



Roger Stoulenburgh 01400810

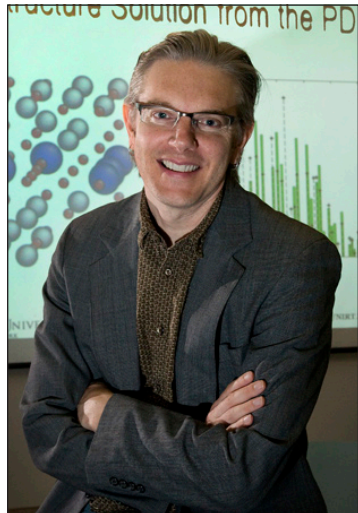
William Sampson Honored With IEEE Award For Applied Superconductivity Research

William Sampson, a senior physicist in the Superconducting Magnet Division, has received the IEEE Council on Superconductivity Award for Significant and Sustained Contributions in the Field of Applied Superconductivity. For 48 years, Sampson has helped to design and build superconducting magnets that keep particle beams circulating in accelerators, such as the Relativistic Heavy Ion Collider (RHIC). He received the award — a plaque, medallion made of niobium, superconducting material, and \$5,000 — on August 2, at the Applied Superconductivity Conference in Washington, D.C.

"I'm glad that my contributions to the development of superconducting magnets are being recognized," Sampson said. "I hope to continue to contribute to the field for many years to come."

Superconducting magnets are made of conductors that can carry electric current without power dissipation at very low temperatures. In particular,...

See *Sampson* on p.2



Roger Stoulenburgh 02750310

Simon Billinge Wins Hanawalt Award

Simon Billinge, a senior scientist in the Condensed Matter Physics & Materials Science Department, has been named a recipient of the Centre for Diffraction Data's 2010 J. D. Hanawalt Award, along with his collaborator and former advisor, Takeshi Egami of the University of Tennessee, Knoxville. The award is given every three years for an important contribution to the field of x-ray powder diffraction, a scientific technique that uses x-rays to probe the structure of materials made of tiny crystals forming a powder.

Named after the late J.D. Hanawalt, a pioneering crystallographer who developed a powder diffraction database in the 1930s that is still in use today, the award consists of a citation and a gift of \$1,000. Billinge received the award at the Centre for Powder Diffraction's 59th annual X-ray Conference in Denver on August 4.

"I am pleased to be chosen for this award, along with Takeshi Egami," Billinge said. "Together we have made developments to a technique called the atomic pair distribution function method, allowing it..."

See *Billinge* on p.2

BNL's 2010 Engineering Awards (Part One)

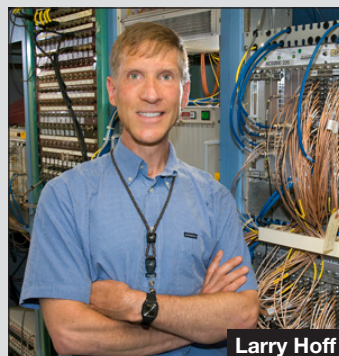
By Diane Greenberg



Thomas Daniels

Roger Stoulenburgh 00830610

BNL's Engineering Awards for 2010 were presented at the annual Employee Recognition Award Ceremony held in Berkner Hall on Friday, June 18. The awards, consisting of a plaque and \$10,000 each, are given to recognize distinguished contributions to the engineering and computing objectives of the Laboratory over one or more years, and are the highest accolades given by BNL to its employees. This year's winners are: Nathalie Bouet, National Synchrotron Light Source II Project (NSLS-II); Ray Conley, NSLS-II; Thomas Daniels, Modernization Project Office; Larry Hoff, Collider Accelerator Department; Thomas Nehring, NSLS-II; Charles Spataro, NSLS-II; and Marie Van Buren, Business Systems Division.



Larry Hoff

Roger Stoulenburgh 00830610

Space constraints impel the Bulletin to feature the winners' achievements in two issues. Therefore the contributions of Daniels, Hoff, and Van Buren are described below. The contributions of Bouet, Conley, Nehring, and Spataro, which were summarized earlier on the NSLS website at <http://www.nsls.bnl.gov/newsroom/news/> will appear in a future Bulletin.

Thomas Daniels

Thomas Daniels is a project manager in the Modernization Project Office (MPO) in charge of general plant projects funded by the American Recovery and Reinvestment Act (ARRA). He is a certified project management professional and an accredited professional in LEED — Leadership in Energy & Environmental Design. Daniels has...

See *Daniels* on p.3

Larry Hoff

Larry Hoff is a senior software engineer, certified BNL supervisor, and leader of the Controls Front End Systems Group in the Collider-Accelerator (C-AD) Department. His long record at the Lab of technical excellence in software engineering has won him the Brookhaven Engineering award.

Hoff joined BNL in 1984 as a programmer analyst in the...

See *Hoff* on p.3



Marie Van Buren

Roger Stoulenburgh 00860610

Marie Van Buren

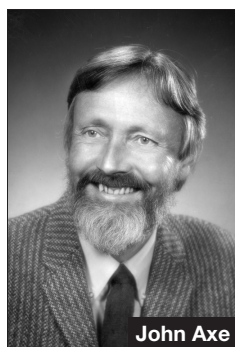
Marie Van Buren, a senior applications engineer in the Business Systems Division, joined BNL in 1999. An electrical engineering graduate from the Massachusetts Institute of Technology, she is expert in designing computerized business applications, and was recognized for her many significant contributions in that area at BNL.

