



## April 20, 2012

# Hard-fought Battle Over Major Brush Fire

By Mike Bebon, Deputy Director for Operations The week of April 9 was challenging for the Laboratory and our neighbors as a result of the major brush fire that started on our northeastern boundary.

At approximately

2:30 p.m. Monday, April 9, the Laboratory Protection Division received an emergency call to respond to a brush fire. Within moments, immense smoke billowed over the northeastern portion of the Laboratory site that could be seen from miles away. It marked the beginning of a long, hard-fought battle to contain the fire, get it under control, and ultimately extinguish it — to protect life and property.

I'm pleased to report that no Laboratory facilities were damaged. The Sewage Treatment Plant was quickly and safely evacuated as a precaution and has since reopened. Approximately 290 wooded acres on the Laboratory site burned. An investigation continues to determine the cause of the fire.

The Lab's Fire/Rescue and Police groups did an outstanding job, working tirelessly for many hours. Fighting such a large fire was a major challenge and we're very appreciative of our neighboring fire departments ---and their dedicated volunteer members — who provided us with mutual aid assistance. Fire departments providing mutual aid included Coram, Gordon Heights, Farmingville, Flanders, Mattituck, Medford, Ridge, Riverhead, St. James, Selden, Southold, and Yaphank. In addition, we received mutual aid emergency medical service from Medford and Shirley.

One of our Lab firefighters received a minor injury. He was struck in the face by a branch while riding on a truck in a wooded area. He was able to return to work.

You may have heard from the

media about three injured firefighters from Manorville and the destroyed Manorville brush truck. We learned that this occurred on Lab property. Two of the firefighters were treated for smoke

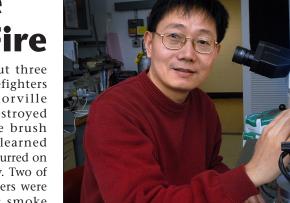
inhalation. The third has been released from the hospital after being treated for firstand second-degree burns.

Though the fire on Lab property was extinguished by late Monday, the Fire/Rescue Group has continued to monitor for potential flare-ups and hot spots. Our Emergency Operations Center remained activated until Wednesday afternoon.

Throughout the fire, it was important that we provided quick and timely updates to our stakeholders. We coordinated our activities and information with the Suffolk County Office of Emergency Management and its command post. I joined Suffolk County Executive Steve Bellone for a live televised briefing on the morning of Tuesday, April 10. We were also in regular communication with the Department of Energy, media, Community Advisory Council, civic associations, elected officials, Brookhaven Advisory Council, and Brookhaven Science Associates Board.

Most importantly, we provided regular updates to the Lab community, beginning shortly after the fire started: we told you where the fire was located, how the Laboratory was responding, and which locations to avoid. We were also committed to updating the Lab community before 6 a.m. Tuesday regarding the status of both the Lab's operations and the fire on site.

I'm relieved — and I am sure you are, as well — that we have not experienced another fire on site since last week. Our Laboratory Protection Division remains at the ready — as always — and that's something for which we all should be thankful.



# Liquid-like Copper Ion Material Aids Conversion of Heat To Electricity New strategy and direction for developing high-efficiency thermoelectric materials

Scientists from the Chinese Academy of Science's Shanghai Institute of Ceramics, in collaboration with scientists from BNL, the University of Michigan, and the California Institute of Technology, have identified a new class of high-performance thermoelectric materials — materials that convert heat to electricity or vice versa.

In the material described in a paper published in *Nature Materials* on March 11, 2012, liquid-like copper ions carry electric current around a solid selenium crystal lattice. The research offers a new strategy and direction for developing high-efficiency thermoelectric materials, which have a wide range of potential applications — including systems that convert solar energy and/ or waste heat from engines and industrial processes directly into usable electricity.

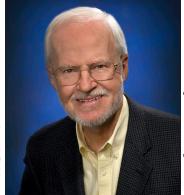
This research was funded by DOE's Office of Science, the U.S. Air Force Office of Scientific Research, and by the National Natu"About 60 percent of the power we get from primary energy sources today goes to waste, mostly in the form of heat. If we can recover that waste heat as electricity, it would be a huge economic benefit."

— Qiang Li, BNL

Qiang Li

ral Science Foundation of China, Shanghai Science and Technology Commission, Program of Shanghai Subject Chief Scientist, and CAS/SAFEA International Partnership Program for Creative Research Team.

"About 60 percent of the power we get from primary energy... See Thermoelectric on p. 3



# Anthony Baltz Senior Scientist Emeritus

Anthony J. Baltz, former Senior Physicist in the Nuclear Theory Group and Deputy Theory Group Leader of the RIKEN BNL Research Center, was named Senior Scientist Emeritus upon his retirement last month. In celebration of his 40 years at BNL, the Physics Department held "BaltzFest" on March 28, during which colleagues related their experiences with Baltz and presented a collection of scientific talks on topics closely related to Baltz's research.

A theoretical physicist, Baltz has tackled problems in a number of realms of physics, including low energy nuclear reaction theory, magnet design, nuclei with strangeness content, the solar neutrino problem, heavy ion collision dynamics at the Alternating Gradient Synchrotron, and ultraperipheral heavy ion collisions at the Relativistic Heavy Ion Collider (RHIC) and Large Hadron Collider (LHC).

Among Baltz's interesting earlier contributions is his... See Baltz and Baltzfest on p.2

# 477th Brookhaven Lecture, 4/25 'Supercomputers and Mathematical Models for Multiphysics Simulations in Energy and Accelerator Sciences'

How is a scientist to search for clues and answers about the planet's climate, nuclear fusion, and the physics of deep space? Many experiments that investigate those mysteries would be extremely difficult to measure, too expensive or dangerous to operate, or too far away to see. That's when high-powered supercomputers with advanced mathematical models can come to the rescue. They simulate hidden processes, predict complex systems' behavior, and guide future experimental





# Walk Around the Ring @ NSLS-II All are invited to celebrate milestones at NSLS-II construction site on Thursday, 4/26

Join Laboratory Director Sam Aronson and Associate Laboratory Director for Photon Sciences Steve Dierker for a walking tour of the ring building at the National Synchrotron Light Source II (NSLS-II) on Thursday, April 26, at 11:30 a.m. The celebration will mark two construction milestones: full occupancy of the ring building and the successful commissioning of the linear accelerator that will power this impressive facility. The tour will coincide with "Take Our Daughters and Sons to Work Day," so employees' children are welcome to attend, making this event a true experience for the BNL family. Wear comfortable walking shoes for this half-mile walk around the ring. esign.

