the Bulletin

BROOKHAVEN NATIONAL LABORATORY

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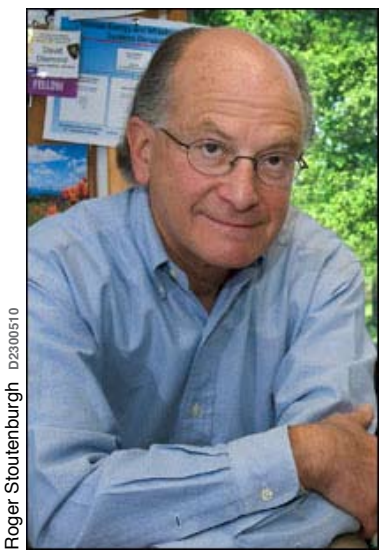
David Diamond Honored With ANS Award



Roger Stoutenburgh D2300510

David Diamond, a senior scientist in the Energy Sciences & Technology Department, has been chosen to receive the 2010 Tommy Thompson Award from the American Nuclear Society (ANS). Named in honor of Theos J. Thompson (1918 – 1970), a Massachusetts Institute of Technology professor and a member of the Atomic Energy Commission who made important contributions to nuclear reactor safety, the award recognizes individuals who have "provided outstanding wisdom and direction to key elements of world nuclear safety activities." Diamond received the award, which consists of a plaque and $1,000, at an ANS meeting in San Diego on June 15.

"I am honored to receive this award," Diamond said. "Also, I honor the contributions and dedication of colleagues throughout my long and rewarding career at Brookhaven Lab. Their dedication and camaraderie provide the motivation for me to come to work every day."

Diamond is a consultant on safety, design and related technical aspects of nuclear reactors, primarily for the U.S. Nuclear Regulatory Commission, but he has also been a consultant for other nuclear regulatory agencies around the world, with a particularly long relationship with the Canadian Nuclear Safety Commission. He does computer simulations to show how nuclear power reactors function under various transient and hypothetical accident conditions — crucial information to assure the safety of these power plants. Currently, there are 104 power reactors in operation in the U.S. and 22 in Canada. Diamond also has provided technical support for the National Institute of Standards and Technology's research reactor in Gaithersburg, Maryland, one of about 40 research reactors in the U.S.

As head of BNL's Nuclear Energy and Infrastructure Systems Division (NEISD), Diamond oversees 25 employees who analyze factors in nuclear energy systems that affect their safety. His staff includes civil, nuclear, mechanical, electrical, and human performance engineers. Recently, his division has taken on research in a new area: small reactors with about one-tenth of the power of currently operating power reactors. These proposed reactors of the future are designed to be more economical than the current generation of larger ones.

"There has been a renaissance in nuclear energy in the last few years," Diamond said. "We hope that Brookhaven Lab will be actively involved in the design and safety issues in this frontier area."

(See 'Diamond' on page 2)

Séamus Davis Elected to NAS

Photo: Cornell University

J. C. Séamus Davis, a BNL senior physicist and Director of DOE's Center for Emergent Superconductivity at the Lab, has been elected to the National Academy of Sciences, one of 72 new members and 18 foreign associates recognized this year for "distinguished and continuing achievements in original research."

The National Academy of Sciences is a private organization of scientists and engineers dedicated to the furtherance of science and its use for the general welfare. The Academy is, upon request, an official advisor to the federal government in any matter of science or technology. Election to the Academy is considered one of the highest scientific honors.

"I am amazed and delighted," Davis said. "I had never considered such an honor. The continued success of our research programs is due in great part to the wonderful collaborators with whom I have worked over the last 25 years, including Professors Richard E. Packard and Dunghai Lee at the University of Califor

(See 'Davis Elected' page 2, and Davis research story below)

First Images of Heavy Electrons in Action

Led by J.C. Séamus Davis, a team of scientists finds characteristics of "hidden order" in an unusual uranium compound and demonstrate new method for investigating long-standing physics problems

Using a microscope designed to image the arrangement and interactions of electrons in crystals, scientists have captured the first images of electrons that appear to take on extraordinary mass under certain extreme conditions. The technique reveals the origin of an unusual electronic phase transition in one particular material, and opens the door to further explorations of the properties and functions of so-called heavy fermions. Scientists from BNL, McMaster University, Canada; Los Alamos National Laboratory, the Canadian Institute for Advanced Research, Ontario; the Max Planck Institut, Germany; and the University of St Andrews, Scotland, describe the results in the June 3, 2010, issue of *Nature*.

"Physicists have been interested in the 'problem' of heavy fermions — why these electrons act as if they are hundreds or thousands of times more massive under certain conditions — for 30 or 40 years," said study leader Séamus Davis, a physicist at BNL and the J.D. White Distinguished Professor of Physical Sciences at Cornell University. Understanding heavy fermion behavior could lead to the design of new materials for high-temperature superconductors. Superconductivity allows materials to carry current with no energy loss.

In the current study, the scientists were imaging electronic properties in a material composed of uranium, ruthenium, and silicon that itself has been the subject of a 25-year scientific mystery. In this material — synthesized by Graeme Luke's group at McMaster — the effects of heavy fermions begin to appear as the material is cooled below 55 kelvin (-218 °C). Then, an even more unusual electronic phase transition occurs below 17.5K.

Scientists had attributed this lower temperature phase-transition to some form of "hidden order." They could not distinguish whether it was related to the collective behavior of electrons acting as a wave, or interactions of individual electrons with the uranium atoms. Alexander Balatsky, a Los Alamos theoretical physicist at the Center for Integrated Nanotechnologies, provided guidance on how to examine this problem.

With that guidance, Davis' group used a technique they'd designed to visualize the behavior of electrons to "see" what the electrons were doing as they passed through the mysterious phase transition. The technique, spectroscopic imaging scanning tunneling microscopy (SI-STM), measures the wavelength of electrons on the surface of the material in relation to their energy.

"Imagine flying over a body of water where standing waves are moving up and down, but not propagating toward the shore," said Davis. "When you pass over high points, you can touch the water; over low points, you can't. This is similar to what our microscope does. It images how many electrons can jump to the tip of our probe at every point on the surface."

From the wavelength and energy measurements, the scientists can calculate the effective electron mass.