See *Van Buren* on p.3

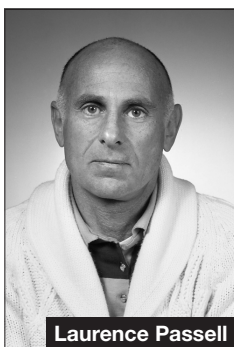
BNL Retiree John Axe Named 2010 NSSA Fellow, Previous Fellows: Laurence Passell & John Tranquada

BNL retiree John Axe, a senior physicist who was the Lab's Associate Director for Basic Energy Sciences from 1990 to 1995, has been named a Fellow of the Neutron Scattering Society of America (NSSA). His fellowship was announced at the 2010 American Conference on Neutron Scattering in Ottawa, Canada, on June 28. The NSSA Fellowship Program recognizes members who have made significant contributions to the neutron scattering community in North America. Each year, no more than one-half of one percent of the current membership of the society are recognized as Fellows.

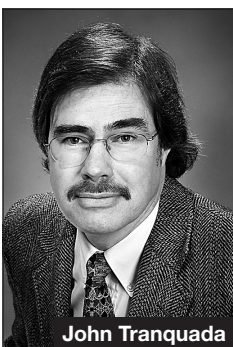
Two other BNLers were also honored as NSSA Fellows since the organization's fellowship program began in 2007. Laurence Passell, a long-time member of the Physics Department and now a guest researcher in the Condensed Matter Physics & Materials Science Department (CMPMSD), became a



John Axe



Laurence Passell



John Tranquada

Fellow in 2008, and John Tranquada, a senior physicist in CMPMSD, was elected a Fellow in 2007.

John Axe

Axe was given the distinction of Fellow for "seminal studies of commensurate and incommensurate structural phase transitions, and service to the U.S. and international neutron community."

Axe said, "I am proud of helping to establish the NSSA, which allowed non-government scientists to have access to neutron scattering facilities, giving

birth to a vigorous user community. When I began my career in neutron scattering, I knew most of the players on a first-name basis, but now the NSSA is full of members that I don't know, who are making remarkable advances in the field."

Axe used the Lab's High Flux Beam Reactor (HFBR) to study how crystalline solids undergo structural changes with temperature fluctuations. All solid materials are in continuous vibration at the atomic level, and sometimes this vibration becomes "stuck" in a certain

direction and embedded permanently in a material's structure. Occasionally this new structure has a repeating unit that is a multiple of the original structure, and it is called "commensurate"; when it does not, it is called "incommensurate." Using neutrons as a probe, Axe performed basic studies of both kinds of structures, but he was most interested in incommensurate materials, which often have unusual elastic, electrical and magnetic properties.

Axe received a B.S. in chemistry from the University of Denver in 1956 and a Ph.D. in chemistry from the University of California (UC) at Berkeley in 1960. After working for IBM, Axe joined BNL in 1969, mainly to study structural phase transitions at the HFBR. He was named HFBR Scientific Program Head in 1988, and in 1990, he was appointed Associate Director for Basic Energy Sciences, a position he held until 1995, when he again pursued

research as a senior physicist. He retired in 1998, and since that time he has held a guest appointment at BNL.

A Fellow of the American Physical Society since 1969, Axe has won numerous awards for his research. In 1973, he was the co-recipient with the late BNL physicist Gen Shirane of the Bertram Eugene Warren Diffraction Physics Award of the American Crystallographic Association; in 1976-77, he was awarded a John Guggenheim Fellowship; and in 1989, he won the DOE award for Sustained Outstanding Research in Solid State Physics.

Laurence Passell

Passell's 2008 fellowship citation stated, "For his sustained and pioneering work in the application of neutron scattering to studies of surfaces and crystal field excitations as well as his contributions to neutron instrumentation in the development of polarizing..."

See *NSSA Fellows* on p.3

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. <http://www.bnl.gov/bera/activities/toastmasters/>.

Tue., Wed., & Thurs.: Rec Hall Activities
5:30–9:30 p.m. 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: Ballroom Dance
Dance Lessons start 9/1 in N. Ballroom, Brookhaven Center. See <http://www.bnl.gov/bera/activities/dance/default.asp>

Wednesdays: On-Site Play Group
10 a.m.–noon. Apartment playground. Infant/toddler drop-in event. Parents meet while children play. Ext. 2873.

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. 53049.

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 Bernholz, 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.

Sampson from p.1

...the IEEE honored Sampson for his contributions to the field of large-scale superconductivity. In the 1960s, he built some of the first superconducting magnets to exceed 10 Tesla — 200,000 times the earth’s magnetic field.

Sampson also made early models of dipole and quadrupole magnets, used for bending and focusing beams of particles in accelerators. Accelerators around the world, including RHIC and the Large Hadron Collider (LHC) at CERN, the European Organization for Nuclear Research, have benefited from this pioneering work.

In the 1970s, Sampson made magnets called “wigglers” for the NSLS, which began operating in 1982. Annually, about 2,300 scientists use x-rays, infrared and ultraviolet light at the synchrotron to study materials as diverse as computer chips and viruses. Wiggler magnets force the electron beam in a light source to move, or wiggle, due to high local magnetic fields, giving rise to increased energy in the emitted light. This type of magnet will also be used in the Laboratory’s NSLS-II, a light source 10,000 times brighter than the NSLS,

Improving Operations Through Battelle’s Job Shadow Program

Rolf Lageraaen, Assistant Fiscal Officer and Acting Payroll Manager in the Fiscal Services Division, and Michelle Holbrook, Staff Specialist in the Procurement & Property Management Division (PPM), participated in Battelle’s new Job Shadow Program, in which they visited Battelle in Columbus, Ohio, and Idaho National Lab (INL) to gain new ideas for improving business practices

Twelve employees of Battelle and the national laboratories it manages or co-manages participated in the program, which was the brainchild of Dennis Newby, Division Director for Business Management at Oak Ridge National Laboratory (ORNL) and former Finance Manager for Battelle Global Laboratory Operations, and Greg Turner, Chief Financial Officer at ORNL. Each of the program participants was paired with a participant from another Lab and they spent a week at each other’s sites, “shadowing,” or observing how business was done there. The goal was to take home at least three ideas for improvements and also to leave three.