The Computational Science Center at Brookhaven Lab is home to several supercomputers that enable scientists to gain new insights through numerical experiments and simulations. There, scientists and mathematicians combine applied mathematics, computer science, and physics theory to develop sophisticated models, numerical algorithms, and supercomputer codes to simulate complex systems such as particle accelerators and energy sources.

On Wednesday, April 25, join Roman Samulyak of the Computational Science Center for the 477th Brookhaven Lecture, titled "Supercomputers and Mathematical Models for Multiphysics Simulations in Energy and Accelerator Sciences." All are invited to attend this free talk, which is open to the public and will be held in Berkner Hall at 4 p.m. Refreshments will be offered before and after the lecture. Visitors to the Lab ages 16 and older must carry a photo ID while on site.

To join Samulyak for dinner at a restaurant off site following the talk, contact Laura-Li Loffredo, Ext. 3051, *laurali@bnl.gov*.

During his talk, Samulyak will discuss the goal of developing mathematical models accurate and reliable enough to perform simulated experiments that replace actual experiments. He will also explain how supercomputers and numerical tools are used to investigate the nature of turbulence, design components for future muon colliders, evaluate new ideas for nuclear fusion, and more.

Samulyak earned a Ph.D. in applied mathematics through a joint New Jersey Institute of Technology-Rutgers University program in 1999. He arrived at the Computational Science Center at Brookhaven Lab as a postdoc in 1999 and was promoted to the role of scientist in 2005. In 2007, he also became an associate professor in the Department of Applied Mathematics and Statistics at Stony Brook University. — Joe Gettler

### The Bulletin

## CALENDAR OF LABORATORY EVENTS

• The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.

## - REGULARLY -

#### Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See http:// asp for schedule. Jen Lynch, Ext. 4894.

#### Mondays: Yogalates

Noon-1 p.m. at the Rec Hall (Bldg. 317). Registration required, Ext. 2873.

Mon. & Thurs.: Kardio Kickboxing \$5 per class. 12:15-1:15 p.m. in the gym (Bldg. 461). \$5 per class. Ext. 2873.

Mon., Tues., Thurs., & Fri.: Tai Chi Noon-1 p.m., B'haven Cntr (Bldg. 30), N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov

**Tuesdays: Hospitality Welcome Coffee** 10:30 a.m.-noon. Rec Hall (Bldg. 317). Meet over coffee. Children welcome.

#### **Tuesdays: Pilates**

Noon-1 p.m. at the Rec Hall (Bldg. 317). Registration required, Ext. 2873.

Tuesdays & Wednesdays: Zumba Tuesdays: Noon–1 p.m., in gym (Bldg 461). Wednesdays: 5:15-6:15 p.m., at the Rec Hall (Bldg. 317). Registration required, Ext. 2873.

#### **Tuesdays: Toastmasters**

Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Room 160. Guests and visitors welcome. www.bnl.gov/bera/activi-

Tuesdays & Thursdays: Aerobic Fitness 5:15-6:30 p.m. in the Rec. Hall (Bldg. 317). \$5 per class, or 10 classes for

\$40. Kathy Schoenig, Ext. 2818. Tuesday & Thursday: Aqua Aerobics 5:30-6:30 p.m., Pool (Bldg. 478). Registration required, Ext. 2873.

## Wednesdays: Ballroom Dance

5:30, 6:30, 7:30 p.m., Brookhaven Center (Bldg. 30). Vinita Ghosh, Ext. 6226.

Wednesdays: Play Group 10 a.m.-noon at Rec Hall (Bldg. 317). Parents meet while infants/toddlers play. For events, see http //www.meetup.com/BNL-Playgroup, or call Ext. 2873.

Wednesdays: Yoga Noon-1 p.m., B'haven Center (Bldg. 30). Free. Ila Campbell, Ext. 2206, ila@br

1st Wednesday of month: LabVIEW 1:30-3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379.

Thursdays: BNL Cycletrons Club 5 p.m., Brookhaven Center. First Thurs. of month. Andy Mingino, Ext. 5786.

Thursdays: Reiki Healing Class Noon-1 p.m., Call for location. Nicole Bernholc, Ext. 2027.

Thursdays: Postdoc Social Night 6:30 p.m. ASAP Lounge (Bldg. 462). www.bnl.

Thursday: Judo Class 7:30 p.m. Gym (Bldg. 461). Tom Bald-win, Ext. 4556.

Fridays: Family Swim Night 5-8 p.m. Pool (Bldg. 478). \$5/family. Ext. 2873.

# **Arrivals & Departures** Arrivals –

None

# - Departures -

Michael Arens ..... CEGPA

Wayne Boyd...... Site Resources Cheryl Donato...... Business Ops

To honor Anthony Baltz on ing the 20-year role of RBRC his retirement after 40 years at BNL, as well as to celebrate his being named Senior Scientist Emeritus, his colleagues held "Baltzfest" on March 28, in the Physics Department Small Seminar Room.

The symposium included scientific talks in areas closely related to Baltz's research, and several lively reminiscences from his colleagues.