(See ' Heavy Electrons Imaged' on page 2)

BNL Chemists Receive Patents For Fuel-Cell Catalysts

New catalysts reduce costly platinum use and increase its effectiveness in fuel cells

Chemists at BNL have received three patents for developing catalysts to accelerate chemical reactions in fuel cells. The newly patented catalysts, as well as a method for making a particular type of catalyst with a thin layer of platinum, could greatly reduce the cost and increase the use of fuel cells in electric vehicles. The catalysts and the technique are available for licensing.

Platinum is the most efficient catalyst for fuel cells. However, the platinum-based catalysts are expensive, unstable, and have low durability. The newly patented catalysts have high activity and stability, while containing much less platinum than the amount used in current fuel cells, so their cost is reduced.

The DOE Office of Science and DOE Office of Energy Efficiency & Renewable Energy funded the research that led to these patented technologies.

"Fuel cells are expected to become a major source of clean energy that can impact both transportation and stationary power sectors," said Radoslav Adzic, the principal researcher in all three patents. "They have several advantages for automotive applications and can be used extensively in electric cars if the technology can be made to work efficiently and economically. Developing these electrocatalysts is a big step in that direction."

Several types of renewable fuel — such as hydrogen, ethanol or methanol — may be used in fuel cells. A hydrogen fuel cell, for example, converts hydrogen and oxygen into water, and, in the process, produces electricity. Hydrogen is oxidized by separating into negatively charged electrons and positively charged ions with the help of a catalyst at the fuel cell's negative pole, the anode. Electrons then travel to the positive pole, the cathode, creating electricity with their movement. At the cathode, with the aid of a catalyst, oxygen gains electrons, resulting in oxygen reduction, and combines with hydrogen ions forming water, the only by-product of a hydrogen/oxygen fuel cell.

Roger Stoutenburgh D4620410

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(From left): Kotaro Sasaki, Miomir Branko Vukmirovic, and Radoslav Adzic

Two of the BNL chemists' patents were awarded for catalysts that speed up oxygen reduction. One is composed of a thin layer of platinum on palladium nanoparticles, which is more efficient than current catalysts. The other includes metal oxides, such as niobium oxide and ruthenium oxide, with a thin layer of platinum. The patent also covers a unique method for depositing a thin layer of platinum on the metal-oxide catalysts.

Compared to the patented platinum-palladium catalyst, the metal oxides combined with platinum are more stable and cost-effective, although the catalytic efficiency is not as high. Thus, the patented catalysts are complementary and can be tailored for various applications.

> The newly patented catalysts . . . could greatly reduce the cost and increase the use of fuel cells in electric vehicles.

The scientists also received a patent for adding gold clusters to platinum-based catalysts. In the reactions during the stop-and-go driving of an electric car, platinum dissolves, which reduces its efficiency as a catalyst. But the researchers have overcome this problem by adding a very small amount of gold to the platinum-based catalyst. With the addition of gold, the platinum was kept intact during an accelerated stability test, which mimicked the stop-and-go conditions of an electric car. The gold clusters protected the platinum from being oxidized, which stabilized the platinum, making possible improved platinum-based catalysts.

U.S. patent 7,691,780 B2 for the development of platinum-palladium catalysts, was issued to BNL's Adzic and Miomir Branko Vukmirovic, along with Junliang Zhang and Yibo Mo, formerly of BNL. Adzic, Vukmirovic and Kotaro Sasaki of BNL received title to U.S. patent 7,704,918 for metal oxide-platinum catalysts and their unique method of making them. Adzic and Zhang received U.S. patent 7,704,919 for adding gold clusters to platinum-based electrocatalysts. — Diane Greenberg

For information about licensing these patents, contact Kimberley Elcess at 631 344-4151, or elcess@bnl.gov.

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.*
- *Additional information for Hospitality may be found at www.bnl.gov/hospitality/calendar.asp.*
- *Most events below are organized through the Quality of Life/BERA/Recreation Office, Bldg. 400, http://www.bnl.gov/bera/*

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes
Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See *http://www.bnl.gov/esol/schedule.asp* for schedule. Jen Lynch, Ext. 4894

Mondays & Thursdays: Kickboxing
$5 per class. Noon–1 p.m. in the gym. Pay as you go. Ext. 2873.

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

Tues.: Hospitality Welcome Coffee
Will resume in September.

Tuesdays: Zumba
Will resume in September.

Tuesdays: Knitting Class
2–4 p.m. Berkner Hall lobby until Sept. All levels of skill. Free. Call Ext. 5090 to confirm.

Tuesdays: Toastmasters
Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests and visitors welcome. *www.bnl.gov/bera/activities/toastmstrs/*.

Tue., Wed., & Thurs.: Rec Hall Activities
5:30–9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Tuesday & Thursday: Aqua Aerobics
5:30–6:30 p.m., Pool. Will resume in September. Ext. 2873.

Wednesdays: On-Site Play Group
10 a.m.–noon. Apartment area playground for summer. Infant/toddler drop-in event. Parents meet while children play. Ext. 2873. See *http://www.meetup.com/BNL-Playgroup/*

Wednesdays: Yoga
Noon–1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, *ila@bnl.gov*.

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. Tim Devine, Ext. 2350.

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

Fridays: Family Swim Night
5–8 p.m. BNL Pool. $5 per family. Ext. 2873.

Fridays: Family Gym Night
5–8 p.m. Family gym activities. Free. Ext. 2873.

'Diamond' *(cont'd)*

After earning a Ph.D. in nuclear engineering from the Massachusetts Institute of Technology, Diamond joined BNL as an assistant nuclear engineer in 1968. He rose through the ranks to become division head of NEISD in 2001. Diamond is a Fellow of the ANS.

— Diane Greenberg

In Memoriam

Robert Larson, who joined the Alternating Gradient Synchrotron Department as a development engineer II on May 21, 1962, and retired as a research engineer I from the National Synchrotron Light Source Department on September 30, 1995, died on November 16, 2009. He was 75.

Small Business Workshop At Stony Brook, 7/14

The Stony Brook Small Business Development Center announces the next in its free workshop series, "The Direction of Renewable Energy." BNL is a sponsor of this series. The next workshop, "Small Business Innovative Research & New York State Energy Research & Development Authority Grants," will be held on Wednesday, July 14, 8:45 a.m.- noon, at the Small Business Development Center Training Center, Bldg. 17. For advance registration and directions, call 631-632-9837.