In addition, the participants were assigned team projects. Members of the finance group were asked to think of ideas to reduce the cost of doing business. The contracts team was asked to find ways to improve the purchasing and requisitioning process.

In December 2009, the entire group of participants and their mentors started the program with a tour of Battelle’s corporate facilities in Columbus. Battelle President and CEO Jeff Wadsworth, Chief Financial Officer Martin Inglis, Newby, and other Battelle managers greeted the participants with presentations about Battelle and the new program.

Sponsored by Mark Israel,

now under construction and due to be in operation by 2015.

Sampson has also worked on high-temperature superconducting magnets that can operate in high radiation environments, such as the future DOE-funded Facility for Rare Isotope Beams (FRIB), a nuclear physics facility that will be operated by Michigan State University. FRIB is expected to provide scientists with information about the properties of rare isotopes — short-lived nuclei not normally found on earth — that should help them to better understand the origin of elements and evolution of the cosmos.

Currently, Sampson is developing very high-field superconducting magnets that may be used in building a high-energy muon collider. A team of physicists is examining the feasibility of such a collider, which would enable scientists to make detailed studies of particles found at the LHC.

After earning a Ph.D. in physics from the University of Toronto in 1962, Sampson joined BNL as an assistant physicist. He was promoted to physicist in 1967 and to senior physicist in 1977.

— Diane Greenberg



Joseph Rubinio D0840310

(left) BNL’s Rolf Lageraaen of the Fiscal Services Division and Michelle Holbrook of the Procurement & Property Management Division

BNL’s then Interim Laboratory Director for Finance and current Director of Internal Audit and Oversight; Lageraaen, mentored by Israel; and Holbrook, mentored by PPM’s John Collins, each visited INL and shadowed their counterparts. “The program promotes personal growth and development for the participants,” Israel said. “Also, gaining a different perspective and being open to ways to improve operational efficiency is a healthy way to do business.”

After his weeklong visit to INL, Lageraaen brought back several ideas to improve financial processes. For example, he liked their monthly financial progress report that supplemented standard financial data with a variety of charts, simulating a dashboard format. The relevant figures being tracked were easily identified. A similar report could be used at BNL. INL uses a local accounting firm to perform its annual retirement plan audit, a concept BNL may consider instead of continuing with the more expensive national firm used now. Also, based on a

review of INL’s processes, BNL will plan to revise its process of securing taxpayer identification numbers from new vendors and the subsequent process of contacting vendors in the case of mismatches with the Internal Revenue Service.

In turn, INL took back some ideas they can use from BNL. While INL is in the process of formalizing its payroll disaster recovery plan, it may consider using certain aspects of the process BNL has already established, including the type of alternate processing site and the software used for issuing checks. INL also may consider fully or partially converting to a monthly payroll process instead of the current weekly one to reduce expenses. Eighty-three percent of employees at BNL are paid monthly. In addition, INL is looking into consolidating some of its financial software packages into one master program for easier use, training, and less maintenance.

For the team project, recommendations for reducing costs included looking at new ways for revising the current budgeting

process to make it more efficient, and reducing the risk of software vendor penalties and possible license repurchase requirements by improving housekeeping over software license purchases.

Both Lageraaen and Holbrook had regular phone conversations with their INL and group project counterparts for several months until the program ended in June, when they presented their personal and team projects at Battelle. “It involved a big time commitment, but I thoroughly enjoyed the program and learned a great deal more about Battelle, the other labs, and my own,” Lageraaen said.

Holbrook took away ideas from INL that are already being implemented in PPM. For example, new software is being implemented to track package delivery from the central receiving warehouse through final destination. PPM also is adopting new training methods to be applied to web-requisition training.

INL took back some of BNL’s Word document templates for procurement, and an efficient program to look for “illegal” characters in catalogs, such as the percentage signs. The use of these characters delays the requisitioning process, since computer software will not accept them.

For the team project, the group reviewed questions on requisition forms and developed new, more uniform questions that all the labs can use.

“All the team members gained new perspectives,” Holbrook said. “Our counterparts at Idaho didn’t realize we have lots of trees, wild turkeys, and deer here. We didn’t know that security at Idaho was so tight that employees’ spouses are not even allowed on site. The program was a great learning experience, and I am still in touch with my team.”

— Diane Greenberg

Part of Brookhaven Avenue Closed

The section of Brookhaven Avenue between Renaissance Road and Sixth Street is closed while crews install a new sewer line for the National Synchrotron Light Source II (NSLS-II) Project. This work is expected to be complete by about August 25. Traffic will be redirected to allow access to points east of Sixth Street, including the softball fields and the National Weather Service. Please avoid the area and obey all safety personnel as well as posted barricades, warnings, and signs.

For more information, contact Mike Bromfield of the NSLS-II Project, Ext. 7108.

Billinge from p.1

...to be used to study the structure of complex materials on the nanoscale, with a range of a few hundred to a few thousand atoms.”