The afternoon began with a talk on "RIKEN BNL Research Center (RBRC): Past, Present and Future" by Nick Samios, the present Director. In summariz-

Chester Smith, who joined

the Alternating Gradient Syn-

chrotron Department as a tech-

nician C on July 28, 1958, and

retired as a technical project su-

pervisor on May 14, 1993, died

Alessio Mezzina, who joined

the Department of Applied Sci-

ence as an engineer on March

20, 1978, and retired on De-

cember 31, 1989, died on May

David Hettrick, who, on

April 3, 1947, joined the Emer-

gency Services Division as a

firefighter B, and retired from

the Safeguards & Security Di-

vision as a police captain on

February 27, 1981, died at 86

Robert Dilello, who joined

the Supply & Materiel Divi-

sion on July 13, 1964, as a

warehouseman and retired on

August 31, 2005, as Supply &

Materiel Supervisor, died on

More information on BNL retirees

who have died is on the Obituary

webpage, www.bnl.gov/bnlweb/pubaf/

bulletin/obit/. Send articles to bul-

letin@bnl.gov, headed "Obituary" Or,

contact Liz Seubert, (631) 344-2346.

March 30, 2012. He was 69.

31, 2010. He was 86.

on October 25, 2011.

at 77 on December 5, 2008.

In Memoriam

in physics at the Relativistic Heavy Ion Collider (RHIC) and elsewhere, Samios thanked Baltz for his valuable contributions as Deputy Head of the Theory Group since RBRC's inception. Peter Bond, Special Advisor to the BNL Director, who has known Baltz since their graduate student days at Case Western Reserve University, followed with memories of their time together at BNL.

Larry McLerran of BNL's Nuclear Theory (NT) Group and the RBRC Theory Group Leader, and Spencer Klein of Lawrence

## Baltz from p.1

...role in the so-called "solar neutrino problem." In the late 1960s, BNL chemist Ray Davis, Jr. used a chlorine-argon radiochemical detector to observe solar neutrinos, elementary particles produced in the nuclear reactions that power the sun. For this research he became a Nobel Prize-winner in 2002. However, only one third of the expected neutrinos were detected, implying that either the missing neutrinos produced in the sun do not all reach Earth, or that neutrinos are not produced in the predicted intensity. In 1985, Soviet physicists Stanislav Mikheyev and Alexei Smirnov proposed the solution: electron neutrinos produced in the core of the sun, while passing out through the density of the sun, change form, or "oscillate" into another neutrino species not observable in Davis's electron neutrino detector.

In collaboration with now retired BNL theorist Joseph Weneser, Baltz calculated the possible additional oscillation of the solar neutrinos while passing through the Earth's matter, a phenomenon called the "daynight effect." Baltz's calculations of the day-night variations were included in the final version of the 1987 proposal for the Sudbury Neutrino Observatory (SNO) solar neutrino detector, which finally provided definitive results showing that solar electron neutrinos transform into other types of neutrino. The limit on detection of a day-night effect provided a constraint on the values of the neutrino oscillation solution. Baltz first came to BNL in 1971 as a post-doctoral research

Berkeley National Laboratory, both spoke to Baltz's significant contributions in the field of ultraperipheral heavy ion collisions. These works played a significant role in fostering experimental studies at RHIC and the Large Hadron Collider at CERN, Switzerland, in this direction.

An amusing side-note — in hindsight - mentioned by more than one speaker was that early concerns the RHIC beams may be unstable due to electron capture were allayed in 1998 by computations confirming otherwise by Baltz with BNL's Mark Rhoades-Brown and Joe Wenes-

protons.

in solar neutrino mixing was addressed by Josh Klein, University of Pennsylvania, who provided a broad overview of solar neutrino physics highlighting the many contributions of scientists at BNL. The final speaker was Baltz's longtime BNL colleague John Millener, who gave a summary of past and current studies in hypernuclear physics.

er. Baltz's work on matter effects

The very successful Baltzfest, coordinated by NT Group Leader Raju Venugopalan, concluded with a Symposium dinner held at the Fifth Season Restaurant in Port Jefferson.

associate. He investigated low energy heavy ion reactions, wherein heavy ions graze each other and transfer neutrons and In 1984, with Brookhaven's

Craig Thorn and Chellis Chasman, Baltz patented an improved magnet with pole tips specially designed to reduce fringe fields at the outer edge of produced fields. This invention is potentially useful in single turn beam extraction in the design of large isochronous cyclotrons, an accelerator that increases its magnetic field to compensate for relativistic increase of the accelerated ion's mass.

Currently, Baltz studies the ultraperipheral collisions of relativistic heavy ions, or the collisions induced by the electromagnetic fields surrounding colliding heavy ions, at the RHIC and the Large Hadron Collider (LHC). In both colliders, the ions can pass each other without actual contact, their long-range fields still produce particles of interest. Through his emeritus position, Baltz says he plans to continue this research.

"I've been here for 40 years and I expect to keep somewhat active in physics after I retire. I really appreciate an emeritus position because it allows me to follow the areas of interest that I have, such as the ultraperipheral reaction results coming out of RHIC and the LHC," said Baltz. "I am very honored to have received this distinction." For the ultraperipheral collisions that continue to intrigue him, Baltz has developed theory and models for better predictions of the rates for the fields to create electron-positron pairs, excite the ions to eject neutrons,

and excite quark anti-quark pairs (mesons). The neutrons that are ejected from the ions can be detected in Zero Degree Calorimeters and compared with Baltz's calculations. This allows beam luminosity, or rate of particle interactions, to be determined.

"I enjoy taking theory and being able to compute something where there's data," said Baltz, who commented that Brookhaven, too, has played an important part in the development of his research. "I think it is a really wonderful environment here," explained Baltz. "There is always good physics going on and good people to collaborate and talk with, and the direction the Lab has gone has provided some interesting physics to think about."

During his tenure at BNL, Baltz has had several visiting appointments, including ones at Lawrence Berkeley Laboratory, the Universidade de Sao Paolo's Instituto de Fisica, and the University of Manchester's Department of Theoretical Physics.

On two separate occasions, Baltz spent a year at DOE's Division of Nuclear Physics headquarters in Germantown, Maryland, in charge of the Nuclear Theory program. Baltz enjoyed working in this capacity, he said, because he got to learn about the type of physics that was being done elsewhere and meet many fellow scientists. Baltz received a Ph.D. in physics from Case Western Reserve University in 1971. He was elected Fellow of the American Association for the Advancement of Science in 1989 and Fellow of the American Physical Society in 2010.



