

## Physicist Laurence Littenberg Wins 2011 W.K.H. Panofsky Prize

Recognized for a “needle-in-a-haystack” discovery, Laurence Littenberg, a senior physicist and associate chair for high-energy physics in the Physics Department at BNL, has been chosen to receive the American Physical Society’s (APS) 2011 W.K.H. Panofsky Prize in Experimental Particle Physics. He will share the prize with Douglas Bryman of the University of British Columbia and A.J. Stewart Smith from Princeton University. The physicists will receive the prize, consisting of \$10,000 (shared equally) and a certificate citing their contributions to physics, at the APS April 2011 meeting to be held in Anaheim, California.

The physicists were cited for discovering and measuring a very rare decay of a positively charged subatomic particle called a kaon, or K meson — a feat reported in 1997 by a team of 50 collaborators from around the world after ten years of searching through the remains of the decays of 1.5 trillion particles. At an experiment called E787, which was funded by DOE’s Office of High Energy Physics, at Brookhaven’s Alternating Gradient Synchrotron (AGS), the scientists discovered the rare mode in which a K meson decays to a pi meson and a neutrino-antineutrino pair — a process with a probability of about one in ten billion.

Finding this rare kaon decay sheds new light on the universe’s most elemental forces and most basic building blocks, as explained by the theory of sub-



Roger Stoulenburgh D4531010

atomic particles known as the Standard Model. “This research has been extremely influential in subsequent experimental and theoretical work in particle physics,” said Thomas Ludlam, Chair of the Physics Department.

When subatomic particles decay, they usually break down into more stable, predictable particles. Most often, the K meson decays either to a muon and a neutrino or to two pi mesons, one positively charged and one neutral. Finding the very rare decay was possible because the AGS had state-of-the-art equipment capable of examining one million decays per second, but it was a difficult task for the physicists. Littenberg, who, with Bryman and Smith, was a co-spokesperson for the E787 experiment, explained, “I believe this decay was harder to find than the proverbial ‘needle in a haystack,’ not only because of its rarity, but also because the neu-

trino and antineutrino — two of the particles arising from the decay — can’t be detected. We could only detect the pi meson — one-third of what was happening during the decay.”

Littenberg earned a bachelor’s degree in physics from Cornell University in 1963, and both a master’s degree and Ph.D. in physics from the University of California, San Diego (UCSD), in 1965 and 1969, respectively. He was a research associate at UCSD before joining Daresbury Laboratory in Cheshire, England, in 1970 as a senior research associate. He came to Brookhaven Lab in 1974 as an associate physicist, and rose through the ranks to become a senior physicist in 1989, and associate chair for high energy physics in the Physics Department in 2007. An APS fellow, Littenberg won the Brookhaven Science & Technology Award in 2000.

— Diane Greenberg

## BNL’s Peter Johnson Wins American Physical Society Oliver E. Buckley Prize

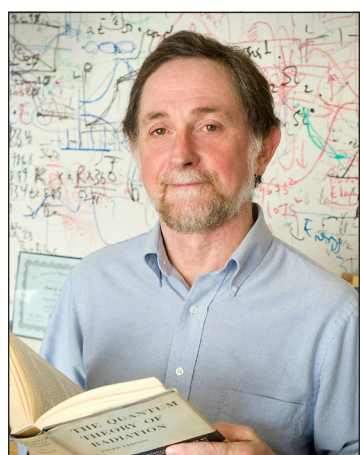
**Award Given for Advancing Photoemission Spectroscopy, High-Temperature Superconductor Studies**

Peter Johnson, Chair of BNL’s Condensed Matter Physics & Materials Science Department, is one of three recipients of the American Physical Society’s (APS) 2011 Oliver E. Buckley Prize in Condensed Matter Physics.

Johnson will receive the award at the 2011 APS March meeting in Dallas, Texas, along with Zhi-Xun Shen of SLAC National Accelerator Laboratory and Juan Carlos Campuzano of Argonne National Laboratory. The prize honors them for “innovation in angle-resolving photoemission spectroscopy, which advanced the understanding of the cuprate superconductors, and transformed the study of strongly correlated electronic systems.”

“This was a very pleasant surprise and the fact that they awarded this prize to all three of us was also a pleasant surprise — we’ve all been very competitive for a long time,” Johnson said. “It is an honor for myself, my group, and the Laboratory to receive this recognition from the larger community.”

Johnson has been working with photoemission spectroscopy since the early 1980s, when he was pursuing postdoctoral research at Bell Laboratories with



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the pioneer of angle-resolved photoemission spectroscopy, Neville Smith. In photoemission spectroscopy, physicists shoot a photon, the elementary particle of light, into a material, and an electron absorbs the photon’s energy and emerges. Physicists can then study the material by examining the properties of the displaced electron.

Johnson has worked with various forms of photoemission spectroscopy, including inverse (time-reversed), spin-polarized, and high-resolution photoemission spectroscopy. It is this last variant for which he is being honored. The techniques...

See *Johnson’s APS Prize* on p. 2

## New Highly Stable Fuel-Cell Catalyst Gets Strength from its Nano Core

**May enhance practicality of fuel-cell vehicles and improve performance of other metallic catalysts**

Stop-and-go driving can wear on your nerves, but it really does a number on the precious platinum that drives reactions in automotive fuel cells. Before large fleets of fuel cell-powered vehicles can hit the road, scientists will have to find a way to protect the platinum, the most expensive component of fuel-cell technology, and to reduce the amount needed to make catalytically active electrodes.

Now, scientists at BNL have developed a new electrocatalyst that uses a single layer of platinum and minimizes its wear and tear while maintaining high levels of reactivity during tests that mimic stop-and-go driving. The research — first described online on October 7, 2010, in *Angewandte Chemie*, International Edition, and identified by the journal as a “very important paper” — may greatly enhance the practicality of fuel-cell vehicles and may also be applicable for improving the performance of other metallic catalysts.

The newly designed catalysts are composed of a single layer of platinum over a palladium (or palladium-gold alloy) nanoparticle core. Their structural characterization was performed at BNL’s Center for Functional Nanomaterials and the National Synchrotron Light Source.

“Our studies of the structure and activity of this catalyst — and comparisons with platinum-carbon catalysts currently in use — illustrate that the palladium core

‘protects’ the fine layer of platinum surrounding the particles, enabling it to maintain reactivity for a much longer period of time,” explained Radoslav Adzic of BNL’s Chemistry Department, who leads the research team. Other authors on the paper were: Kotaro Sasaki, Yun Cai, YongMan Choi, Ping Liu, Miomir Vukmirovic, and Jia X. Wang, all of Chemistry; and Hideo Naohara of Toyota Motor Corporation, Fuel Cell System Development Division, Susono, Japan.

The basic science leading to the development of the new electrocatalyst and early scale-up work was funded by the DOE Office of Science. Additional funding came from the Toyota Motor Corporation.