Using this method, scientists mathematically calculate the probability of two atoms being separated by a certain distance, and then compare that to distances in real materials using short-wavelength x-rays at a synchrotron. This can yield precise atomic coordinates revealing the nanoscale structure of the material. Knowing exactly where each atom in a nanomaterial is located in this way helps scientists to precisely tailor the material’s properties for its intended use.

Such detailed measurements are applied to the study of the properties of diverse materials of interest, for example, in energy,

catalysis, environmental remediation, and pharmaceuticals research. At BNL, the focus is on the role of nanoscale fluctuations in strongly correlated electron materials, which include a wide range of materials that have unusual electronic and magnetic properties that are often useful. This class of materials includes superconductors, materials that carry current with no resistance at very low temperatures, so that no energy is lost in transmission. Scientists’ key challenge is to develop superconductors at temperatures that make them practical in real world situations.

Billinge earned a B.A. in materials science from Oxford University in 1986 and a Ph.D. in materials science and engineering from the University of Pennsylvania in 1992. He was a postdoctoral research fellow at Los Alamos National Laboratory

from 1992 to 1994, and joined Michigan State University as an assistant professor of physics in 1994, rising to become a professor in 2003. In 2008, he accepted a joint appointment as a senior scientist at BNL and a professor of materials science, applied physics, and applied math at Columbia University.

A Fellow of the American Physical Society and a former Alfred P. Sloan Research Fellow, Billinge has won numerous awards for his work, including the Electro-science Laboratories Award and Sigma Xi Outstanding Thesis Award, both in 1992; the Thomas H. Osgood Undergraduate Teaching Award in 1998; Michigan State University College of Natural Science’s Distinguished Faculty Award in 2006; and the university’s Distinguished Faculty Award in 2007.

— Diane Greenberg



Marcum Workplace Challenge Run Was Great!

The Marcum Workplace Challenge 3.5 Mile Run took place at Jones Beach in the evening on August 3. Almost 70 BNL participants joined in this year — the largest turnout in recent years, including many new employees and younger participants. The top three BNL male runners’ team came in 5th place while the top three females placed 2nd.

After the run or walk, everyone gathered under a tent to enjoy a picnic meal together. The BNL organizers of BNL’s participation in the run, spearheaded by Betty Elder of the Business Systems Division, thank Brookhaven Science Associates, the managers of the Lab, for providing new team running shirts this year, which helped to build

enthusiasm and team spirit. Says Elder, “We would also like to thank Michael Thorn and the Health Promotion Program for sponsoring the tent which is truly a necessity at this event to protect everyone from the sun. We all had a wonderful time and it was an excellent way to promote health and fitness as well as camaraderie.”

Daniels from p. 1

...worked at BNL since 1989, and he was recognized for his outstanding achievements in a variety of technical, engineering, and project management positions. As a Reactor Shift Supervisor at the High Flux Beam Reactor (HFBR), 1989-2000, Daniels was responsible for the safe operation of the reactor, including reactor startup, shutdown, fuel handling, and reactor system modifications and upgrades. From 2000 to 2009, Daniels was project engineer at the Brookhaven Graphite Research Reactor and decontamination and decommissioning manager for the HFBR, and played major roles in the cleanup of the former Hazardous Waste Management Facility and the Peconic River. As MPO manager from 2009, he has led a team of engineers and architects that designed and constructed infrastructure improvements on time and within the designated budget. His expertise has helped in positioning the Lab for funding of additional projects supporting the DOE Office of Science Laboratory Plan and the BNL Site Master Plan. — D.G.

Hoff from p. 1

...Alternating Gradient Synchrotron (AGS) Department. Early in his career, he played an important role in the deployment of controls for the Tandem Heavy Ion Transfer Line, the first network-based control system in the AGS complex. Later, Hoff assumed a significant leadership role in the design and development of software for the Relativistic Heavy Ion Collider. He also supervised BNL’s contribution to Oak Ridge National Laboratory’s Spallation Neutron Source project, rapidly developing expertise in a wide array of controls technologies. Further, he expanded his expertise into the areas of budgeting and project management. Hoff has been a ground-breaker, pushing C-AD controls in new directions. His expertise is recognized throughout the accelerator controls community. As a mentor and consultant, Hoff has enhanced the performance of coworkers in controls and in other engineering disciplines. In addition, he is a member of advisory committees for international accelerator controls conferences and for the 2011 Particle Accelerator Conference. — D.G.

Van Buren from p. 1

Van Buren has helped develop some of the Lab’s most widely used applications, including WebReq, a procurement requisitioning system; electronic time reporting, used regularly by nearly 2,000 employees; the goal planning & performance appraisal system; the electronic R2A2 application; and most recently, the open enrollment system for medical and dental insurance. She also has improved the Lab’s budget-allocation rates system and many other systems. Her work has resulted in improved efficiency for thousands of PeopleSoft users at the Lab, and her improvements to business applications have helped BNL to reach its strategic goal of reducing business costs. Van Buren’s work requires the highest degree of technical expertise. She masters new technology quickly and is consistently sought out by other programmers for help with difficult technical issues. Her programming contributions incorporate the latest advances in technology and allow for the development of new applications that meet the Lab’s ever-increasing needs. — D.G.

TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday, 9/8; Thursday, 9/9; Wednesday, 9/15; Thursday, 9/16; Tuesday, 9/21; and Tuesday, 9/28, to answer employees’ questions about financial matters such as finding the right allocation mix, and comparing lifetime income vs. cash withdrawal options. For an appointment, call 1-800-732-8353 or go online at <http://www.tiaa-cref.org/bnl> and select “set up a meeting.”