Congratulations, 2009 Perfect Attendance Employees

Roger Stoutenburgh D0070510

Photographed with Chief Human Resources Officer Tony Bowman (front, fourth from left) during the 2009 Perfect Attendance celebration on May 4 at Berkner Hall are several of the 40 Perfect Attendance Award winners of 2009. Each winner received a certificate and a T-shirt with their $200 prize. The winners are listed below alphabetically in their departments/divisions with the number of years they have won this perfect attendance prize after their name. *Biology Department:* Phyllis Tinsley-Smith, 18; *Community, Education, Government & Public Affairs:* Cornelius Jackson, 15; Alex Reben, 15; and Joseph Rubino, 4; *Energy & Utilities Division:* Richard Lutz, 15; *Fiscal Services Division:* Anne Schroeder, 1; *Laboratory Protection Division:* Mark Opisso, 4; Gary Schaum, 13; Ralph Vega, 3; *Maintenance & Fabrication Services Division:* Eugene Barrow, 5; Keith Jackson, 2; Philip Kennelly, 1; Randolph Seibel, 13; *Physics Department:* Kevin Casella, 2; *Procurement & Property Management Division:* Eva Callister, 10; Dhruba Ghimiray, 13; Lewis Jackson, 3; Peter Realmuto, 8; Clarence Wilkins, 6; Shelby Williams, 15; *Site Services Division:* Wayne Boyd, 3; Robert Callister, Jr., 7; Dale Galante, 1; Ralph Giordano, Jr., 8; Darren Harris, 8; Douglas Harris, 1; Jerry Hobsen, 7; Lisa Metz, 10; Michael Pedersen, 2; Andrew Trent, 5; Johnnie Turner, Jr., 6; Jeannette Vera, 3, and Salvatore Zarba, 4; and *Staff Services Division:* Shirley Ayers, 3; Jean Bunselmeyer, 7; Bryan Hanlon, 10; Frances Smith, 2; and Brenda Turner, 3.

At a ceremony held at the Brookhaven Center on May 4, Chief Human Resources Officer Tony Bowman, with Robert Kelly of the Human Resources and Occupational Medicine Division, congratulated 40 BNL employees on their excellent records of "Perfect Attendance" during 2009, and presented each with a certificate, $200, and a T-shirt with the number of years of perfect attendance the winner has achieved. The annual event is held by BNL in recognition of the commitment and service provided by full-time employees on the technical and clerical schedules who used no sick leave during the previous calendar year.

The Perfect Attendance award was first given in 1992, when full-time employees on the technical and clerical schedules were recognized for having used no sick leave during 1991. In 1995, these employees and those from the Paper, Allied-Industrial, Chemical & Energy Workers International were joined in eligibility for the award by BNL employees represented by the International Brotherhood of Electrical Workers. In 1998, members of the Suffolk County Security Police Association in the Safeguards & Security Division also became eligible for the prize.

This year, as previously, many awardees had achieved multiple years of perfect attendance: five won for the first time, five for the second time, six for the third, three for the fourth, two for the fifth time, two for the sixth time, three for the seventh time, and three for the eighth time. Eve Callister, Lisa Metz, and Brian Hanlon won for the tenth time, Dhruba Ghimiray, Gary Schaum, and Randolph Seibel won for the thirteenth time; Cornelius Jackson, Richard Lutz, Alex Reben, and Shelby Williams for the fifteenth time — and Phyllis Tinsley-Smith, BNL's all-star top-of-the-bill show-stopper, won for the eighteenth time. Employees who became eligible for the prize after its inception have often served BNL with additional years of perfect attendance that are on record elsewhere.

'Heavy Electrons Imaged' *(cont'd)*

"This technique reveals that we are dealing with very heavy electrons — or electrons that act as if they are extremely heavy because they are somehow being slowed down," Davis said.

The detection of "heavy electron" characteristics below the second transition temperature provides direct experimental evidence that the electrons are interacting with the uranium atoms rather than acting as a wave.

In the case of the uranium material, the electron slowdown lasts only a tiny fraction of a second at each uranium atom. But because kinetic energy and mass are mathematically related, the slowdown makes it appear as if the electrons are more massive than a free electron.

Besides revealing these interactions as the source of "hidden order" in the uranium compound, Davis's study shows that the SI-STM technique can be used to visualize heavy electrons. That in turn opens the door to more ways to investigate and visualize this phenomenon.

The research team is continuing to probe a variety of related compounds with this new approach to further their understanding of heavy fermion systems.

This research was funded in the United States by the DOE Office of Science and in Canada by the Natural Sciences and Engineering Research Council and the Canadian Institute for Advanced Research. At BNL, this research was supported as part of the Center for Emergent Superconductivity, an Energy Frontier Research Center funded by the DOE Office of Science.

— Karen McNulty Walsh

For more information, go to *http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1130* and "Imaging the Fano lattice to 'hidden order' transition in URu2Si2," by A.R. Schmidt, M.H. Hamidian, P. Wahl, F. Meier, A.V. Balatsky, J. D. Garrett, T.J. Williams, G.M. Luke & J.C. Davis, *Nature* 465, 570–576 (03 June 2010).

Inventory Warehouse Shutdown, 6/25 Enter all Pick Tickets by Noon, 6/23

All inventory stockrooms will be closed on Friday, June 25, while a physical inventory is completed. During this time, no pick tickets will be processed and no material will be received.

Employees are encouraged to plan their stock needs beforehand. Please enter all pick tickets by noon on Wednesday, June 23, to allow time for material to be picked and distributed before the inventory count. An e-mail will be sent out when the system is turned back on the following week.

To process emergency stock requests or for more information, contact Frank D'Agostino, Ext. 2597 or Pat Jencius, Ext. 2300.

Employee Lunchtime Tour: Water Treatment Facility, 6/25

BNL's clean, fresh, safe water is provided year round. On Friday, June 25, the Employee Lunchtime tour will visit the BNL Water Treatment facility to learn how the quality of Lab water is kept to its excellent standard. The tour group will meet in the upper lobby of Berkner Hall at noon and will return by 1 p.m. No registration is necessary. For more information, call Ext. 2400.

'Davis Elected' *(cont'd)*

nia, Berkeley, and Professors Shinichi Uchida and Hidenori Takagi at the University of Tokyo, Japan."

Davis, who is also the J.G. White Distinguished Professor of Physical Sciences at Cornell University, and the Scottish Universities Physics Alliance (SUPA) Distinguished Research Professor of Physics at the University of St. Andrews in Scotland, specializes in research to illuminate the behavior of superconductors, superfluids, and supersolids.