Senior Scientist Emeritus Baltz Honored at Baltzfest

## April 20, 2012

# **Brookhaven Advocacy Council Looking for New Members:**

# Stop by in Berkner, Learn More, 5/2

If you are a good listener who can maintain confidentiality, remain impartial, and base your judgment on fact rather than emotion, consider becoming a Brookhaven Advocacy Council (BAC) member. BAC members have the opportunity to participate in establishing an atmosphere of trust between BNL management and its employees.

The BAC is a key component of BNL's system of ensuring a respectful, fair, and equitable workplace. The members advise and make recommendations to the Lab Director on resolving employee/guest/user concerns or issues that are brought to the BAC's attention. The BAC functions independently of the Human Resources & Occupational Medicine Division, reporting directly to the Lab Director.

Members of the BAC will host a table in Berkner Hall lower lobby on Wednesday, May 2, from 11 a.m. to 1:30 p.m. To learn more about the BAC, or if you are interested in becoming a member, stop by to chat, or visit *www.bnl.gov/bac*.

– Natalie Crnosija

# Scheduled Administrative Computer Systems Shutdown, 5/5

BNL's Information Technology Division (ITD) will perform significant maintenance of its systems on Saturday, May 5, from 8 a.m. to 4 p.m. During this time, nearly every administrative computer and web-based application on the Lab's network will be unavailable.

Exchange Email, BlackBerry

email, and mail.bnl.gov will remain available throughout the maintenance period.

ITD is providing this advanced notice period to ensure the Laboratory community is prepared for this outage and can plan work accordingly. This has been scheduled for a Saturday to minimize disruption.

### **Support and Questions**

The ITD Helpdesk is your central point of contact for help, service, and support. Email itdhelp@bnl.gov, dial Ext. 5522, or call (631) 344-5522 from an off-site phone.More information is available online: http:// www.bnl.gov/itd/scheduledShutdown.asp.

## The Bulletin

#### *Thermoelectric* from *p*. 1

...sources today goes to waste, mostly in the form of heat," said Qiang Li of the Condensed Matter Physics & Materials Science Department, who leads BNL's Advanced Energy Materials Group and is a co-author on the paper. "If we can recover that waste heat as electricity, it would be a huge economic benefit."

In the best thermoelectric materials, electric charge carriers such as electrons move easily from an area of higher temperature to lower temperature, as long as a difference in temperature is maintained. One key to maintaining the heat gradient, even at the high temperatures found in automobile engines, is to use materials with low thermal conductivity.

Many groups have made advances in thermoelectrics by introducing glass-like substances into crystalline semiconductors to disrupt the regular structure and dampen vibrations along the crystalline lattice. Since a large part of heat moves via these vibrations, the dampening effect reduces thermal conductivity.

But a solid glass still propagates some heat through transverse, shear vibrations. A liquid does not.

"Our approach of using liquid-like ions instead of a solid glass is a new strategy to decrease thermal conductivity below that of a glass," said Li. "It not only reduces the 'mean free path' of lattice vibrations — how far these vibrations can travel — but also eliminates some of the vibrational modes completely."

The reduction in thermal conductivity results in a thermoelectric material with a "figure of merit" — a measure of its performance — that is among the highest for any bulk material, even at temperatures of 1,000 Kelvin (nearly 730 degrees Celsius). That's a higher operating temperature than bismuth-telluriumbased thermoelectric materials used in limited applications today. And unlike those materials, the new copper-selenium material contains no rare-earth elements.

This research, therefore, provides a new strategy and direction for developing highefficiency thermoelectric materials for more widespread applications.

"Over the past decade, there has been an increasing sense of urgency in the field of thermoelectrics, driven primarily by the demand for alternative energy and waste heat recovery," said Li. "Thermoelectric generation systems convert heat into electric energy directly without producing carbon dioxide gas, radioactive substances, or other emissions. Improving the performance and use of these materials could therefore play an immensely important role in the worldwide effort to recover waste heat and develop alternative energy technologies to reduce our dependence on fossil fuels and reduce greenhouse gas emissions." Additional coauthors on the paper include: Xun Shi, Lidong Chen, and Wenqing Zhang from Shanghai Institute of Ceramics; Ctirad Uher of the University of Michigan; and G. Jeffrey Snyder of the California Institute of Technology.

# **Counting the Days Until a Soldier Comes Home** BNL's Teich Family appreciates packages sent by AdoptaPlatoon

Diana and Frank Teich, a husband and wife both employed at the Lab, bid a temporary farewell to their son Vinny this past November. Vinny, a United States Marine, had been deployed to Bahrain, a small desert island in the Persian Gulf.

"It was really tough to see him leave," said Diana who works in the Lab's Information Technology Division. "Frank and I, together with our son Frank, Jr., [who also works at the Lab] and our eighth grade daughter Ashley, are counting down the days until Vinny returns to his home base in Norfolk, Virginia — where we know he will be safe." Vinny is scheduled to return this July.

The Teich family thinks about their son and brother every day and is grateful for the goody packages that BNL's AdoptaPlatoon (AAP) has sent him during his deployment. "We are in touch with Vinny via email and occasional telephone calls, and he tells us how much he and his fellow Marines eagerly await the arrival of these packages," said Frank Sr., who works in the Magnet Division.

The packages are filled with useful, everyday items such as cotton socks, suntan lotion, cool wipes, and helmet liners. But the AAP volunteers make sure the packages include some fun things that aren't readily available in locations like Bahrain. For example, games, candy, gum, and powdered drinks like iced tea and lemonade are all-American favorites.

"It's the very least we can do for those serving and protecting our country," said John Mc-Caffrey, the AAP Team Leader who works in Photon Sciences. "These small gestures make a

classes for free next week. Check

out the list of classes — including

aerobic fitness, aqua aerobics,

kardio kickboxing, pilates, yo-

galates, and zumba — and times

online: http://1.usa.gov/HZ25Cs.