In conventional fuel-cell catalysts, the oxidation and reduction cycling — triggered by changes in voltage that occur during stop-and-go driving — damages the platinum. Over time, the platinum dissolves, causing irreversible damage to the fuel cell.

In the new catalyst, palladium from the core is more reactive than platinum in these oxidation and reduction reactions. Stability tests simulating fuel cell voltage cycling revealed that, after 100,000 potential cycles, a significant amount of palladium had been oxidized, dissolved, and migrated away from the cathode. In the membrane between the cathode and anode, the dissolved palladium ions were...

See *Fuel-Cell Catalyst* on p. 2

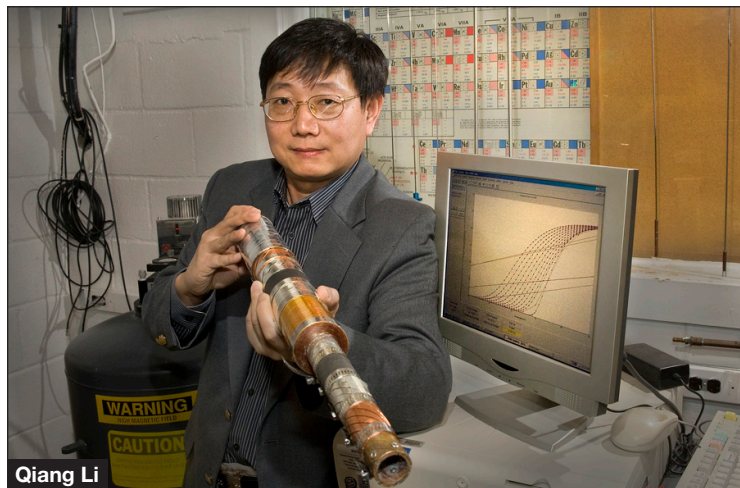
465th Brookhaven Lecture, 1/19

## One Hundred Years of Superconductivity: Superconducting Materials and Electric Power Applications

Whaddya know? It was one hundred years ago this year that Dutch physicist Heike Kamerlingh Onnes discovered that by lowering the temperature of mercury to a blistering cold four degrees Kelvin, the metal became a “superconductor” and allowed electricity to flow through it with very little, if any, resistance.

Fast forward one hundred years: now we are looking for new ways to store and transport energy — energy we can use to get from one place to another, stay comfortable when the weather outside is not, grow enough healthy food to feed the population, and sustain our ways of life — all while trying to protect the planet. Superconductors, with their potential to be über-energy efficient, are likely to play a crucial role in solving these challenges, and researchers at Brookhaven Lab are figuring out just how it can be done.

On Wednesday, January 19, join Qiang Li of BNL’s Condensed Matter Physics and Materials Science Department for the 465th Brookhaven Lecture, titled, “One Hundred Years of Superconductivity: Superconducting Materials and Electric



Qiang Li

Roger Stoulenburgh D0220111

Power Applications.” 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 of age 16 and older must carry a photo ID while on site.

To join Li for dinner at an off-site restaurant following the talk, contact Ali Lopez, Ext. 2590, [lopez@bnl.gov](mailto:lopez@bnl.gov).

Li will begin his talk with an overview of the first one hundred years of exploring superconductivity. He will also discuss the challenges of developing new superconductors and improving their perfor-

mance for real-world energy applications, and then explain how basic science researchers at BNL are addressing those challenges.

Li earned a Ph.D. in 1991 from Iowa State University, where he completed his doctoral work at DOE’s Ames Laboratory. He arrived at Brookhaven Lab as a postdoc that same year. In 1993, Li became an assistant materials scientist at BNL, and an associate materials scientist in 1995. He was promoted to physicist in 1998. In 2009, Li was appointed as group leader for BNL’s Advanced Energy Materials group.

— Joe Gettler



## International Year Of Chemistry Event: Women in Chemistry Breakfast, 1/18

Brookhaven Women in Science (BWIS) and the BNL Diversity Office are sponsoring a Women in Chemistry Networking Breakfast on Tuesday, January 18, 7:30-9:30 a.m. in Berkner Hall, Room A. The breakfast, part of an event called “Women Sharing a Chemical Moment in Time,” will celebrate the International Year of Chemistry 2011, which officially starts on January 27. Women in the BNL community, including employees, postdoctoral fellows, and students, are invited to the free event.

With the support of the American Chemistry Council and the U.S. government, the U.N. General Assembly designated this year as the “International Year of Chemistry.” The effort, led by the International Union of Pure and Applied Chemistry and the United Nations Education, Scientific and Cultural Organization, has the goals of increasing the public’s appreciation of chemistry meeting the world’s needs, interesting young people in chemistry, ensuring a creative future for chemistry, and celebrating the 100th anniversary of Madame Curie’s Nobel Prize and the founding of the International Association of Chemical Sciences.

The January 18 event will bring women in chemistry — including those with a background or job in chemistry, chemical engineering, materials science, or any other chemistry-related field — together worldwide, linking them with other Women in Chemistry Networking Breakfast sites on six continents. At Brookhaven, breakfast attendees will be able to interact with others at venues in the Eastern Standard Time Zone via Skype. A presentation and short video will also be shown. The breakfast is limited to 20 attendees, and pre-registration is required to attend the event. Register at <http://intranet.bnl.gov/wcbreakfast/> by today, January 14. For more information, contact Kimberley Elcess, Ext. 4151, or [elcess@bnl.gov](mailto:elcess@bnl.gov). — Diane Greenberg

### Fuel-Cell Catalyst from p. 1

...reduced by hydrogen diffusing from the anode to form a “band,” or dots.

In contrast, platinum was almost unaffected, except for a small contraction of the platinum monolayer. “This contraction of the platinum lattice makes the catalyst more active, and the stability of the particles increases,” Adzic said.

Reactivity of the platinum monolayer/palladium core catalyst also remained extremely high. It was reduced by merely 37 percent after 100,000 cycles.

Building on earlier work that illustrated how small amounts of gold can enhance catalytic activity, the scientists also developed a form of the platinum monolayer catalyst with a palladium-gold alloy core. The addition of gold further increased the stability of the electrocatalyst, which retained nearly 70 percent of reactivity after 200,000 cycles of testing.

“This indicates the excellent durability of this electrocatalyst, especially when compared with

## Talk on Protecting Intellectual Property, 1/24

A talk on “Intellectual Property — What It Is and How to Protect It” will be featured at an Entrepreneurs’ Foundation Workshop to be held on Monday, January 24, 5-7:30 p.m. at the Brookhaven Center South Room. Sean Grygiel, a principal at the New York office of Fish & Richardson, a national law firm specializing in intellectual property, will be the featured speaker.