Ballroom Dance Lessons Re-Start, 9/1

Three new six-week sessions of weekly ballroom dance lessons, sponsored by the BNL Ballroom Dance Club and given on Wednesdays by instructor Giny Rae at \$45 per person for each session, will start on Wednesday, September 1. The new schedule is as follows:

- Beginner ONLY merengue lessons, 5:15-6:15 p.m.
- Advanced beginner cha-cha lessons, 6:15-7:15 p.m.
- Intermediate tango lessons, 7:15-8:15 p.m.

Classes are held in the North Ballroom of the Brookhaven Center. Lessons are open to all BERA members, BNL employees, retirees, official BNL visitors and their immediate families (spouse and children). Each BERA member may bring a partner, but a partner is not necessary to participate. New dancers may try two classes before they have to pay for the series. For more information, contact: Vinita Ghosh, Ext. 6226; John Millener, Ext. 3853; Kathleen Tuohy, Ext. 3845; Kerry Mirabella, Ext. 2632; Michael Hanson, Ext. 2947; or go to <http://www.bnl.gov/bera/activities/dance/default.asp>.

BWIS Reception, Chasman Scholarship Presentation, 9/2

Brookhaven Women in Science (BWIS) invites the BNL community to a summer reception and presentation of the Renate W. Chasman Scholarship for Women, on Thursday, September 2, from 5:15 to 7 p.m. in the Physics Seminar Lounge, Bldg. 510. Named after Renate Chasman, a renowned physicist who worked at Brookhaven, the \$2,000 scholarship is awarded each year to a re-entry woman — one whose college education was interrupted, but who has returned to pursue a degree on a half time or greater basis. BWIS offers the scholarship to qualified candidates annually to encourage women to pursue careers in science, engineering, or mathematics. Refreshments will be served at the reception. For more information, contact Loralie Smart, Ext. 2425, or lsmart@bnl.gov.

NSSA Fellows from p. 1 ...multilayers and novel methods of preparing monochromators.”

Passell was the first to use neutrons as atomic-scale probes of surface films. At the HFBR, he and coworkers showed that neutron scattering from films adsorbed on high-surface-area powders, such as graphite and magnesium oxide, could be separated from scattering from their substrates. By analyzing the film-related part of the scattering, they were able to determine a number of single- and multiple-layer film structures, establish their relationship to the underlying surface structures, and, in a few cases, explore film dynamics as well.

Passell and his coworkers also pioneered the use of neutrons to investigate the configuration of internal electric fields in a variety of rare earth materials. Today, these materials are found in such applications as fiber optic communications and medical diagnostic systems.

In addition to his work in basic science, Passell also had a strong interest in neutron instrumentation, inspiring the development of the composite neutron monochromators currently employed in high-resolution neutron studies of crystal structures and of improved methods of producing polarized neutron beams – beams of neutrons with their spins all pointing in the same direction. Such beams are used to explore the fundamental properties of the neutron and identify the purely magnetic part of neutron scattering from magnetic materials. At the HFBR, Passell and coworkers were the first to develop neutron-reflecting multilayer films composed of alternating magnetic and non-magnetic layers and to show that they are efficient low-energy neutron polarizers and polarization analyzers.

Earlier in his career at the Brookhaven Graphite Research Reactor, Passell and BNL scientist Robert Schermer established that neutrons of only one-spin orientation are absorbed by helium-3 nuclei, thus paving the way for the development of polarized helium-3 gas as a neutron polarizer and polarization analyzer, a technique now widely employed at neutron facilities throughout the world.

After receiving a Ph.D. in physics from UC Berkeley, in 1955, Passell worked at the Lawrence Livermore Laboratory in Livermore, California, and at the Riso National Laboratory in Roskilde, Denmark. He came to BNL in 1963 as an associate physicist in the Physics Department, becoming a physicist in 1966, and a senior physicist in 1976. In 1998, he was the co-winner with BNL scientist John Larese of DOE’s Materials Science Award. He retired in 1995, continuing his work on neutron-related projects as a guest senior physicist until 2007.

John Tranquada

The NSSA honored Tranquada with the 2006 Sustained Research Prize in 2006 for “his outstanding neutron scattering studies of the charge and spin ordering in the high-temperature cuprates and related materials.” Winners of this prize and the other top NSSA award, the Shull Prize, automatically become NSSA Fellows, so Tranquada was named a Fellow in 2007. For more information, see: <http://www.bnl.gov/bnlweb/pubaf/bulletin/2006/bb063006.pdf>. — Diane Greenberg

CALENDAR

Today, Friday, 8/20

***Employee Lunchtime Tour**
Noon. Berkner Hall upper lobby. Meet with a group to be taken on a tour of the PHENIX detector at RHIC. Return by 1 p.m. No reservations. See p.4.

— WEEK OF 8/23 —

Monday, 8/23

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

— WEEK OF 8/30 —

Thursday, 9/2

***BWIS Reception and Chasman Scholarship Award**
5:15-7 p.m. Physics Department, Large Seminar Room, Bldg. 510. Brookhaven Women in Science invites the Lab community to a summer reception and the presentation of the Renate W. Chasman Scholarship for Women. All are welcome. Refreshments will be served.

— WEEK OF 9/6 —

Monday, 9/7

Labor Day Holiday, Lab Closed
No Bulletin this week.

— WEEK OF 9/13 —

Tuesday, 9/14

BSA Distinguished Lecture
4 p.m. Berkner Hall, Room B. Bruce Alberts, Editor-in-Chief of *Science* Magazine, will talk on “Science Education: From Kindergarten through College.” All are welcome to this free talk, sponsored by BSA and open to the public. Visitors to the Lab of 16 and older must carry a photo ID.