Davis earned a B.Sc. in physics from the University College Cork at the National University of Ireland in 1983 and Ph.D. in physics from the University of California, Berkeley (UC Berkeley), in 1989. He came to Brookhaven Lab in 2007 as a senior physicist, and in 2009 was appointed Director of DOE's Center for Emergent Superconductivity, one of 46 Energy Frontier Research Centers established last year by DOE. Also in 2007, he became SUPA Distinguished Research Professor of Physics at the University of St. Andrews.

A Fellow of the American Physical Society and the Institute of Physics, Davis has won numerous awards for his work, including the National Science Foundation's Young Investigator Award and the Packard Fellowship in Science and Engineering. He received the Miller Research Professorship at UC Berkeley in 1997, the Outstanding Performance Award from LBNL in 2001, the Fritz London Memorial Prize in 2005, and the Heike Kamerlingh-Onnes Prize in 2009.

The DOE Office of Science, the US Office of Naval Research, the US National Science Foundation, Cornell University, and the UK Engineering and Physical Sciences Research Council fund Davis's work. — Diane Greenberg

For more information, see *http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1133*.

Robert J. Lang to Speak On Modern Science of Origami


Photo by Stephen A. Heller

Robert J. Lang, who is recognized as one of the world's leading masters of origami, will give a talk on Thursday, June 24, at 4 p.m. in Berkner Hall. Sponsored by Brookhaven Women in Science, the talk, titled "From Flapping Birds to Space Telescopes: The Modern Science of Origami," is free and open to the public. All visitors to the Lab age 16 and older must carry a photo ID.

During the 1990s, the development and application of mathematical techniques to origami revolutionized this centuries-old Japanese art of paper folding. In his talk, Lang will describe how geometric concepts led to the solution of a broad class of origami-folding problems. Conversely, algorithms and theorems of origami design have shed light on long-standing mathematical questions and have solved practical engineering problems. Lang will discuss how origami has led to huge space telescopes, safer airbags, and more.

Robert J. Lang is a pioneer in computational origami and the development of formal design algorithms for folding. With a Ph.D. in applied physics from the California Institute of Technology, he has authored or co-authored over 80 technical papers and has been awarded 45 patents in lasers and optoelectronics.

Along the way to his current career as a full-time origami artist, Lang worked at the NASA/Jet Propulsion Laboratory, Spectra Diode Laboratories, and JDS Uniphase, holding scientific and management positions. He has authored, co-authored, or edited nine books on origami. He is also editor-in-chief of the IEEE *Journal of Quantum Electronics*.

BNL Radiation Protection Program Changes

All staff who have RAD GERT and Contamination training must complete a 5-minute new training course by June 28

In June 2007, 10CFR 835, Occupational Radiation Protection Rule was amended to clarify radiation protection requirements. In ensuring changes to the program are communicated and understood by radiological workers, an updated training course 10CFR835 was developed and added to the BNL Training Website. The new course takes approximately five minutes to complete and can be accessed from the BNL training web courses page *http://training.bnl.gov/demo/courses/index.html*. The course includes an overview of:

1. The basis for revising 10CFR835
2. Changes in terminology
3. Impacts to the BNL Radiation Protection Program (e.g., radiation weighting factors, sealed source accountability levels)
4. Impacts to contamination and benchtop dispersible workers
5. Minor changes to your Annual Dose Report

All staff who are required to have Radiological Worker I, General Employee Radiation Training (GERT), and Contamination training must complete the updated training no later than June 28. Individuals who fail to complete the updated training by the date listed above will be unable to perform work in areas controlled for radiological purposes until the training is completed.

BERA Events, Trips

The Brookhaven Employee Recreation Association (BERA) is happy to welcome all members (members are everyone with a BNL badge) — to join in club activities, take trips, etc.

At the BERA Store in Berkner Hall, open weekdays, 9 a.m.-3 p.m., you can buy a ticket (non-refundable) for trips or for concerts that are to be held at the Lab, such as the two concerts this weekend (see page 4). For more information, go to: *http://www.bnl.gov/bera/recreation/events.asp* or stop by the BERA Store, which also sells cards, tee-shirts, items with the BNL logo, and more.

Some of the events you may want to participate in are listed below:

• Ducks home games. $10/ticket. See spreadsheet of home games for the 2010 Season, *http://www.bnl.gov/bera/recreation/events.asp*.

• Tues., 7/6 (Lab Holiday) - Six Flags, MA. $35/pp. Depart BNL, 7 a.m., dep. Park, 5 p.m.

• Sat., 7/10 - *Promises Promises*, 2 p.m. Broadway Theatre. $116/pp Dep. BNL 9 a.m., dep. NYC after the show.

• Sat., 7/17 - Brooklyn Bridge Walking Tour, $30/pp. Dep. BNL 7:30 a.m., 2-hr tour from 9:30 a.m, walk over bridge; then lunch, shopping on your own. Pick up: 3 p.m.

• Sun. 7/25 - *Addams Family*. 3 p.m. Lunt Fontanne Theatre, Broadway. $107/pp. Dep. BNL 10:30 a.m., leave after the show.

• Tues., 6/27 - METS vs. Cardinals. $43/pp, under 21s must be with a parent. Dep. BNL 4 p.m., 7:05 p.m. Leave by 11:30 p.m.

• Sat. 7/31 - Bus to the Bryant Park area of NYC for "Do As You Please" day trip. $15/pp, dep. BNL 10 a.m.; dep. NYC, 6 p.m.

• Friday, 8/6 - Tickets will be sold from 6/25. Evening dinner Skyline Princess Cruise, see Statue of Liberty, more. $105/pp. Dep. BNL 4:30 p.m., dep. after boat docks, approximately 11 p.m.

• Sun. 8/8 - Bus to Battery Park downtown Manhattan for "Do As You Please" day trip. $15/pp, dep. BNL 10 a.m., dep. NYC, 6 p.m.

• Fri. 8/13. METS vs. Phillies - $38/pp. Dep. BNL 4 p.m., leave no later than 11:30 p.m. If under 21, he/she must be with a parent.

BSA Noon Recitals: Pianofest Returns, 6/30 and 7/28

Participants in Pianofest, a summer workshop held in the Hamptons, will be showcased in two recitals at BNL, on Wednesday, June 30, and Wednesday, July 28, at noon in Berkner Hall. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concerts are free and open to the public. All visitors to the Lab age 16 and over must bring a photo I.D.