Aimed at the technology entrepreneur, Grygiel’s talk will cover the basics of intellectual property and highlight mechanisms most frequently used by technology-based companies to obtain and maintain competitive advantage.

The workshop is open to the public. There is a \$10 fee, and advance online registration is required. Online registration and payment by credit card is available at the Entrepreneurs’ Foundation Workshop website, <http://www.bnl.gov/efw/>. Registrants may also pay the fee at the door by cash or check. All visitors to the Lab age 16 and over must bring a photo ID. The workshop schedule includes refreshments and networking from 5 to 5:30 p.m., the talk with time for Q & A from 5:30 to 6:30 p.m., and more refreshments and networking from 6:30 to 7:30 p.m. For more information, contact 631 344-4151 or [elcess@bnl.gov](mailto:elcess@bnl.gov).

BNL, the Small Business Administration, Stony Brook University, and the New York State Small Business Development Center at Stony Brook developed the Entrepreneurs’ Foundation Workshop Series to help those interested in starting up small technology companies. Fish & Richardson is sponsoring the January workshop. Information about more workshops will be posted at the workshop series website above as soon as it is available.

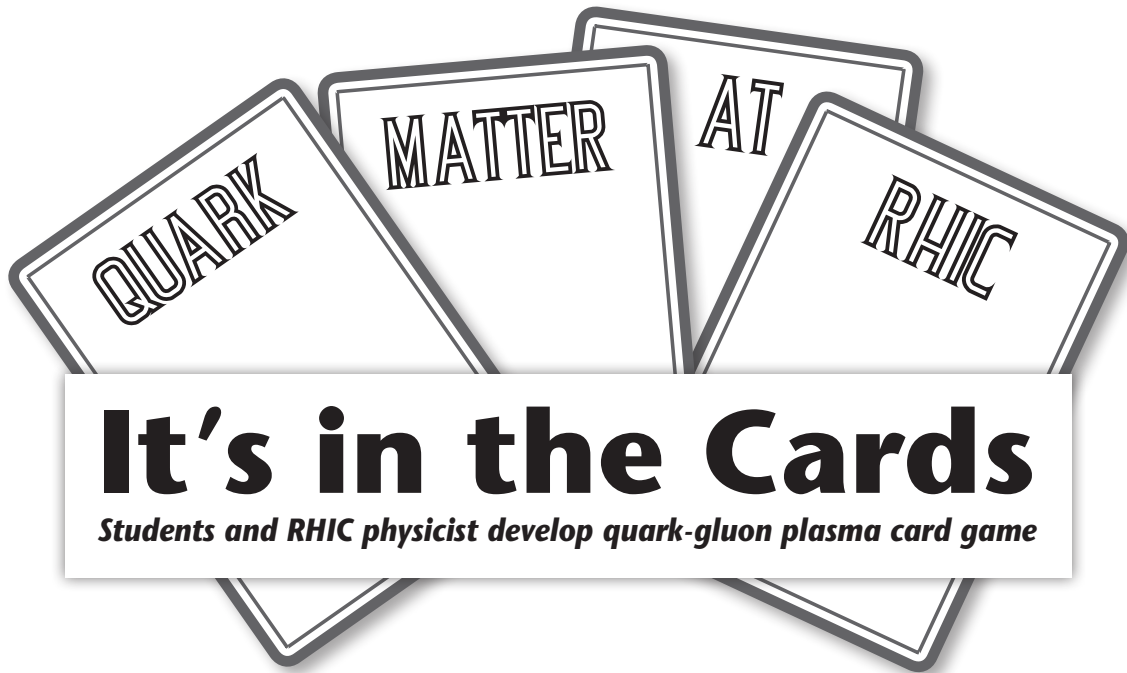
Remember  
Ye Olde  
Food Drive

simpler platinum-carbon catalysts, which lose nearly 70 percent of their reactivity after much shorter cycling times. This level of activity and stability indicates that this is a practical catalyst. It exceeds the goal set by DOE for 2010-2015 and it can be used for automotive applications,” Adzic said.

Adzic noted that fuel cells made using the new catalyst would require only about 10 grams of platinum per car — and less than 20 grams of palladium. Currently, in catalytic convertors used to treat exhaust gases, 5 to 10 grams of platinum are used. Since fuel-cell-powered cars would emit no exhaust gases, there would be no need for such catalytic converters, and therefore no net increase in the amount of platinum used.

“In addition to developing electrocatalysts for automotive fuel cell applications, these findings indicate the broad applicability of platinum monolayer catalysts and the possibility of extending this concept to catalysts based on other noble metals,” Adzic said.

— Karen McNulty Walsh



Happy New Year! Like the sprays of confetti and streamers exploding in Times Square at midnight on December 31, millions of subatomic particles will soon be streaming from heavy ion collisions at RHIC, BNL’s Relativistic Heavy Ion Collider.

Linking subatomic particles with New Year’s Eve celebrations may not be so strange: Two years ago, a group of Hungarian secondary school students rang in the New Year while playing with particles, literally. The group, which included Judit Csörgő, daughter of RHIC/PHENIX collaborator Tamás Csörgő, and her friend Csaba Török, were at a New Year’s celebration, playing with the first edition of a set of cards invented by Csaba as an entertaining way to learn about subatomic particles and their interactions. The game, more formally developed and tested by the students with mentoring help from Tamás, won an honorable mention in a 2010 Hungarian competition for junior innovators. It is now available for purchase as an e-book, with cards included, on Lulu, currently with Hungarian directions. An English version is in the works.

“The card game provides a great opportunity for all people — not just physicists — to get acquainted with some of the elementary particles and concepts of the Standard Model,” said Csaba. His invention was inspired by lectures about heavy ion and particle physics in the Science Club at his school, the Berze Secondary School, in Gyöngyös, Hungary, where Tamás was a frequent presenter and founding member of the club.

The deck consists of cards that represent particles and anti-particles from neutrinos, to electrons,

positrons, muons, and quarks, which can be used for four different games.

Co-inventor Judit tested the games and ranked them according to their difficulty level. “I have played a lot with students of primary and secondary school, and I found that they really enjoy the games,” she said.

“My favorite,” said Tamás, “is Quark Matter,” the game most closely related to RHIC physics. In it, the cards are mixed face up on a table, packed closely together to represent matter at the instant of a collision at RHIC — a quark-gluon plasma. The object for each of the players is to quickly extract particles as they would emerge from a RHIC collision: non-interacting neutrinos and antineutrinos first, followed by electron/positron and muon/anti-muon pairs, and then finally the quarks and anti-quarks as they hadronize, or freeze out, to form mesons (made of a quark and an anti-quark), baryons (three quarks) and anti-baryons (three anti-quarks), all the while maintaining a neutral color charge (by joining red, green, and blue quarks, for instance, or red/anti-red pairs).

As players race one another to extract the correct particles, the “system” expands — as particle cards are pushed apart — just as it does in a real RHIC collision. Players score points for each correct particle pick.