Wednesday, 9/15

BSA Distinguished Lecture
11 a.m. Berkner Hall. Bruce Alberts of *Science* will talk on “Biology Past and Biology Future: Where Have We Been and Where Are We Going.” All are welcome to this free talk, sponsored by BSA and open to the public. Visitors to the Lab of 16 and older must carry a photo ID.

461st Brookhaven Lecture
4 p.m. Berkner Hall. Michal Herman of the Energy Sciences & Technology Department will talk on a topic to be announced. All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and older must carry a photo ID.

Vending Machine Survey

To aid quality improvement, the Lab community is asked to complete an online survey for the BNL Vending program, which is managed by the New York State Commission for the Blind: <https://intranet.bnl.gov/NoviSurvey/n/vending.aspx>.

Arrivals & Departures

— Arrivals —

Elyse Hochstrasser.... Lab Protec.
Ming Ke..... C-AD
Joseph Lee Diversity
Yan Li..... Comput Sci.
Jiajie Ling..... Physics
Deyu Lu..... CFN
Hua Song Env. Scis.

— Departures —

Lee Newman..... CFN
Yang Qin..... Biology

Classified Advertisements

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."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

SENIOR ADMINSTRATIVE ASSISTANT (A-5) – Requires some form of secretarial or office administration training, plus ten years related work experience (which includes two years as an Administrative Assistant at BNL) showing progressively more complex responsibilities in a substantive and relevant administrative role. This experience must demonstrate the aptitude necessary to successfully perform the duties as outlined in the position job summary. A bachelor's degree in a business or related field with coursework, or training, specifically related to the position requirements may offset qualifying experience, with the exception of the two years at BNL as an Administrative Assistant. Requires excellent communication and interpersonal skills including an in-depth knowledge of Laboratory practices, policies, and procedures. Must possess proficiency in MS Office Products, including Word, Excel, PowerPoint, Access and Outlook, as well as a strong working knowledge of PeopleSoft. Experience in coordinating and preparing funding proposals for DOE and WFO Sponsors is highly desired. Responsible for assisting the Chair of the newly formed Sustainable Energy Technologies Department (SET) within the Global and Regional Solutions Directorate. Coordinates administrative functions effectively with administrative staff within the SET Department. Collects and analyzes data, and summarizes findings on complex assignments and projects. Arranges conferences and meetings, attends meetings and records minutes for distribution. Recommends, initiates, and implements policies, practices, and procedures in areas of functional responsibility. Screens and responds to inquiries and administrative issues involving both routine and non-routine matters for which there might not yet be an established practice, policy, or procedure. Has a wide variety of high-level contacts both within and outside the Laboratory which are considered significant and critical to the efficient operation of the office and its functions. Operates independently and consistently exercises a high degree of discretion and judgment, and is capable of representing BNL effectively with external organizations and sponsors. Sustainable Energy Technologies Department. Apply to Job ID #15469.

SR. ADMINISTRATIVE SERVICES ASSISTANT (A-3) – Requires some form of secretarial or office administration training, plus six years of experience (which includes two years at BNL) in substantive and relevant administrative, secretarial, clerical, or other responsible work providing evidence of the particular knowledge, skills, and abilities necessary to perform successfully the duties of the position. A bachelor's degree in a business field with coursework, or training, specifically related to the position requirements may offset qualifying experience, with the exception of the two years experience at BNL in the current or similar role. Must be highly competent in secretarial skills with excellent oral and written communications skills. Must exercise initiative, good judgment, be a team player, and able to work independently and under pressure to handle routine and non-routine office matters. Must be skilled in the use of MS office products, including Word, Excel, Powerpoint, Outlook, Access, and web-based tools. Must possess a thorough working knowledge of Lab policies, practices, and procedures including full knowledge of the Peoplesoft travel system and experience with arranging all aspects of both domestic and foreign travel, and knowledge of the Guest Information System. Responsibilities will include but not be limited to the effective administration, operation, and management of support groups within C-AD, including the coordination and direction of all administrative office practices, policies, and procedures, arranging and processing domestic and foreign travel, developing and maintaining web sites, maintaining group files and publications, managing office supplies. Responsibilities will also include interacting with contacts both inside and outside of BNL to coordinate and plan conferences and meetings both on site and off site in addition to arranging appointments, visitor paperwork, preparation of reports and presentations, handling multiple assignments, and planning and coordinating priorities. Collider-Accelerator Department. Apply to Job ID #15475.

HUMAN RESOURCES SERVICES ASSISTANT (A-2, part-time position, 60 percent) – Requires some form of secretarial or office administration training, plus four years of progressively responsible human resources experience in a substantive and relevant role and/or comparable HR-related administrative role is required. Excellent organizational and communication skills, both oral and written, as well as demonstrated attention to detail are required. Expertise in performing complex administrative functions, as well as knowledge of PeopleSoft HR, MS Excel, Word, and Outlook is required. A working knowledge of BNL's Scientific Staff Policy and procedures is highly desirable. Position will support the Office of Scientific Appointments within HR. Advise BNL's scientific departments in administering appointments. Coordinate Scientific Staff appointments and the implementation of Scientific Staff policies with all HR groups. Will also assist

and provide back-up to other members of OSA. Will be expected to perform this job with a high level of confidentiality and discretion. Human Resources & Occupational Medicine Clinic. Apply to Job ID #15362.