Pianofest is an East Hampton-based intensive workshop, now in its 22nd season, that addresses the fine points of professional pianism. Its alumni have gone on to make their mark nationally and internationally. For each recital at Brookhaven, the workshop's founder and director, Paul Schenly, will select outstanding Pianofest participants to perform a varied program from the great classical repertoire.

For more information on Pianofest, go to *http://www.pianofest.com*.


Joseph Rubino D1940704

Summer Science Explorations At BNL's Science Learning Center

BNL employees are invited to register their children for the 2010 Summer Science Explorations Program, which is a free offering from the Lab's Science Learning Center. The three-day summer camp will be held on Tuesday through Thursday, from 8:30 to 11:30 a.m. for students entering 4th – 6th grades. The focus of the camp's first two days is the planet Mars. Through various experiments and activities, students will gain an understanding of the planet's environment and of Rover technology, and they will also design and build a habitat to sustain human life. During the third day, "environmental day," students will go to Weaver Road Pond and learn about habitats. These programs, offered by BNL's Office of Educational Programs (OEP), center on research done at the Lab. The children are mentored by OEP science educators, research staff and pre-service teacher interns.

The weeks of July 20 and August 3 have been reserved for the children of the BNL community. Space is limited, so register your child/grandchild early by contacting the Science Learning Center office, Bldg. 400, Ext. 4495. Students must attend all three days and the parents of participating children are welcome to attend.

Prepare to Run/Walk at Jones Beach, 8/3

Many BNL runners and walkers will participate in the Marcum & Kliegman Workplace Challenge again on Tuesday, August 3, at 7 p.m. at Jones Beach. If you're interested in participating or volunteering, contact Betty Elder, Ext. 3562; or Jim Marron, Ext. 6222.

Additionally, to get ready for this event, BNL's Health Promotion Program Coordinator, Michael Thorn, is hosting a readiness session on Wednesday, June 30, in the Medical Department Large Conference Room, Bldg. 490. You must preregister at *mthorn@bnl.gov* or Ext. 8612 to attend. During this session, Jennifer Gatz, who is a competitive runner and triathelete, will hold a Q & A session with advice on 5-kilometer training and racing. Remember to RSVP!

CALENDAR

Friday, 6/18

***Acoustic Bluesman Concert**

8 p.m. Brookhaven Center. Paul Geremia will play. Ticket info. on pg. 4.

Saturday, 6/19

***Young Musicians Play BNL**

7:30 p.m. Berkner Hall. The Sheppard Brothers, Calico Galazy, and The Well, will play. Ticket info. pg. 4.

— WEEK OF 6/21 —

Wednesday, 6/23

Order Lab Inventory Stock by Noon

On Friday, 6/25, Lab stockrooms will be closed for inventory. Please enter all pick tickets by noon today, 6/23. See notice, pg. 2.

Thursday, 6/24

***Talk on Modern Science of Origami**

4 p.m. Berkner Hall. Robert J. Lang will talk on "From Flapping Birds to Space Telescopes: The Modern Science of Origami." Sponsored by Brookhaven Women in Science, the talk is free and open to the public. Visitors to the Lab of 16 and older must carry a photo ID. See notice above, left.

Friday, 6/25

BJ's Wholesale Club

11 a.m.-1:30 p.m. Berkner lobby. Discounts for memberships.

***Employee Lunchtime Tour**

Noon. Berkner Hall lobby. Meet with others to be taken to the BNL Water Treatment Facility to learn how Lab water is kept to an excellent standard. No registration necessary. Return to Berkner by 1 p.m. See notice, pg. 2.

— WEEK OF 6/28 —

Monday, 6/28

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, 6/30

CostCo Company

11 a.m.-1:30 p.m. New memberships at $50.

BSA Noon Recital: 'Pianofest'

Noon. Berkner Hall. Talented pianists in the "Pianofest" workshop will play. Sponsored by BSA, this free concert is open to the public. Visitors to the Lab of 16 and older must carry a photo ID. See notice above, left.

458th Brookhaven Lecture

4 p.m. Berkner Hall. Mary Bishai, Physics Department, will discuss neutrinos in a talk titled "Fire, Earth, Water, Iron — Harnessing the elements to study Nature's most elusive elementary particle." All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and older must carry a photo ID. Refreshments will be offered before and after the talk.

On-Site Garage Is Open

It may be harder than usual to get to the on-site gas station, where the new management welcomes BNLers who dare to take the detours around the construction to get there. The detours are clearly marked and it's convenient to get gas, repairs, and NYS inspections done on site. Try it!

Arrivals & Departures

— Arrivals —

Kelly Carroll..... Physics
Grace Giuffre ..... Budget Office
Christine Melbihess... Finance Dir.
Dario Stacchiola .....Chemistry
Kevin Whelan..... Medical
Shinyae Yoo .....Comput. Science

— Departures —

Mikhail Feygenson ..... CMP/MS

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. 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 many more current job openings on the World Wide Web at *www.bnl.gov/HR/jobs/* and see also *http://www.bnl.gov/HR/careers/*

To apply for a position, go to *www.bnl.gov*. Select "Job Opportunities," then "Search Job List."

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

MECHANICAL SR. TECHNICAL SPECIALIST (T-3) - The NSLS–II Project seeks a well-qualified individual to provide support to the magnet–girder integration system. The candidate will be responsible for the high-precision positioning of multiple magnets onto common girders with a very high degree of accuracy as well as the sequential build-up of these magnet-girder assemblies for the NSLS–II Project. This will involve the use of lasers, inclinometers, precision levels and other sophisticated inspection equipment. Other responsibilities include performing incoming inspection of magnets, pressure and flow tests, electrical tests, and various mechanical assembly tasks. Requires an associate's degree in engineering or equivalent and six years of relevant experience. Demonstrated proficiency and safe use of hand tools, forklifts, pallet jacks, electrical testing and machine shop equipment are required. Must have good communication skills, experience with basic PC software and must have flexibility of working on the 2nd shift. Must have the ability to make sound technical decisions with minimal technical direction. He/she will have to teach, train, direct, and coordinate the efforts of other, less experienced, technicians to achieve these goals successfully. Demonstrated leadership capability is preferred. National Synchrotron Light Source II. ERAP eligible: $500. Apply to Job ID #15390.

Motor Vehicles

05 MAZDA 3 HATCHBACK – 23K mi. rem contrl, pw, pd, ps, ac, 4 whl ABS F/R side airbag, $10,500 neg. Tao, wangt@bnl.gov.

01 LINCOLN CONTINENTAL – 32.5 mi. Ltd Ed, fully loaded, rem strt, stnlss steel trim, vinyl top, gar, perf. cond. $8,500. 208-0009.