“At the beginner level, students are usually quicker and more successful players, than physicists are,” Csaba added.

The game is instantly addictive. Brookhaven physicist Jeff Mitchell, who brought it back from Hungary to share with other BNLers, has played with his six-year old daughter.

“This would be perfect for middle school students,” said Bernadette Uzzi of Brookhaven’s Office of Educational Programs, who will be trying it out during her classroom visits.

More sophisticated players can name the particles formed by the various combinations of quarks. And additional games teach and reinforce deeper concepts, such as the weak decays of hadrons and several laws of conservation.

“As part of the requirements for the young innovators competition, we tested the game in several age groups and among people with quite different professions — from kindergarten kids to truck drivers, architects, farmers, administrators in my research lab KFKI, primary and secondary school teachers, BS, MS, and PhD students, researchers, pensioners, and so on,” said Tamás.

They’ve also presented the game at conferences, including one attended by the former Hungarian minister for education, representatives of the U.S. Embassy in Hungary, and the director of the Hungarian American Fulbright Foundation.

“Our goal is to spread this game to as many people as possible,” said Tamás. He and the young inventors, now university students pursuing degrees in science, have filed an application for a Hungarian patent.

“Our minds were quite inspired, predominantly by the discovery of the perfect fluid of quarks in gold-gold collisions at RHIC. It is fun to have particles in our hands — or, in our pockets,” concluded Tamás.

For more information about the particle cards, visit: <https://sites.google.com/site/particlescardgame/>.

— Karen McNulty Walsh

### Johnson’s APS Prize from p. 1

...that Johnson helped develop have provided more insight than any other into one of the major challenges of modern physics, namely strongly correlated electronic materials.

In the second half of the 1980s, a new class of materials was discovered that could conduct electricity with no resistance to the flow of electrons. This property, called superconductivity, had been observed previously, however, the new materials could superconduct at higher temperatures than ever before achieved.

These cuprate superconductors are one example of strongly correlated materials. Whereas in most simple metals, the interactions between electrons are screened by the mutual interactions of many electrons,

in strongly correlated materials there are strong residual interactions among electrons that hold them in place. The work of Johnson and his fellow award-ees has provided considerable insight into the properties of such materials.

Although there is no agreement in the field as to the mechanism responsible for high-temperature superconductivity, the materials are already being put to the test in energy applications. These include superconducting wire to improve existing energy grids and superconducting coils for storing power from energy sources such as solar panels.

Johnson, the Chair of the Condensed Matter Physics & Materials Science Department, received his Ph.D. in physics at Warwick University in 1978. Fol-

lowing graduation, he worked at Warwick and Bell Laboratories until 1982, when he joined Brookhaven. Named a senior physicist in 2000, he became the Acting Associate Chair of the Physics Department in 2003, and Deputy Chair of the Condensed Matter Physics & Materials Science Department in 2006. He became Chair a year later. He leads the electron spectroscopy group at Brookhaven, and received the Laboratory’s Science and Technology award in 2001.

Johnson is a Fellow of the American Association for the Advancement of Science, the American Physical Society, and the Institute of Physics in the United Kingdom. He is the author of more than 160 peer-reviewed scientific papers.

— Daisy Yuhas





**BSA Noon Recital,  
Bryant Park Quartet,  
1/19**

The Bryant Park Quartet will perform a selection of music from Adams and Stravinsky through Rachmaninov and Beethoven to Haydn and bluegrass, on Wednesday, January 19, at noon in Berkner Hall. Sponsored by Brookhaven Science Associates, the concert is free and open to the public. Visitors to the Lab 16 and older must bring a photo I.D.

Based in New York City, the Bryant Park Quartet received a 2008 Chamber Music America Residency Partnership Program grant and was a prize winner in the 2010 Hugo Kauder International Music Competition.

**ASAP Annual  
Elections Underway**

Students and postdocs can vote in the Association for Students & Postdocs (ASAP) annual elections until 4 p.m. on Saturday, January 15. Vote online at <https://fsd84.bis.bnl.gov/asap/vote.asp>.

**Issues With Vytra Health Care Plan**

*The following message comes from the Benefits Office.*

The Benefits Office has been notified of several issues for those who selected Vytra health care for 2011 and those who received coverage from Vytra in 2010. Vytra is working to fix these issues, which include:

Some people who did not select Vytra during open enrollment received Vytra identification cards in the mail. Vytra sent these cards in error — those who did not select Vytra were properly enrolled in the health care plan they selected with the correct amount deducted from their salary.

Those who did select Vytra during open enrollment — including those who used Vytra in past years — should have received new identification cards for 2011 by now from Vytra for medical coverage and from CIGNA for prescription drug coverage. Those who have not yet received both cards should call Vytra at (631) 694-6565 or CIGNA at (800) CIGNA24 (244-6224) to resolve any issues.

Those who used Vytra’s mail order company Medco in the past must also switch to CIGNA’s home delivery pharmacy program through CIGNA’s QuickSwitch program now that CIGNA is providing prescription drug coverage for Vytra participants. More information for this is available online: <http://www.bnl.gov/hr/Benefits/medical/link-ablefiles/CIGNA/qckswtch.pdf>.

Vytra is working to fix these issues, however, those who need assistance or more information should call the Benefits Office, Ext. 5126 or 2877.

**Talk on Breast Health, 1/21**

In Berkner Hall, from noon to 1 p.m. on Friday, January 21, David Mangiameli, Associate Director of Breast Surgery and Services at Brookhaven Memorial Hospital Medical Center in Patchogue, will talk on breast cancer and screening tools. Additionally, he will review some modern approaches to breast cancer management, including some surgical techniques of cancer resection and reconstruction approaches. It will be an interactive question and answer session. Please register by email to Gary Welch, [gwelch@bnl.gov](mailto:gwelch@bnl.gov).

**EAP Talk on Caregiving, 1/26**

All are invited to a talk titled “The Unexpected Second Career: The Experience of Caregiving in the Early Stages of Illness,” on Wednesday, January 26, at noon in Berkner Room B. Nancy D. Losinno of the Lab’s Employee Assistance Program will discuss the psychological and cognitive signs of difficulties ahead, common themes in caregivers’ expectations, and good practices for self-care and managing stress. RSVP for this talk by contacting Michael Thorn, [mthorn@bnl.gov](mailto:mthorn@bnl.gov) or Ext. 8612.

**TIAA-CREF One-on-One Retirement Counseling**

A TIAA-CREF consultant will visit BNL on Tuesday, January 18, and Thursday, January 27, to answer employees’ questions about their financial matters. For an appointment, call 1-800-732-8353 or go on-line at [www.tiaa-cref.org/bnl](http://www.tiaa-cref.org/bnl) and select “set up a meeting.”