Sessions for May, June

**BERA Fitness Class** 

 Seated (from left) holding a photo of Vinny is the Teich family: Frank Sr.,

Seated (from left) holding a photo of Vinny is the feich family: Frank Sr., Diana, Ashley, and Frank Jr. Standing (from left) AAP Volunteers: Bob Duffin, Michael Paquette, Sue Duffin, Joyce Fortunato, Lisa Metz, John Mc-Caffrey, Joanne Rula-Delles, Tina Walsh, and Kelly Backofen.

# Fundraiser Plant Sale, 5/10 & 11

The AAP group will hold its annual fundraiser plant sale May 10-11, 11 a.m. – 1 p.m. in the Berkner parking lot. All proceeds will be used to purchase items for packages to soldiers deployed overseas. Monetary donations are also greatly appreciated.

huge difference when you are deployed overseas," added Michael Paquette of Facility Operations, also an AAP member.

But Vinny is just one of many who receive packages from BNL. Volunteers for AAP organize fundraisers and use the monies to purchase and mail suitable items to military personnel of BNL families and to a specific platoon assigned to BNL by the national AdoptaPlatoon program.

When the AAP volunteers gathered with the Teich family for this photo, Diana took the opportunity to extend them a face-to-face thank you. "I can't tell you how much these packages mean to Vinny and to us," she said. "It's a little piece of home that helps to get him and his comrades through their days." McCaffrey responded with an emphatic, "We should be thanking Y-O-U!"

For more information on the Lab's AAP program, go to: www.bnl.gov/bera/activities/va/ Adopt-A-Platoon/ or contact John McCaffrey, Ext. 8162, mccaffrey@bnl.gov.

— Jane Koropsak

Free BERA Fitness Classes All are invited to try BERA fitness

# EAP Lunchtime Talk, 4/25

*"Achieving Work-Life Fit"* is the title of a talk to be held at noon on Wednesday, April 25. Sponsored by the Employee Assistance Program (EAP) in the Human Resources & Occupational Medicine Division, the talk will be held in Berkner Hall, Room B.

The concept of work-life "fit" refers to the way people establish priorities for relationships vs. the demands of work. This training will provide evidence-based information about the significance of work-life fit, tools for self-assessment of work/life balance, as well as strategies and resources for integrating this information into personal and professional life.

# CALENDAR

Friday, 4/20

## Earth Week Bike Tour

Noon-about 1 p.m. Gazebo east of NSLS-II site. Bring your bike and helmet. Guided tour of L.I. Solar Farm. Two rides, 2.5 miles or 5 miles. See *www. bnl.gov/earthweek/*.

#### Webinar: 'Addiction Awareness'

1-2 p.m. Attend via your computer, the Employee Assistance Program Webinar on addiction. To receive weblink and call-in number, email *nlosinno@bnl.gov* or call Ext. 2346.

# - WEEK OF 4/23 -

#### Monday, 4/23

## **IBEW Meeting**

6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

#### Wednesday, 4/25

#### \*Talk: 'Work-Life Fit'

Noon. Berkner Hall, Room B. Sponsored by the Employee Assistance Program. All welcome. See notice below.

#### \*477th Brookhaven Lecture

4 p.m. Berkner Hall. Talk by Roman Samulyak, Computational Sciences Center, on mathematical models and supercomputer codes simulating complex systems. Refreshments before and after the talk. All are welcome to this free event. Visitors to the Lab of 16 and older must carry photo I.D. See p.1.

### Thursday, 4/26

\*Small Business Supplier Showcase 9:30 a.m.- 2 p.m. Berkner Hall lobby. See notice below, left.

## \*Take Our Children to Work Day

Register by form sent through interoffice mail or *http://1.usa.gov/HdC6d1*. See p.4.

\*1st 'Particles' Circle NSLS-II Ring 11:30 a.m.-12:30 p.m. NSLS-II Ring. The Lab community is invited to walk all around inside the half-mile ring. See p.1.

# New Dance Class Sessions Begin, 4/25

All are invited for dance classes on site through the BERA Ballroom Dance Club. The next five-week session begins Wednesday, April 25, in the Brookhaven Center North Ballroom, Bldg. 30.

The cost is \$40/person for five classes. New beginners can try one class before paying. 5:30-6:30 p.m. Beginner Waltz 6:30-7:30 p.m. Viennese Waltz 7:30-8:30 p.m. Intermediate Samba

For information contact Arun



— Karen McNulty Walsh

Advance registration is required for the following classes. Please make checks payable to BERA and mail to: Recreation Office, Bldg. 400A. **Aqua Aerobics:** 8-week session. \$32 for once a week, \$60 for twice a week. 5:30-6:30 p.m. at the Pool. Tuesdays and Thursdays, May 1 until June 21.

**Pilates:** 8-week session. \$40 for once a week. Noon-1 p.m. Rec Hall, Bldg 317. Tuesdays: May 1 until June 19.

**Yogalates:** 10-week session, now already begun, 8 weeks remain. Classes cannot be prorated. \$50 for once a week (reposting). Noon-1 p.m. Rec Hall, Bldg 317. Mondays until June 18.

**Zumba:** 8-week session. \$40 once a week, \$80 twice a week. Tuesdays: May 1 until June 19 from noon to 1 p.m. at the Gym, Bldg 461. Wednesdays: May 2 until June 20 from 5:15 to 6:15 p.m. at the Rec Hall, Bldg 317.

To attend this talk, please register with Nancy Losinno, EAP Manager, Ext. 4567 or *nlosinno@bnl.gov*.

# HUB, SDVOB Small Business Supplier Showcase, 4/25

Products and services from Historically Underutilized Small Business (HUB), Service-Disabled Veteran-Owned Small Business (SDVOB) Companies to be featured

Lab employees who are responsible for purchasing activities are invited to a supplier showcase that will feature several local and national HUB and SDVOB companies. BNL will host this showcase on Wednesday, April 25, from 9 a.m. to 2 p.m. in the upper lobby of Berkner Hall. Reservations are not required. Products and services to be featured include: Bearings, hoses, valves, pumps, etc.; Computer equipment and supplies; Construction services; Furniture; Instruments; Information technology services; Office supplies; Pipes, fittings, etc. Ghosh, Ext. 3974, or Vinita Ghosh, Ext. 6226.