01 SUZUKI BANDIT 600S (GSF600S) – 31K mi. overall gd cond, Ridden yr rnd in TX, $2,000. Brent, Ext. 2455, bbuetow@bnl.gov.

00 HYUNDAI ELANTRA GLS – 147K mi. gd cond, great mileage, a/c, heater working great. $1,800 neg. Syed, 344-2770.

87 5TH WHEEL FLEETWOOD PROWLER – grt cond, lg rr windw, q/bed, slps 6, everything works, . $3,000 neg. 241-1006.

4 TIRES – 215-65-15 excel cond, $100/neg. Ext. 5265.

SPARE TIRE – for '01 Ford Taurus, can be full size or compact. Sal, Ext. 4039.

THE CLUB – antitheft device for car steering wheel, 3 keys, new cond, $15. Kelly, Ext. 4901 or kellys@bnl.gov.

Boats & Marine Supplies

26' WELLCRAFT NOVA SPYDER – '87 spdboat, w/twin 350 merc cruiser's and tandem trailer, $4,000 neg. Bob, 235-9405.

28' CRUISER – '92 Rinka Fiesta V 260, prof maintd, w/84 roller Load-Rite Trailer, new top/prop, in water mid-Jne, $9400. Ext. 4320.

Furnishings & Appliances

BABY STROLLER – Graco dble, brown and green, immac cond, orig/$209, ask/$125. Marcel, Ext. 5517, 767-0357.

BUREAU – antique oak, beveled glass mirror in carved oak removable frame, drawers, 2 over 2, $265. 878-0898.

CHILD/TEEN BDRM – 7/pc light gray laminate; corner desk, bed, chest w/wide bkshelf; 2 chests, cabinet/$400. 689-8092.

CHILD/TEEN BUNK+DESK BED – all wood, desk pull out bed lists/$1,659, ask/$400, Ron, 379-0742.

DINING RM SET – Solid walnut, 6 chrs & custom glass top, $295. And kids furniture & master bdrm sets availbl. 698-3543.

ELECTRIC STOVE – gd cond. self-cleaning; $250; filing cabinet, metal, fits 11x8.5 paper, 2/drwer/$20; for charity, 475-1297.

ELECTRIC WHEELCHAIR – new, Jet 3 Ultra, 300 lb capac, pic avail, $1,000. 821-1271.

FREEZER – Frost Free 20 cu feet upright freezer $245. 698-3543.

HEADBOARD – brass plated king size headbrd, $25/like new. Joe, 281-4459.

LIFT CHAIR – pride, 2 position, burgundy, great cond, photo avai, $400. 821-1271.

MOVING SALE – Wall Units: one 5-sectn 12' w/gray mirror front, $370. Walnut Veneer 3 sect. - $60. White 2 sect. - $50. 698-3543.

MULTIPLE SOFAS – Moving Sale - 7 PC sectnl floral $245. black leather sofa $100. Queen sleeper sofa black $170. 698-3543.

ROLLATOR WALKER – less than 1 yr old, has basket on front and folding seat, burgundy, photo avail, $50. 821-1271.

SERTA PEDIC MATTRESS – full size w/box spring full size, $350, in great cond. Mary, Ext. 2711 or mchuc@bnl.gov.

SOLID CHERRY DRESSER - w/sep wall mirror, classic, excel cond, 7 Eng. dovetail drawers, pics avail, price neg. Ext. 4931.

TODDLER TOYS – various prices. Mary, mmccabe@bnl.gov.

Audio, Video & Computers

DELL LAPTOP BAG MF875 – unused, fits 12.1" laptop, blck nylon, padded slot, handles, shoulder strap, $25. schlock@bnl.gov.

LINKSYS WRT54G ROUTER – $25. Mark, Ext. 3970 or mwahlert@bnl.gov.

TV – 36" SONY KV36FS200 w/rem, s-video, stereo, 3-compon inputs, anal in/out, spkrs, PNP, PIP, cbl rdy, $150/obo. 399-5189.

Sports, Hobbies & Pets

'95 POP-UP CAMPER – Coleman sleeps 4-5, porta potty, portble stove, no elect/water. $1,200/neg. Leo, Ext. 3823.

2000 KOUNTRY COMFORT RV - 36' – cust. Ltd Ed w/d, 2 slide outs, cabinets/couches/loveseat, pics, $9,500. Rick, Ext. 3005.

89 TERRY CAMPER – 29' w/mster bdrm, slps 2 w/bunkbeds, kit table, 6 spkr stereo, all works, pics, $5700/obo. Ext. 4931.

AQUARIUM – fresh water $40/neg, incl 30 gal tank, aqua tech filter, new catridges for filter, some colorful guppies. 344-2770.

BUNNIES – presently have 5 avail, call for more info. 827-1416.

DOG COLLARS – 2 new prong training collars 3.8mm/22" w/rubber coated tips, $10/ea. Kim, Ext. 7465 or khayes@bnl.gov.

ELLIPTICAL – Nordictrack CX998, excl cond, 10 wkout prog, carb counter, EKG heart mon, more, ask/$300. 399-3098

HIP AND THIGH MASTER – "Body by Jake" exercise equip; barely used; ask/$25/Pd/$125. signorel@bnl.gov.

SCOOTER & BIKE – Razor scooter, burnt-orange color, suit girl or boy, $35; girl's purple bike, excel cond, $40. 516-241-4598.

SEA KAYAK – Wet Willy Spirit, 17'x24", 13.5"h wood deck, carb/kevlar hull seward rudder syst, 59lbs, $1900/neg. 281-7873.

Tools, House & Garden

PERENNIALS: – hydrangia, hosta, iris, liatris, cone flowers, lilies, vinca vine. $4/each, will deliver to BNL. 905-8222.

Miscellaneous

BABY'S CHANGING TABLE – $25, white wood, 2/shelves; Baby Swing/$25, pics avail; clothes rack, $24. For charity. 475-1297.

24" RCA TV – combo w/36"x24"x60"/solid oak cabinet; stairmaster 4K-Pt/barely used, pd/$2K; 9'x10'oriental rug w/pad; Craftsman gas/weedwacker,32cc, 1.9 cu in, all excel, make offer(s). 928-6930.