**BNL Fire Rescue Group Aids in Response  
To Propane Tank Leak in Nearby Town**

The BNL Fire Rescue Group rang in the New Year by assisting in the emergency response to a large propane gas tank leak early January 1 in Shirley near the intersection of William Floyd Parkway and Montauk Highway.

The leak came from a 30,000-gallon propane tank located behind Kohl’s department store at 999 Montauk Highway. BNL Deputy Chief Tim Kelly was on duty that morning when the call for assistance came in. Captain Roy Barone, along with BNL Firefighters Frank Palmeri, Joe Perry, Tim Devine, and Chris LoPreto, responded to the scene in Shirley. All members of the BNL Fire Rescue group have been trained to mitigate situations involving hazardous materials, or HAZMAT.

“It looked like theatrical fog,” Kelly said. “The entire Kohl’s parking lot was knee deep in this fog of propane gas, and it was a huge danger. One spark, one small source of ignition – maybe from a clothes dryer in someone’s

basement nearby – could have turned this vapor cloud into a fireball.”

BNL Fire Rescue partners with the Brookhaven Town fire marshal’s HAZMAT team and runs drills two to three times each year, Kelly explained. “So we work very well together. We rely on each other for response, whether we need help or they need help.”

In this case, Kelly received the call for the BNL Fire Rescue Group to join the effort shortly after the leak was reported. The local fire department was on the scene soon after 1 a.m. but realized as the sun was coming up they needed help defining and establishing the perimeter of the vapor cloud.

Barone was BNL’s operations officer on scene that morning. From his position at the incident command post set up at Brookhaven Airport, he directed the BNL crew by radio. Palmeri, Perry, Devine, and LoPreto were dispatched to the north of Sun-

rise Highway and then to the east side of the plume. Using their official pickup trucks, they surveyed the air with multi-gas detectors, which can detect trace amounts of propane. During their four hours on the scene, the team also entered some residences to check if propane was collecting in basements and other low areas.

And they helped local residents on the scene.

“People were trying to come back to get their pets,” Kelly explained. “They’d left in a rush and didn’t know their pets would be left alone for so long. But everyone did cooperate.”

In all, more than 900 homes were evacuated and more than 2,000 people had to be uprooted in the early hours of the morning. Most were not allowed back home until after 10 p.m. that night.

Kelly said the BNL team completed their perimeter work by mid-morning and returned to the Lab but were on standby for the rest of the day. — Will Safer

**Calling all Stony Brook University Alumni at BNL!  
Event: Reception, Cirque Eloize, 2/13**

All Stony Brook University (SBU) alumni at BNL are invited to a mid-winter event hosted by the Stony Brook Alumni Association, on Sunday, February 13: a 2 p.m. reception with SBU President Samuel Stanley and BNL Director Sam Aronson at the Wang Center and 4 p.m. performance of the Cirque Eloize at the Staller Center, at a very special discount price of just \$10 per ticket, with a two-ticket maximum per alum. Please RSVP by January 19 by contacting Janet Masini, Alumni Relations Coordinator, 1-877-SEA-WOLF or [janet.masini@stonybrook.edu](mailto:janet.masini@stonybrook.edu).

**SCCC Spring Course on Site at BNL**

Suffolk County Community College will offer one of the following courses (see below) on site at BNL for the spring 2011 semester, depending on enrollment. Fifteen students are needed to hold a course. Registration deadline is January 21. Employees who take college courses may apply for tuition assistance. BNL offers tuition advances or reimbursements at 75 percent for undergraduate courses. For more information, contact Starr Munson, [munson@bnl.gov](mailto:munson@bnl.gov) or Ext. 7631.

**The Structure of English:** Evolution of the English language and syntactical patterns from which English sentences are generated. Particular attention given to traditional, structuralist, and generative-transformational theories of grammar and to pedagogical and sociological assumptions underlying each. Prerequisite: ENG101 Standard English Composition.

**Introduction to Law:** Introduces an understanding of law through its forms, classifications and courses. Impact of law as influenced by political, social and economic needs; legal rights and their enforcement; federal and state course systems; and functions of administrative agencies. A study of the lawsuit, jurisdiction, pleadings, preparation of forms and role of the paralegal. No prerequisite.

**Principles of Accounting I:** Computerized enhanced instruction examines nature and purpose of accounting theory and procedures through study of accounting cycle, asset valuation and financial statements. Develops foundation of accounting knowledge for additional learning in subsequent courses. No prerequisite.

**Worker Health Protection Program**

Former BNL workers and contractors can now obtain free medical screenings for select occupational illnesses under a program headed by occupational medicine physicians at Queens College of the City University of New York.

The Worker Health Protection Program (WHPP) is part of a complex-wide DOE program called the Former Worker Medical Screening Program (FWP). This program came out of a 1996 assessment of hazardous exposures to former national lab workers. DOE concluded that some of the work-related exposures, especially at its current and former weapons production sites, were significant and warranted implementation of a medical screening program. WHPP was established in 1999 to conduct these screenings at selected weapons labs and other DOE sites.

In its current form, the program funds external teams of independent health experts who offer medical screenings to former workers who may be at risk for occupational diseases. The purpose of the screening is to detect work-related illnesses and to evaluate whether those illnesses may be associated with exposures to toxic substances. Queens College recently expanded the program to include former BNL workers and contractors.

Please note that WHPP is a separate program that complements the Energy Employees Occupational Illness Compensation Program (EEOICPA). Under EEOICPA, employees, retirees, and contractors at BNL and other DOE sites may be compensated if diagnosed with specific types of cancers and other work-related illnesses. WHPP is a medical program and does not provide compensation to workers but results may be helpful in supporting claims. To arrange a screening, call 1-888-241-1199, email [info@worker-health.org](mailto:info@worker-health.org), or visit the WHPP website at <http://www.worker-health.org/index.html>.

**CALENDAR**

**Monday, 1/17**

**Lab Closed in Observance of Martin Luther King Jr. Day**  
No Bulletin on Friday, 1/21.

**Wednesday, 1/19**

**\*BSA Noon Recital**  
Noon. Berkner Hall. Sponsored by Brookhaven Science Associates, the Bryant Park Quartet will give a free concert, open to the public. Visitors of 16 and older must carry photo ID.

**\*465th Brookhaven Lecture**  
4 p.m. Berkner Hall. Qiang Li, Condensed Matter Physics & Materials Science Department, will talk on “One Hundred Years of Superconductivity: Superconducting Materials and Electric Power Applications.” All are welcome to this free event, open to the public. Visitors to the Lab of 16 and older must carry a photo ID. See p.1.