# Camera Club, 4/26

The Camera Club will meet on Thursday, April 26, at noon in Conference Room 2 in Bldg. 400. Those who plan to attend should email three recent photos to *jgettler@bnl.gov*.

# TIAA-CREF Oneon-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on May 9 and May 29 to answer employees' questions about their financial matters, such as protecting assets against inflation or comparing life-time income vs. cash withdrawal options. For an appointment, call 1-800-732-8353 or go on-line at *www.tiaa-cref.org/bnl* and select "set up a meeting."



The Bulletin is proud to celebrate Earth Week by printing these magnificent shots of a red-tailed hawk spotted on site at BNL by Lab photographer Roger Stoutenburgh. You can also see them in full color at www.bnl.gov/bnlweb/pubaf/bulletin/default.asp. Red-tails adapt well to living in different environments and are the most common hawk in North America.

# Classified Advertisements

Current iob openings and a statement of job placement policy at BNL are available on the homepage at www.bnl.gov/HR/careers/. To apply for a position, go to www. bnl.gov and select "Search Job List." For more information, call Ext. 2882.

#### Motor Vehicles & Supplies

09 NISSAN SENTRA FE+ - 46K mi. excel cond, avail May 20th, http://tinyurl. com/87gmmtz. \$12,559 neg. Jayesh, Ext. 3612 or jshah@bnl.gov.

03 HONDA ACCORD EX-L V6 COUPE - 84K mi. ABS, a/c, p/s, p/w p/l, c/c, tilt whl, side air bags, Ithr, heatd fr seats, s/roof, gar dr openr, new tires/brakes. \$8,500 neg. Ext. 5873.

02 BUICK RENDEZVOUS - 117 mi. awd, On Star, 7 pass, 3rd row seating, Ither int, replaced front/rear brakes, champagne color, excel cond. \$6,850 neg. 742-4804. 00 CHEVY SILVERADO - 54K mi. 2500HD 4wd, lthr, trailering extend. cab locking tonneau, photo. \$9,000. scottrott@aol.com.

87 FORD MUSTANG - 79K mi. 5 spd, 5.0, gray int/white ext, newly painted, new top, orig mi. \$5,500 neg. Edgar, 516-318-7300. 68 CHEVY CAMARO - 63K mi. mint, a/t, red w/white racing stripes, rec. redone, 500 mi on rebuilt eng, more, pics. \$29,000 neg. John, banijon@optonline.net.

RIMS W/TIRES - 4 18" RT6 Enkei 360 Perfect Rims; 6 Lug, used on Dodge Durango; excel cond as well as tires, less than 1 yr old, as/\$700; pd/\$1,800, pics. 813-6583. TRAILER - 2011, 2000lb open trailer, like new cond, 8'x 5' platform w/diamond plate tailgate, pics avail on request, \$600. Joe, Ext. 4639, 764-2666.

## **Boats & Marine Supplies**

38' CHRIS CRAFT COMMANDER 1967 twin 350's, radar, 2/steering statns, m/w, refrig, stove, Bimini top etc, fully equipd, in Greenport, \$5,000. 386-492-3953.

25' SEARAY SUNDANCER - '98 excel, 5.0 Bravo III Mercruiser Eng, new in '03, Bimini Top/Camper Canvas/Cockpit Cover, photo. \$18,999 neg. 495-1184.

23' ODAY 23 ODAY CONVERTIBLE - Shoal Keel/C/B 2'/5'Draft, 9.9 Evinriude O/B. VHF,OB,Roller Furling, Sails, PortiPotti, Stove, more. \$2,300 neg. Sal, Ext. 5055.

18' REGAL CUDDYCABIN - full, red canvass, 4 cyl, iron Duke, I/O, runs well. \$1,500. Mike, 516-993-4313.

KAYAK - Recreational double, Ig open cockpit for 2, & third removable center child seat, incls 2 paddles, pics upon req, \$400/firm. Bill, Ext. 2378, 793-9111. **OBRIEN YOUTH WATER SKIS - excel** 

## **Furnishings & Appliances**

cond/\$35. Mark, Ext. 2599

FREEZER - Imperial Heavy Duty Com-

#### SONY BRAVIA 40-INCH LCD HDTV - less than yr old w/2 yrs of Costco warr, full HD 1080p BRAVIA® SyncTM Compat Light-SensorTM Technol, \$450. Jayesh, Ext. 3612. VINTAGE LAFAYETTE LR-1500 TA - solid state receiver 1960's, works v. well, some bulbs out on face, \$35. Jim, Ext. 7460.

## Sports, Hobbies & Pets

BICYCLE - St. Tropez La Sport 12spd road bike, 20" frame, 30" standover, new 27" tires & tubes, brakes, pedals, seat, \$150. Phil, Ext. 5669 or harringt@bnl.gov. FENDER STRATOCASTER 1984-87 - made in Japan, red, rosewood fret brd, 3 sing coil pickups, locking nut, Fender Schaller type 1 tremolo, case incl, \$550. Ext. 7999.

HONDA 50 R DIRTBIKE - Hardly used Needs work. \$450.00 neg. Has training wheels. \$50. Red. Pic available. Maryellen, Ext. 3328 or mmccabe@bnl.gov. SURFBOARD - Roxy, 7.5', It blue w/

pink detail, cushioned, non-slip surface, leash, excel cond, \$400. 219-7196. TOTAL GYM - gd cond, pics avail, \$85. Chris, Ext. 2094, 929-5008, harrisc@bnl.gov.

WETSUIT - youth sz 12, like new, pd/\$105, ask/55. Lynda, Ext. 7235 or fitz@bnl.gov. WILSON A2K GLOVE - \$150, almost new, soft leather 11.25, retail \$299. Rich, Ext. 5218, 566-6845.

#### **Miscellaneous**

HIGH CHAIR - Chicos, blue/white, v/gd cond, ask/\$60. Scott, sbronson@bnl.gov. MAC TOOLS TOOL BOX - Mac Tech 1000, silver, hardly used/\$1500. Maryellen, Ext. 3328 or mmccabe@bnl.gov.