Motor Vehicles & Supplies

07 BMW 335i – 48K mi. Dyno provn 430hp/490tq, coilovrs, ltwtght 18" wheels, grt brks, warr till 6/2013/100k. \$25,000. Ext. 3970.
06 KAWASAKI VULCAN 900 LT – 5.3K mi. excel cond 5,300 mi. \$4,000 neg. 286-6492.
04 HYUNDAI ELANTRA GLS – 57K mi. red, 4 dr, 30+mpg, stereo/CD, new brkes/tires, all records. \$6,200 neg. amanda, Ext. 5225.
03 HYUNDAI TIBURON – 46K mi. GT V6 6 spd manual sunroof leather pw/pl ac excel in & out. \$7,800. 806-2881.
03 BMW 325Xi – 152K mi. silver 4dr sedan, a/t, a/c, heated seats, am/fm/cd gd cond. \$7,000 neg. Ext. 3811, 678-2055.
01 FORD TAURUS SES – 157K mi. lthr buckts, 6cyl, spoiler, all pwr, a/c, MP3, AUX input, c/c, 4 new tires, \$3,500 neg. Ext. 4039.
01 CONTINENTAL CARGO TRAILER – 6x12, encl side dr, rear Tailgate. \$3,000. 979-7043.
00 HONDA ACCORD EX-L – 145K mi. 2dr Coup, V6, instltd air intake sys, lthr seats, s/mn rf, a/c, alarm, rem strt, \$5,100. 681-8840.
00 BUICK ULTRA – black tan int, v/gd cond, all h'way mi, needs nothing, well maint. \$3,000. 516-357-6220.
00 HYUNDAI ELANTRA ELANTRA GLS – 149K mi. Maroon, 4dr, ice cold ac, a/t, sm dng nr trunk, \$1,500 neg. 302-543-3631.
98 MERCURY NAVIGATOR – clean body runs, high mi, salvage. \$1,500. 979-7043.
98 NEWMAR COUNTRY AIR MOTOR HOME – 50K mi. 40', fully equip, 1 slide out. \$55,000. Bob, 289-1834.
97 NISSAN ALTIMA – 75K mi. a/c, a/t, 4cyl, fwd, am/fm, p/w, p/m, air bags, new brks, inspcdt, free tire, \$2,600 neg. 344-1097.
97 JEEP GRAND CHEROKEE LAREDO – 155K mi. many new parts incl trailr hitch, 4x4. ps/pb/pw/pl. \$3,000 neg. Ext. 3970.
94 JEEP GRAND CHEROKEE LIMITED – 122K mi. loaded, 4x4, tow pkg, runs fine. KBB \$3K. \$2,400 neg. Karl, Ext. 3116.
80 HARLEY DAVIDSON LOW RIDER – 1340cc orig. \$6,000. 979-7043.

Furnishings & Appliances

CUCKOO CLOCK - Authentic German w/dancing figures, needs repair/\$100; 979-7043.
DINING ROOM SET – oak, hutch, table w/leaf, 6 chrs, pics avail, ask/\$500; Whirlpool d/w, ask/\$100, all excel cond. Ext. 5132.
FREEZER - upright, 16cf, not frost free/\$20; 63"x43" mirror, wood frame/\$20; qu. hd-brd, drk oak, \$15. all neg. 375-7264.
GAS CLOTHES DRYER – Maytag fr loader, eir, white, runs well, oversize capac plus, h/duty a/t dry control, \$175. 255-0729.
KITCHEN TABLE – white formica, 42"x66"; 8/white chairs w/brown vinyl upholstered seat and back, \$100. Ext. 4959.
LEATHER SOFA – 7'L, black, gd cond, \$75. Richard, Ext. 7129, 516-779-3116.
MICROWAVE OVEN – Sharp Carousel, 18"w x 12"h, white. gd cond, \$30. Ext. 2017.
SOLID CHERRY FURNITURE – dresser w/sep wall mirror, excel, orig owner, 7 Eng. dovetail drawers, pics, neg. Ext. 4931.
SOLID WOOD Q/SIZE BED FRAME – \$130/neg, pics avail. Wencan, Ext. 8061.
TABLE/HUTCH/CHAIRS – d/r table w/hutch & 6 chairs \$150, fair cond. Richard, Ext. 7129, 516-779-3116.
TAILGATE GRILL – Margaritaville #NB-MGLG1000, \$300, Swing arm fits 2" hitch, 352 sq in. 20,000 Btu. 516-660-0290.

Audio, Video & Computers

COLOR TVS – 13" & 20" Toshiba, gd cond, \$20/ea. Ext. 7129, 516-779-3116.
HOME THEATER SYSTEM – Panasonic, 5 changer DVD/CD/MPG/etc, 5 spkrs/subwoofer/remote, works well, \$30. Ext. 7397.
IPOD NANO & ARMBAND – 8GB, pink, approx 1 yr old, not used for 10 mos, ask/\$90. Ext. 7216, 445-4027.
PHOTO & NEGATIVE SCANNING – www.pictureperfectscans.com scans, color corrects, makes DVD. Music also. 928-6469.