**Thursday, 1/20**

**\*Defensive Driving, Part I**  
6-9:15 p.m. Brookhaven Center S. Room. See notice p.4.

**Saturday, 1/22**

**\*Gathering of the Slides Concert**  
7:30 p.m. Berkner Hall. The Kerry Kearney Band and Dee Harris will perform the ninth blues “Slides” concert at BNL. All are welcome; visitors to the Lab of 16 and older must carry a photo ID. Tickets are \$10 in advance, \$15 at the door. Buy tickets at the BERA Store in Berkner. See p.4.

**— WEEK OF 1/24 —**

**Monday, 1/24**

**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.

**\*Talk on ‘Intellectual Property’**  
5-7:30 p.m. Talk on “Intellectual Property” by Sean Grygdel of Fish & Richardson, NYC, part of Entrepreneurs’ Foundation Workshop Series. All are welcome. For registration & fee info, more, see p.2.

**Thursday, 1/27**

**\*Defensive Driving, Part II**  
6-9:15 p.m. Brookhaven Center S. Room. See notice p.4.

**Arrivals & Departures**

— Arrivals —

Suchit Bhattarai..... Photon Scis.  
Robert Bouchard..... Staff Servs.  
Hyung Chul Kim...Sust. En.Techs.  
Toby Miller..... C-AD  
Randy Weidner..En. Scis. & Tech.

— Departures —

James Davenport ..... Comp. Sci.  
Maxim Khodas..... Physics

**LIANS Dinner Meeting,  
Talk by Indusi, 1/19**

At the next dinner meeting of the Long Island Chapter of the American Nuclear Society (LIANS), on Wednesday, January 19, Joseph Indusi, Chair of BNL’s Nonproliferation & National Security Department, will talk on “It’s No Secret: 58 Years of National Security Programs at BNL.” The meeting will be held at Brickhouse Brewery & Restaurant, 67 W. Main St., Patchogue, (631) 447-2337. Complimentary appetizers/cash bar will start at 6 p.m., dinner at 7 p.m., and Indusi’s talk at 8 p.m. The cost is \$25/ person, which has been in part defrayed by LIANS. To reserve, leave a message with Arnie Aronson, Ext. 2606, by Tuesday, January 18.



## Classified Advertisements

### Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882. Access current job openings on the World Wide Web at [www.bnl.gov/HR/jobs/](http://www.bnl.gov/HR/jobs/).

To apply for a position, go to [www.bnl.gov](http://www.bnl.gov). Select "Job Opportunities," then "Search Job List."

**LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.**

**ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires some form of secretarial or office administrative training, plus four years of experience in substantive and relevant administrative, secretarial, clerical, or other responsible work which provides evidence of the particular knowledge, skills, and abilities necessary to perform successfully the duties of the position. In-depth knowledge of Laboratory and Department procedures and protocols related to administrative functions in order to provide guidance to associated staff, word processing, presentations and technical reports, excellent written communication, and coordination skills. Must be able to deal with confidential and personnel matters as well as the ability to work independently. It is essential that the candidate be responsible, able to adapt to an ever-changing and challenging work environment, willing to expand views and talents, and manage multiple deadlines and priorities. Minimal domestic travel may be required for security training/certification. Provide administrative and programmatic support to the Nonproliferation and Safeguards Group Leader and associated staff, including the management, direction, and coordination of all group administrative office practices, policies, and procedures. A strong working knowledge of PeopleSoft, including web requisitions and travel, is required. Must be familiar with BNL credit card ordering and associated policies. Arrange and process domestic and foreign travel. Work closely with Group Leader on administrative matters requiring use of discretion and tact in the handling of confidential personnel matters. Use and development of inter/intra Laboratory communication skills in the coordination and planning of a number of conferences, workshops and meetings both on and off site. Candidate will also provide minimal support in the absence of the Department Administrative Assistant. Must be able to obtain and maintain a DOE "Q" clearance. Nonproliferation and National Security Department. Please apply to Job ID #15626.**

**CUSTODIAN (2 Regular positions) - Under general supervision. Performs general cleaning and housekeeping duties in all Lab buildings. Hours are 3:00 a.m. - 11:30 a.m. Site Resources Division. If interested please submit transfer form to Diana Hubert, HR Division, Bldg. 400B.**

**OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.**

**HAZARDOUS WASTE MANAGEMENT TECHNICIAN - Requires an AAS in chemistry, engineering, physical sciences, or equivalent experience. Experience in working with hazardous chemicals and knowledge of associated segregations/classifications and hazard controls required. Responsibilities include but not limited to the pick-up, packaging, transportation, storing and bulking of hazardous and radioactive wastes. Additional responsibilities include completing and maintaining certifications required for the operation of the Waste management Facility. Ability to operate handling equipment and obtain a CDL. Environmental and Waste Management Services Division. Please apply to Job ID #15623.**

**SENIOR GRAPHIC DESIGNER - Must possess considerable knowledge of the entire production process. Must have extensive knowledge of typography and its usage, and the use of computer-assisted design. The term "computer-assisted design" refers to the use of hardware and software for graphic design and excludes video editing, web page design and computer programming. Must be familiar with photographic, printing, binding, finishing, and mailing processes and operations. Provides technical and artistic guidance to the Laboratory personnel and contractor representatives, as required. Must possess excellent people skills, and be able to effectively interface with customers, production personnel, and**

**supervision in coordinating production and estimating the cost of jobs. Must be able to work within tight production schedules. Under minimum supervision and with considerable latitude for the exercise of initiative and judgment, plans, coordinates and produces graphic design, layout and artwork, for use in Laboratory technical publications, administrative documents, forms, presentation graphics, and the full range of printed public information products. Community, Education, Government and Public Affairs. Please apply to Job ID #15610.**

### Motor Vehicles & Supplies

**09 HYUNDAI TOURING - 13.8K mi. 4dr wagon, red, all pwr, 32mpg, 3.5 yrs warr left, like new. \$14,500 neg. 331-7048.**  
**07 KAWASAKI ZX-6R - 5.5K mi. black, UTD maint, orig owner, new exhaust syst, pics avail. \$5,500 neg. dsnyder@bnl.gov.**  
**04 TOYOTA MATRIX XR - 96K mi. 4dr hatch, awd, silver, all pwr, alarm, new tires/batt, \$8,000 neg. Ext. 2159, 331-7048.**  
**01 MITSUBISHI ECLIPSE - 140K mi. gd running car, 4 cyl, great on gas, 800 watt Pioneer sound syst. \$2,800 neg. 383-7561.**  
**00 PLYMOUTH VOYAGER SE - 107 mi. new tires, a/t, p/w, a/c, c/c, abs, rem start, am/fm/cd. \$2,500 neg. Ext. 7013, 698-5294.**  
**99 DODGE GRD CARAVAN SE - 122K mi. rear a/c, all pwr; auto srt, video syst, 110 volt pwr cnvtr, more, \$5,000 neg. Tom, Ext. 4440.**  
**98 CHRYSLER SEBRING LXI - 75K mi. Pics avail, after mrkt rims, AF/FM/CD, Cruise, must sell. \$2,300 neg. Ext. 5684, 872-5074.**  
**RIMS W/TIRES - 4 18" RT6 Enkei 360 Perf Rims; 6 Lug; excel cond - less than a year old. Ask \$700, Paid \$1,800. Pics avail. 813-6583.**  
**TIRE - All-terrain, Michelin ATX P235-65/R17, only used 5K, mint, \$50. Ext. 3116.**