BROOKSTONE LEG MASSAGER – double leg & ft elect massager, hardly used, orig/$500, $125/obo. 516-241-4598.

CLOTHING FEST – girls', gd cond, 0-7 yrs. Petite size skirts. $3+/item, some designer labels; call to view, Medford. 475-1297.

COUPON ORGANIZERS – that attach to a shopping cart, comes w/labeled tabs, avail at cost, $5/ea. Michael, Ext. 8612.

GLIDER & OTTMAN SET – med-color wood w/beige fabric, $50. mmccabe@bnl.gov.

IN-POOL STAIRS – for 4' pool w/removable stair rails from pool to deck or patio, pic, ask/$150, u pic up. Frank, Ext. 5920.

KID CLOTHES – Girl up to 6yrs old and boys up to 18 mos, excel cond, name brand, $1/ea pc. mmccabe@bnl.gov.

Car Pool

PLAINVIEW – establised 3-person car pool meeting in Plainview looking for 4th person, 8-4:30. Ron, Ext. 6068.

Happenings

CRUISE – 7-Day Apr 10, 2011: Cayman Islands, Cozumel, Isla Roatan & Belize w/2 days at sea. $789.72pp dbl occup Dep req'd. Kim, Ext. 7465, 399-3098.

Free

CAT – Need good home for indr cat, spayed, very friendly, pics avail or contact me to meet her. Bob, 516-805-3178.

CHINA CABINET – w/2 pieces, can sep, ea pc 76hx32wx18d, engraving on drs, lights inside, pics. Ext. 7472, loftus@bnl.gov.

COMPUTER MONITOR – 15" eMachines & keybrd. Kim, Ext. 7465, khayes@bnl.gov.

DOG RUN – Chain link w/gate, 16'Lx4'W x5'H, u pic up. Ext. 2377 or bills@bnl.gov.

EXERCISE EQUIPMENT – bike and treadmill. Mike, Ext. 7472 or loftus@bnl.gov.

MIRROR – v/gd quality, lg sized for over a couch, u pic up. aschroed@bnl.gov.

PLATE GLASS PANES – 4 sheets of 1/4"x34"x78", unframed, u pic up in Cutchogue. Susan, Ext. 3492, 734-2593.

Wanted

BIKE – used, at low price, gd cond. Yugang, yuzhang@bnl.gov.

Acoustic Bluesman Geremia Plays Tonight, 6/18

Acoustic bluesman Paul Geremia will give a concert on Friday, June 18, at 8 p.m. at the Brookhaven Center. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo I.D.

In the 1960s, inspired by the folk music boom, Paul Geremia picked up his first harmonica. Soon after, he began learning guitar. After leaving agricultural college, he picked up gigs in coffee houses and on college campuses. During these years he crossed paths with people who greatly influenced his career — early blues and folk legends Woody Guthrie, Skip James, Howlin' Wolf, and

Pink Anderson, to name a few.

Geremia's harmonica and piano playing, combined with his finger-picking talent on six- and twelve-string guitars and his husky, soulful voice, have earned him accolades throughout the United States and Europe. Wanting to keep traditional acoustic blues alive, Geremia has never switched to electric. He has recorded 10 solo albums and appeared on numerous compilation discs.

Tickets for the concert are $15 in advance and $20 the day of the show. Tickets may be purchased at the BERA Store in Berkner Hall, through *http://www.ticketweb.com*, or at the door. Advance ticket purchase is recommended. For more information on Paul Geremia, go to *http://www.paulgeremia.org*.

— Jane Koropsak

Young Musicians Fuse Rock, Blues, Jazz Tomorrow, 6/19

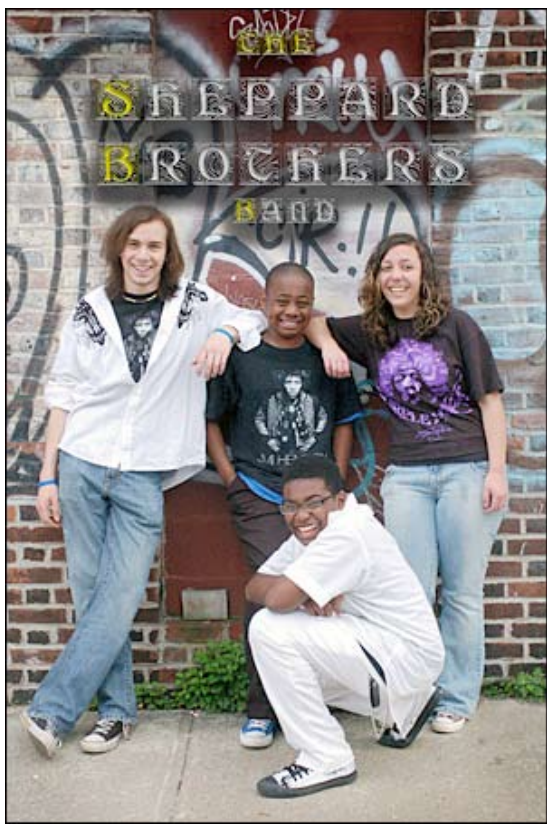
A number of up-and-coming local musicians will get a chance to show their talent at a Young Musicians' Showcase on Saturday, June 19, at 7:30 p.m. in Berkner Hall. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo I.D.

Featured artists at this performance will be "The Sheppard Brothers," "Calico Galaxy," and "The Well." The aim of this new musical series at the Laboratory is to offer performance opportunities to young musicians with exceptional talent at the college, high school and middle school level.

The Sheppard Brothers of William Floyd High School consists of Kenya Sheppard, lead guitar and vocals; Camara Sheppard, keyboards and backup vocals; Ryan McCloskey, drums and backup vocals; and Angelica Franzino, bass and vocals. The band will play a mixture of blues and rock, featuring songs of Jimi Hendrix, Prince, and Led Zeppelin.

Calico Galaxy of Patchogue-Medford High School consists of twin brothers Nick Rufolo on bass and Mike Rufolo on drums; Josh Smith, currently majoring in music at the City College of New York, on keyboards; Anthony Romano, guitar; Dan Minogue and Jon Greene, both on sax; and Daniel Pessalano, currently studying at Ithaca College School of Music, on vibraphone. Their music, they say, is a collision of Frank Zappa and Jaga Jazzist. Inspirations include The Edgar Winter Group, Bela Fleck and the Flecktones, Stevie Wonder, Tower Of Power, and Weather Report. For more information, go to: *http://www.myspace.com/calicogalaxy*.

