles Herbert, Sue Hill, Jim Hirsch, Bob Horner, John Jenner, Larry Jones, Margaret King, John Lacenere, T.J. Levis, Magdalena Liebnitz, Kim Mastromarino, Tom McGeachen, James Morgan, Andrea Moten, Susan Murphy-LaMarche, Ceil O'Brien, Sonja Patterson, Erik Perry, Kevin Ranahan, Charles Sands, Carl Scimecca, Lena Scimecca, Paul Sichta, Elle Starkman, Daniel Stevens, Tim Stevenson, Sly Vinson, Al von Halle, Tom Ward, Jean Wernock, Patti Wieser, Mike Williams, Joe Winston, Regina Worthy, and Irving Zatz.*

Photos by Elle Starkman and Nevell Greenough.