### Furnishings & Appliances

**BEDROOM FURNITURE - dresser, sm desk, twin bdrm frame, cabinet, 12" color TV, \$100/obo. Sean, Ext. 5331.**  
**BISSEL BAGLESS VACUUM CLEANER - Like New! \$20. Ext. 7007.**  
**CHROME WIRE SHELVES - 4'w x 6'h x 18"d w/caskets \$40, 3'w x 6'h x 18"d with caskets \$30. Peter, Ext. 3981, 872-8963.**  
**ELECTRIC STOVE - \$250 white/self-clean/excel cond; chrome clothes rack/\$20, filing unit/20. Nina, Ext. 5894.**  
**IKEA COMPUTER DESK - blond wood, silver legs, \$30. Pamela, Ext. 5218.**  
**KETTLE - Krups Aquacontrol - 1L compact cordless, new in box, \$25. Ext. 5873.**  
**RADIATOR-HEATER - Patton Accue-Temp oil-filled, portable w/wheels, used seldom 1/season, ask/\$25. Jane, Ext. 2198.**  
**SHARP CAROUSEL MICROWAVE OVEN - fam sz 1.4cu ft w/1100 watts; 14-1/8" turntable dish; \$75. Ext. 5873 or miesell@bnl.gov.**

### Audio, Video & Computers

**36" COLOR TV - Zenith w/remote control, great cond, like new, \$150. Judy, Ext. 5263, 375-7959 or badal@bnl.gov.**  
**APPLE MACBOOK - Mac OS X Snow Leopard, 2.4 GHz Intel Core 2 Duo, 2GB SDRAM, mch more, 2 yrs old, prot plan, \$700. Ext. 7570.**  
**CANON EOS REBEL XTi DSLR KIT - w/10.1 megapixel body, 18-55mm EF-S lens, SanDisk 512 MB CF card, much more, Ext. 5669.**  
**COMPUTER - COMPAQ ST1110NX, 40FBHD, XSEQ/dvd, XPU2.53GHz, RAM: 768MB, more, \$60; Acer LCD, \$40, more, Ext. 5049.**  
**TREND MICRO TITANIUM ANTIVIRUS - New in box, + for Windows 7, Vista or XP, \$15. Melanie, Ext. 3906.**

### Sports, Hobbies & Pets

**BOWFLEX MOTIVATOR - w/lat pulldown & leg exten, excel cond, \$400. 902-5453.**  
**ELECTRIC GUITAR - Epiphone Special II Ebony, new in box, autographed by Joe Bonamassa, \$250. 902-5453.**  
**G.I. JOES - Authentic G.I. Joe dolls in excel cond (1964-1973); some w/tags; access. also avail, Ext. 4931, signorel@bnl.gov.**  
**NORDIC TRACK PRO - exercise machine, gd cond, bought for \$600, pic avail, \$50/obo. Ext. 7505, 689-8605.**  
**SLED - Flexible Flyer Model 47, approx 40-50 yrs old, gd cond, \$20. Robert, Ext. 4637.**  
**SPRING WETSUIT - Quicksilver, Synchro 2/2 mm, short arms & legs, blk w/gray, used once, ask/\$50. Scott, sbronson@bnl.gov.**

### Tools, House & Garden

**AFGHANS - hand-crocheted, new, \$30/ea; also handmade pillowcase dolls, embroidered \$40/ea. Kathleen, Ext. 7114.**  
**CRAFTSMAN RADIAL ARM SAW - elect w/2 dr cabinet, great cond, \$200/obo. Gary, Ext. 7779 or gsteven@bnl.gov.**  
**PLUMBING PARTS - \$5 for box. 949-4046.**  
**PORTABLE BANDSAW - Bick&Dckr, \$50, 12" Dewalt metal cutoff saw \$100; 5HP B&S horiz gas eng.\$50. Ext. 3981, 872-9863.**

### Miscellaneous

**\$100 GIFT CERTIFICATE - for Sea Basin in Rocky Point selling/\$75. Linda, Ext. 7430 or lindab@bnl.gov.**  
**45 RECORDS - 60, list avail, gd cond, w/1960s holder, \$60/neg; H. Potter's No. 5 Bk *The Order Of The Phoenix*, \$10. 949-4046.**  
**BABY'S SWING - Graco Baby Swing \$25; Soft Green Boppy Pillow FREE. Pictures upon request. Rachel, irachel@bnl.gov.**



Kerry Kearney



Dee Harris

Photo: Nino Ruisi

## Ninth Annual 'Gathering of the Slides' Concert, 1/22

The annual "Gathering of the Slides," a blues concert featuring the Kerry Kearney Band and Dee Harris will be held on Saturday, January 22, at 7:30 p.m. in Berkner Hall.

Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Laboratory 16 and older must bring a photo I.D.

Back for his ninth year at BNL, Kearney performs his unique brand of upbeat blues and electrifying slide guitar that he calls "Psychedelta." The Kerry Kearney Band has performed at music festivals across the country and internation-

ally, and at well-known venues including B.B. King's and Terra Blues in New York City, as well as the Stephen Talkhouse located on the East End of Long Island in Amagansett. The band has headlined the Riverhead Blues Festival and received a Long Island Sound Award from the Long Island Music Hall of Fame.

Band members include Kearney on guitar and vocals, Frank Celenza on bass, Mario Staiano on drums, Charlie Wolf on harmonica, and Tony Campo on keyboard.

Dee Harris is a self-taught blues guitarist, songwriter, and

vocalist. He studied slide guitar with legendary guitarist Mississippi Fred McDowell. Harris has developed distinctive techniques and plays a mixture of Appalachian, Celtic, and classical Indian music. He enjoys interpreting early renaissance music and can usually be found strumming a banjo or sitar.