The Well of Smithtown High School East and West, a recently formed combo, will perform original compositions of jazz-fusion inspired rock. The band consists of brothers Eddie Bickard



The Sheppard Brothers is one of three bands that will perform at BNL on June 19.

on drums and Alex Bickard on bass and John Romano and Dylan Larese on guitar.

Tickets for this concert are available at the BERA Store, Berkner Hall or *www.ticketweb.com*. To promote young talent and provide music at a reasonable cost, the BNL Music Club is offering all tickets for this show for $5. This performance is appropriate for all ages, including children. — Jane Koropsak

DONATIONS OF DOG/CAT FOOD – Please help struggling families/elderly keep their pets by donating pet food. Collection bins are in bldgs: 134, 400, 725, 901, 902. Kathleen, Ext. 3161 or kratto@bnl.gov.

FOLDING BICYCLE RACK – that fits into car hitch and holds 4 bikes. Dominick, Ext. 5030, 576-5195 or dsavino@bnl.gov.

NEW/GENTLY USED CLOTHES – all sizes, children's books, toys to be donated to 76 families living in a shelter. Laura X4027, lbuscemi@bnl.gov. Kathleen, Ext. 3161 or kratto@bnl.gov.

SPARE TIRE – for '01 Ford Taurus, full size or compact. Sal, Ext. 4039.

STATIONARY BIKE – really simple, basic, sm and cheap or free. Brian, 291-0962.

Yard & Garage Sales

SOUND BEACH – gar sale, Fri & Sat, 6/18 & 19, 9a-2p. No Rain Date. Call if looking for something specific, 278-1905, 821-1271.

For Rent

KISSIMMEE, FL – T/share. 15 mins to DisneyWorld. www.calypsocay.com pics. 1-brm unit - $500/wk, slps 4. 2-brm unit/slps 8. $1,000/wk. Nina, Ext. 5894, 475-1297.

CENTER MORICHES – 4 bdrm hse, 2 bath, eik, waterfront dock, sweeping view of bay, plus util. $1,950/mo. 261-7908.

HOLTSVILLE – studio apt, full kit & bath, closets, sep outside ent, util incl, cac, wireless int service, no smkg/pets, plus 1/mos sec. $900/mo. 834-3574.

MASTIC – 1 bdrm apt, kit, l/r combo, full bath, priv, ent, quiet area, util incl, nr LIRR, no smkg/pets, walk to shop, 7 min to Lab, 1 mo sec. $680/mo. 335-4907.

MILLER PLACE – 2 bdrms avail, own bdrm, all incl, share lg furn col home, 8 mi to BNL, full kit cac, int/tv, fen backyd/deck/grill responsib non-smkr. $675/mo. 744-8386.

PATCHOGUE – 2nd flr, 1 bdrm sunny apt, off-st prkg, lots of closet space, all new appli, no smkg/pets, plus elect, 1/mo sec. $1,000/mo neg. Chris, 516-330-0954.

ROCKY POINT – 1 bdrm, 2nd flr, priv drwy, incl some util, no smkg/pets. $795/mo. 821-3287.

ROCKY POINT – 1 bdrm upper unit, kit, bath, l/r, balcy, quiet co-op comm, nr stores, lndry rm on prem, prkg, no smkg/pets, cac, incl gas/water. $1,150/mo. 806-5965.

SHIRLEY – 2 bdrm, grnd level, furn, close to BNL, rent incl heat/elec/water/cable/int, no smkg/pets. $1,100/mo neg. Tomasz, Ext. 7448 or tomw@bnl.gov.

SHOREHAM – walk to beach, lg 1 bdrm apt w/office area, kit/l/r combo, lg closets, pvt ENT, drway prkg, incl: cac, heat, elect, cable/int, mins to lab. $875/mo. 849-6121.

SHOREHAM – spacious, clean 1 bdrm furn studio apt, sep ent & thermo, full bath, kit, patio, big yd, cable TV, no smkg/pets, 7 min to lab, avail now. $775/mo neg. 747-3495.

SHOREHAM – 1 bdrm, garden apt, 1st flr, indep. ent/drvwy, full bath, kit, l/r, cac, attic space, no smkg/pets, few mi to BNL, 1 mo sec, util not incl. $1,150/mo. 566-8261.

WESTHAMPTON BEACH – Dune Road Beach House, 3 bdrms w/extra beds, w/d, d/w, 100' to beach access, old time favorite. $1,800/wk. 569-2832.

For Sale

MASTIC – 3bdrm, 2ba, ranch, 2-car gar, eik, new boiler, rec. roof, .6 acre fen, park-like, grape arbor, trees, gardens, nr. dock, train, 3 mi Smith Pt bch, $219,000 neg. 281-2002.

RIDGE – 3bdm ranch 2bath eik, lr. den, full bsmt, 1-car gar, lg deck, .8 acre, 5 min to Lab. $268,000 neg. Ext. 4309, 924-0818.

RIDGE – 3 bdrm, 3 full baths, eik, 2 car gar, nice garden, 8 mins to lab/N.gate, 0.48 acre. $329,000 neg. Joe, 929-1033.

RIDGE– 3bdrm ranch, 2bath eik, l/r, den, full bsmt, 1-car gar, lg deck, .8 acre, 5 min from BNL. $268,000 neg. Ext. 4309, 924-0818 or lafler@bnl.gov.

S. PATCHOGUE – v/lg 3 bdrm ranch, a block from Bay, cac, eik, newly renov, l/r, form d/r, den, full bsmt on .5 acre. $330,000 neg. 929-4978 or mjulian@bnl.gov.

In Appreciation

My family and I would like to acknowledge and thank all of you for your expressions of sympathy during the loss of my mother. She will be terribly missed by us and especially by those which she diligently devoted countless community service hours in her hometown in North Carolina.

Sincerely, Eugene Barrow and Family.

On-Site Garage: You CAN Get There From Here!

The on-site garage is open and welcomes customers for gas, repairs, NYS inspections, and more. Keep going through the detours, you'll get there! Have repairs done while you are at work.

the Bulletin

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Liz Seubert, editor
Joe Gettler, staff
Roger Stoutenburgh, photographer

On the Web, the Bulletin is located at *www.bnl.gov/bnlweb/pubaf/bulletin.html*. A calendar listing scientific and technical seminars and lectures is found at *www.bnl.gov/bnlweb/pubaf/calendar.asp*.

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