MEDELA NURSING PUMP - double pump w/all accessories, \$150. Nina, Ext. 5894, 813-0497 or vbri1@aol.com. MEDICAL EXAM TABLES/EQPT - Midmark

Ritter 204 high-end, new cond, \$1075/ea, or 3/\$3150 & Clinitek Status® Analyzer, Urinalysis machine, \$400. 516-505-0765. PICNIC TABLE - folding, Lifetime/\$100.

Maryellen, Ext. 3328, mmccabe@bnl.gov. TOYS - Deal or No Deal Board Game/\$5, Handy Manny Workbench & Tools/\$40, Smartcycle & 2 games/\$30. Ext. 7918. TRANSPORT WHEEL CHAIR - mint cond, padded arm/ft rests, compact light weight, easy to fold, bought from Lewis, ask/\$65. Michael, 744-7852

#### Yard & Garage Sales

CALVERTON - April 28, 8a-4p, N. end of Sunny Line Dr, Multi-family, something for all! bldg mtls, clothes, shoes, yarn, games, records, bottles, exercise equipment. 727-5646

## Happenings

"THEME BASKET" AUCTION - St. Andrew's Episcopal Church, Yaphank, Sat. May 5, \$5 admission. Doors open noon; drawing starts @1:30pm. Ext. 4538.

DINNER-DANCE - Polish American Independence Club social event, Port Jeff Polish Hall, 35 Jayne Blvd PJ, May 12, 7-11pm, \$30/pp incls steak dinner live music unlimited tap beer, wine/soda,

#### Wanted

BOXTOPS & CAMPBELL'S UPCS - for 1st and 5th Grade class, Bldg 911A. Nina, Ext. 5894, 813-0497 or vbri1@aol.com. DUMB BELL WEIGHTS - for my son, at a low cost; preferably free, 20-25 lbs, etc. Chris, Ext. 2094, 929-5008.

HOUSE - in or near Brookhaven Hamlet to rent 4th of July wkend from July 4th-8th, need lodging for guest at family union. 286-5897.

MICROWAVE OVEN - compact or midsize countertop. Wayne, Ext. 5936 or wlewis@bnl.gov.

POP TOPS FROM SODA/BEER CANS -Collecting for Shriner's Children's Hospital, please send or drop off @ Bldg 400A, Transportation Office, Paula, Ext. 2535. ROOMMATE - looking for roommates to share a 2 or 3 bdrm apt nr BNL starting in July. Female preferred. yixyang@bnl.gov.

#### For Rent

WEEKI WACHEE, FL - priv ranch on Gulf. 70m Orlando, 45m Tampa, fly Islip direct, near beach/tennis/park, SW architecture, 3/ bdrm, 2/bath, d/r, f/p, 2gar, igp in lanai, fruit see review.oktane.net/HouseTour. \$450/wk. SALE: \$125,000 neg. 344-5537.

BELLPORT VILLAGE - 1 bdrm 1st flr apt in 2-Fam. home; prvt drwy & ent, newly renov, wood firs, encl back porch, use of vd. village amenities, util incl. no smkrs or pets, avail May 1. \$1,350/mo. 275-0745. MASTIC - new 3 bdrm hse w/2 f/bath, formal l/r, d/r, f/p, fully equip new eik, quiet, 7 min to BNL, walk to McDs, Subway, Bgr King, CVS, Kohl's, 7/11, Pizza, no smkg/ pet. \$2,250/mo neg. 339-3444.

MIDDLE ISLAND - newly renov, 900sq ft upper condo, 1/br 1/bath, 10 min to BNL, heat/water incl, new applis, full w/d, 1/ mo sec dep \$1200, lease ends 5/1/2013. \$1,200/mo. Tim, 813-5097.

MIDDLE ISLAND - Artistlake Dr, 5 min dr to Lab, 1/big br, up flr, 900SF, new appli/decoration, 1/mo deposit, no pets. \$1.125/mo. 516-637-1088.

MIDDLE ISLAND - 1 bdrm+den 2/bdrm, 1/ bath, 10 min to BNL, heat & water incl, free Patio furn, nr grocery, 1 rsrved & guest prkg, 1/mo sec dep, 1st mo free, lease ends 1/31/2013. \$1,395/mo. 392-8768.

MIDDLE ISLAND - 2 b/r apt, 1st flr, 10 min to BNL, nr amenities, free heat/water, pay elect, reserved prkg, patio, m/wave, d/w. refria, closet space, free \$100 gym membership. \$1,240/mo. 418-6922.

RIDGE - 1 bdrm, full bath, kitchenette, I/r. sep prkg/ent, incl all, no smkg/pets in apt, mins to lab. \$975/mo. 924-0002.

RIVERHEAD - 3bdrm, 2 full bath, Western Ranch, kit, dw. l/r, d/r, w/d, gar, new windws & furnace, quiet, lg prpty on cul-d-s, nr shops, no smkg/pets, refs & cc reqd, 1/mo sec+util. \$2,250/mo. 512-6470.

SHIRLEY - beautiful Cape, 6 rms, 4 bdrms, 2 full baths, full bsmt, 7 min from

# Take Our Daughters & Sons to Work, 4/26

**Register for afternoon program by 4/23** 

BNL will again be welcoming Lab children to "Take Our Daughters & Sons to Work Day" - on Thursday, April 26. If deemed safe, with supervisory approval, the girls and boys will spend the morning with their parent in his or her workplace and then at lunch. An afternoon program will be available to the first 100 registered participants only.

Register in advance to participate in the afternoon program, which is open to children of BNL employees and guests only. If you have a child between the ages of 10 and 14 and would like to take advantage of this opportunity, please register by April 23. Please be reminded that safety must be a priority throughout the event. The children will be accompanied by chaperones on the afternoon tours. Keep in mind that minors may not visit a Lab facility that exposes them to radiation, chemicals, or other potentially hazardous situations. If a visit to your workplace might involve exposure to these conditions, consult with your Environment, Safety & Health Coordinator or Facility Representative to determine if such a visit is allowable. If it is not, you should arrange for a "host parent" to cover the morning portion of the day.