Tickets are \$10 in advance and \$15 at the door and can be purchased at the BERA Store in Berkner Hall or through [www.ticketweb.com](http://www.ticketweb.com). Advance ticket purchase is recommended because "Gathering of the Slides" concerts have been sold out in the past. — Jane Koropsak

**INFANT/TODDLER ROCKER - /\$25; Nina, Ext. 5894 or nrvera@bnl.gov.**

**JEWELRY - handmade, new, earrings and pins/\$5/ea; necklaces/\$10/ea. Kathleen, Ext. 7114.**

**NEED CAMERA CHARGER - for a Sony Cyber-Shot Camera, Can you help? Thanks. Linda, Ext. 7187 or niksa@bnl.gov.**

**WEDDING DRESS - Dupioni silk, [P. Blanca style Sz6 Ivory w/Fr. bustle. Fits 5'3" Needs cleaning. \$1,000 neg. 516-972-2143.**

### Community Involvement

**KARA'S HOPE BLOOD DRIVE - Foundation is hosting a blood drive on Saturday 1/15/11 from 9am-3 pm at William PACA MS in Mastic Beach. For more info contact Jeff Williams. Ext. 5587, 504-8940 or jeffwill57@live.com.**

### Happenings

**MOTORCYCLE RIDER TRAINING - learn how to ride and get a license or practice your riding skills? Certified instructors. Contact Frank D., 433-9205 or dusek@bnl.gov.**

### Free

**MIRROR - approxi 2'x 5', help me unglue from wall & you own it. Thomas, Ext. 4642.**  
**SEWING MACHINE - Sears Kenmore in cabinet. Sean, Ext. 5331.**

### Wanted

**BOXTOPS & CAMPBELL'S UPCS - for KG & 4th grade class. Also want desk for 9 yr old. Thanks. Nina, Ext. 5894.**  
**DONATIONS OF DOG/CAT FOOD - For pets of struggling families/elderly. Collection bins are in Bldgs. 134, 400, 510 (ext. 5864), 725, 901, 902. Donations to be given to local pantries/Kent Animal Shelter. Kathleen, Ext. 3161 or kratto@bnl.gov.**

### Lost & Found

**FOUND: FOLDING FAN - on 1/4/11 around 1:30pm nr cross of B'haven & Center sts. Ext. 3906 or mschwart@bnl.gov.**

### For Rent

**NAPLES, FL - 2 bdrm, 2 bath, 1414 sq ft, sleeps 6, 2nd flr lake & 17th green view; newly furn, immaculate! Affordable Golf Condo, call for pricing. 751-7023.**  
**BROOKHAVEN HAMLET - 3 bdrms, dead end country lane, walk to bay, 2 bath, lg eik, \$1,500/mo. +utils and 1/mo sec, suzy183@optonline.net, 632-286-0204.**  
**MASTIC - new 1 bdrm apt, kit-l/r combo, full bath, priv, ent, quiet area, own thermostat, util incl, nr LIRR, no smkg/pets, walk to shop, 8 min to Lab 1/mo sec. \$750/mo neg. 335-4907.**  
**MILLER PLACE - share lg furn home in prof residential area 8 mi to BNL, own bdrm, drway prkg, int/tv/utis all incl, responsible non-smkr. \$700/mo. 275-0866.**  
**PORT JEFF - 2 bdrm, 2 bath, furn, l/r/d/r combo, kit, lg screen-n-porch, w/d, incl util, no pets/smkg, priv village beach. \$1,800/mo. Mary, 928-5185.**

## Defensive Driving Course: Two Parts, 1/20 & 27

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on consecutive Thursdays, January 20 and 27, in the Brookhaven Center South Room, 6-9:15 p.m. The course is open to BNL, BSA, and DOE employees, BNL facility-users, contractors and other guests, and their family members. The cost is \$33 per person. Preregistration is required. To register, call Ed Sierra, Ext. 4080 or 821-1013, and leave a message. Or take a New York DMV approved course online at <http://www.lidrivsafe.com/>, using code: "SAVE10" for \$10 discount.

## Donations Needed to Support Troops

The AdoptaPlatoon team is collecting hot chocolate, canned food with easy-to-open lids, and instant oatmeal to be sent to the Lab's adopted platoon. Drop off your gift in boxes located at Bldg. 490, Clinic; Bldg. 400, lobby; Bldg. 488, lobby; and Bldg. 510, Library.

Please send monetary donations to: BVA, memo: "troops" P.O.Box 671, Upton, NY 11973.

## Half-Price BERA Fitness Classes

Jump start the New Year and keep those resolutions to be physically fit with half-price BERA fitness classes. Advance registration is required. Make checks payable to BERA and mail to: Recreation Office, Bldg. 400A. See *The Bulletin* from January 7, 2011 for more information.

- **Aqua Aerobics:** Tuesdays and Thursdays, January 25 – March 17
- **Pilates:** Wednesdays, January 26 – March 16
- **Yogalates (Yoga/Pilates) for Beginners:** Mondays, January 10 – March 14
- **Zumba:** Tuesdays, January 18 – March 8

**SHOREHAM - share a home w/professional, 7 mi to BNL, lg furn bdrm, int/tv/etc, incl all. \$650/mo. 516-380-2650 or gg19582003@gmail.com.**

**SMITHTOWN - 1 bdrm apt, bath, full kit, opens into l/r, off st prkg, patio, priv ent, all util, no smkg/pets, 1 mo sec. \$1,200/mo. Nancy or Bill, 360-8874 or fdagostino@bnl.gov.**

**YAPHANK - 3 bdrm hse, 1 bath, w/d, incls utils, avail Feb 1st, 10 min to Lab, near LIE. \$1,875/mo. John, Ext. 3302, 513-1619 or muller2@bnl.gov.**

### For Sale

**BAYPORT - Grt. S. Bay area, 2,300 sq. ft. ranch, approx. 1 acre, priv., wooded, 3 bdrm, 2+half ba, den, l/r/dr, kit, util rm, scrnd porch, carport, excel schls. \$585,000 or \$2,300/mo. 617-332-6264.**  
**CALVERTON - 7/rms, 2/bdrm, 2/full baths, kit, d/r, lrg l/r w/vaulted ceilings, lots character, needs some TLC! in quiet n'borhd & nr. all. \$280,000 neg. Joe, 591-2772.**

### In Appreciation

A big Thank You! to all who contributed to the United Way collection jars at the bank, Starbucks, and Post Office. We were able to donate another \$140 to United Way. — Sabine Kessler

Thank you. Laura Buscemi and I could barely keep up with all your generous contributions of new/gently used clothing & toys to the shelter. Unfortunately we have had to put this effort on hold, once again, thank you! — Kathleen Ratto

### On-Site Services

**CAFETERIA**  
**Special Raffle! Win Super Bowl Party pkge for 15! Buffalo Chicken Wings, heros, 2 salads, chips, sodas, cookies & all paper goods. Play as many times as you like, receive a raffle ticket per visit to cafeteria, no purchase necessary. Two winners to be drawn Feb. 3: winners pick up your party pkge food Feb. 4.**

**ON-SITE SERVICE STATION**  
 Is your battery weak? Get a new one, or get oil changes, all sorts of vehicle maintenance and repairs, and New York State inspections, all conveniently while you are at work. Gas and specialty services such as windshields and collector car service also available. Call to schedule an appointment, Ext. 4034.

*Services provided by BNL employees are listed on the intranet homepage at "See all ads" at bottom right, or call Ext. 2346.*