Children will also be invited to the Walk Around the Ring event at the National Synchrotron Light Source II at 11:30 a.m. (see details on p. 1).

Registration: To register online, go to the Human Resources Homepage, www.bnl.gov/HR/, and click on "Take Our Daughters and Sons to Work Day" in the right column. Follow the prompts and submit your form. For those of you who do not have access to a computer, please fill in the registration form on the memo on this topic sent to all employees and guests and return to Liz Gilbert, Bldg. 400B, no later than this Monday, April 23.

# **Upcoming BERA Trips**

Purchase tickets at the BERA Store in Berkner Hall, which is open Monday through Friday from 9 a.m. until 3 p.m. BERA may limit the number of tickets per person during the first week of sales. BERA trips are a BNL benefit and tickets are for BNL employees and retirees, those with guest appointments, and their families only. Buses leave from the Brookhaven Center.

For more information, see www.bnl.gov/bera/recreation/events.asp or call Ext. 2873.

NY City Do-As-You-Please Bus Trip: Sat., May 5. Depart BNL at 10 a.m. for drop off near Bryant Park in midtown. Leave NYC at 7 p.m. \$15/person. Children under 2 are free if they sit on your lap. Trump Taj Mahal Casino, Atlantic City: Sat., May 5. Depart BNL at 9 a.m., leave casino 8 p.m. \$30/person, includes \$20 slot play money. Must be at least 21 years of age for this trip, photo ID required at casino.

al, 20.8 cu ft, excel co a/\$750.678 3299 or dgordon@bnl.gov.

GLIDER ROCKING CHAIR & MORE - mint green, blonde wood, ask/\$35; Kerosene Heater, like new w/box & manuals/\$75, u-pic-up in Medford. Pamela, Ext. 5218, 804-7569

HOUSEHOLD ITEMS - Ig entertainments cntr for TV, 2 matching side bookcases, pine, excel/\$350; 2 Buffet lamps, \$30. Maryellen, Ext. 3328 or mmccabe@bnl.gov. POOL LADDER - \$30, used in an 18'agp. Nina, Ext. 5894 or vbri1@aol.com.

TUCKER CONSOLE - fr JCPenney, assembled, unused, top & lower shelf for displays, 2/drawers, classically styled/\$100, 42x13x30"h, Pine Park finish. 681-9976.

#### Audio, Video & Computers

DELL PC - DIM E520 '07 w Intel Core 2, 4GB RAM, 16X DVD ROM, 16X DVD +/-RW, TV ready, no hard disk, \$175. David, Ext. 2604. PHONE SYSTEMS - Vtech cordless. model #I6786, 5.8 GHz, 3 hand sets, \$5; Uniden cordless, model# D1384, 4 hand sets. \$10. Ext. 7505.

music more. Mark, Ext. 2574, 928-5684.

DINNER/SHOW OUTING - to see Jonah at Sight n Sound Theatre in PA on Sat Oct 13, 2012. Deposits by May 30, call for details. Kim, Ext. 2896, 399-3098 or khayes@bnl.gov.

SHEN YUN PERFORMING ARTS - Reviving 5,000 Years of Civilization April 18-22, Lincoln Center, experience the world's premier classical Chinese dance and music shenyunperformingarts.org. George, georgewei@bnl.gov.

## **Farewell Gathering**

SHERYL GOLDEN - celebrating Sheryl's retirement at Ladakins on 4/26, 5:30, RSVP w/\$35 pymt by 4/19. Karen, Ext. 4432 or liebermann@bnl.gov.

MEMORIAL CELEBRATION OF VICKI MCLANE'S LIFE - Saturday, May 12, 2-5 p.m. at Shoreham Village Hall, Peter Kahn, husband of the late Vicki McLane, will host the event for family and friends. All are invited to attend, share memories

BNL, huge fenced property, tremendous deck, pets allowed, no smkrs, utils not incl. \$2,250/mo. Eileen, 516-433-5777.

#### For Sale

PORT JEFF STATION - Ig upper 1 bdrm, 1 bath Co-op, eik, new appls/windows, a/c, d/w, Indry/pool on site; pet friendly. \$98,000. Megan, 828-2743.

**ROCKY POINT – Grand Custom Colonial** in The Tides, 3,100 sq ft, 4 beds, cust. kit w/granite, bridal w/aircase, gunite pool, pond w/waterfall, beach rights, oversized gar. \$439.000. Nina. Ext. 5894.

ST JAMES - 3 bdrm, 3 bath ranch, new furn. Anderson wind. I/r. d/r. dbl gar. fin bsmt, ig/sprinkler, patio, wd flrs, w/w carpet, ctrl vac. \$439,000. 584-6002.

#### In Appreciation

RETIREMENT! - Wayne Boyd has left the building! Best wishes on your retirement. You will be missed. Happy Trails, Cowboy! Linda, Ibarrett@bnl.gov Racing @ NHRA Toyota Supernationals, NJ: Friday, June 1. Races at Englishtown, NJ. Depart BNL at 11 a.m., leave track at 9 p.m. \$55/person, includes reserved seat in Section 3 at starting line/pit side, coach bus, driver tip. Must use an approved vacation day. Trip is not suggested for young children.

Belmont Stakes: Sat., June 9. Depart BNL at 11 a.m., leave Belmont at approximately 7:30 p.m. or 30 minutes after last race. Dress code: shirts with collar, no jeans. \$60/person includes ticket, grandstand reserved seating in Section 2AA group area (under overhang), admission to the Clubhouse, and coach bus, driver tip.

NASCAR Race: Sun., September 30. Depart BNL at 5 a.m., leave Dover, Delaware, at 6 p.m. Only 40 tickets. \$200/person, includes party chalet, catered food and beverages, great seats, program, as well as souvenir, coach bus, and driver tip.

# Bulletin

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Bldg. 134. P.O. Box 5000 Upton, NY 11973-5000 phone: (631) 344-2345 fax: (631) 344-3368 e-mail: bulletin@bnl.gov