Sports, Hobbies & Pets

BADMINTON RACQUET – New APACS NANO 9900:84-86g, Flex-Lgth 675mm, lwtw Head, Hi-Tens Frm, more. \$45. 729-6951.
BICYCLE – Diamondback Junior Viper, silver 20" frame, gd cond, \$30. Lloyd, Ext. 5225.
CANNONDALE 3.0 ROADRACE SERIES – Blk alum frm abt 56 cm, v/ light, some scratches, \$100. Angela, Ext. 7397.
FOOSBALL GAME TABLE – high qual, incl foosball, air hockey, ping-pong, more, instruction manual incl, \$20. awefer@bnl.gov.
LOOKING FOR A HORSE TO LEASE – mostly for trail rides. Sold my quarter horse to move to LI. Tasha, Ext. 8072.
SCUBA TANK – 80 cu ft, hot-pink scuba tank. Incl. protective net & boot, 2 yrs old. Great cond. \$125. Carl, Ext. 4420.
TANDEM BICYCLE – \$120/obo. Ext. 5886.

Tools, House & Garden

POWER BLOWER – Craftsman 2 spd elec, gd cond \$30. Lloyd, Ext. 5225.

Miscellaneous

6HP GO KART – use yerf-dog go kart, 6hp tecumseh motor, nds tune up, new air filter,spark plug, \$400. Matthew, Ext. 4612.
BRITAX CARSEAT – new in box, 5-50/lbs, made 04/10, \$120/neg; Peg Perego Prima Pappa hi-chr, \$20, u-pic-up. 650-644-6220.

CANVAS PICTURES – all Disney: 3/Princecess, ask \$20/ea; Lamp ask/\$25, Canopy Bed, \$15, all excel cond. Wendy, Ext. 3924.
EXERCISE EQUIPMT – NordicSport cross country ski mchn - \$20; Cardio mchn/push/pull, \$10, both gd cond. marascia@bnl.gov.
FISHER PRICE KITCHEN – Grow w/Me Kit, great shape, \$10. Angela, Ext. 7397.
POOL TABLE – \$100, neg. 375-7264.
SAMSONITE LUGGAGE – 2 sets, 4 pc, v/gd cond, pic avail, \$100; Titanic table book – grt. photos, \$15. Yvette, Ext. 5591.
U.S. OPEN TICKETS – Mon. 9/6/10 Arthur Ashe Stadium, gates 6pm, matches 7pm, sect 311, 2 tckts/\$100. swinzen@bnl.gov.
VASE - Lennox, 6"h/\$10; M. Mouse Ball-Vintage, needs air/\$10; Thermos/hot/cold push button spout, new/\$10. 979-7043.
VW & AUDI REPAIR – Certified VW tech, 7 yrs dealer exper., all repairs, maint, Also repair other makes & models. 484-9888.
YAMAHA UPRIGHT PIANO – perfect cond, beautiful sound, v/ attractive case, Stony Brook. Lorraine, 689-7326.

Yard & Garage Sales

MT SINAI – Barn sale, Sun 8/22, 10a-3 p, Temple Beth Emeth, 52 Mt Sinai Ave, clothes, household, electronics, toys, much more, call for more info. 744-8632.
SELDEN – Sat, Aug 28, 9a-3p, Sun Aug 29, 9a-1p, NO early birds, household items, 151 Adirondack Drive, cross st Mooney Pond Road. Ann, Ext. 5226.

Car Pool

WESTBURY/PLAINVIEW – Estab. 3-pers. car pool wants 4th. 8-4:30. Ron, Ext. 6068.

Happenings

BINGO NIGHT – Bellport Fire Dept, Sat 8/28, 7 pm, Pre-reg at Avino's Italian Table Bellport \$35, at Door \$40, Standard Admission \$5. Jason, 286-0273.
SHEN YUN PERFORMING ARTS – Chinese New Yr Show, Lincoln Cntr, Jan 6-16, 10 nights only www.ChineseArtsRevival.org Brilliant, Inspiring, Glorious. Ext. 4033.

Farewell Gathering

MARY CAMPBELL – Come and wish Mary all the best! Wed, 9/8, 5-7 p.m.; B'haven Cntr-Patio/S. Rm; \$35pp. incl. gift; Bonnie Sherwood Ext 7250, sherwood@bnl.gov. Maria Ohlsen, Ext. 8142, mohlsen@bnl.gov.

Free

CHOC. LAB – 10 mo old obedient, housebroken all shots. John, Ext. 5307, 275-3476.

Wanted

BROOKHAVEN VETS ASSOC. – Monetary donations gratefully accepted towards mailing shipments to military overseas and to support our troops. Thank you. Joanne, jrula@bnl.gov.
CAR WASH VOLUNTEERS – BVA-AaP needs help in raising funds to support troops in Afghanistan. Contact us if you can spare an hour on Fri 8/20, 11a-1p, at Fire House. John, mccaaffrey@bnl.gov.
DOG AND CAT FOOD DONATIONS – For pets of struggling families/elderly. Collection bins are at Bldgs 134, 400, 510 (x5864), 725, 901, 902. Kathleen, Ext. 3161 or kratto@bnl.gov.
DOG CRATE – collapsible dog crate for a Lab retriever. Reasonable, but free would be great. Patricia, 727-0547.
FURNITURE – bdrm, fabric sofa & d/r sets, low prices, pls email. iramirez@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 and. Kathleen, Ext. 3161 or kratto@bnl.gov.
POOL VACUUM – grd, used or new for reasonable price. Ext. 4056.
STATION CAR – for daughter, v/inexpensive and needs to run well. Mary, Ext. 3927 or maryc@bnl.gov.

Lost & Found

EARRING – round cluster of 7 small diamonds in white gold posted setting. Lost 8/12/10 nr the Center. Maryann, Ext. 3620.
FOUND MONEY – in parking lot of Bldg 400. Grace, Ext. 3363.

For Rent

FARMINGVILLE – fully furn, v/lg 1 bdrm apt w/eik, v/lg l/r & bath, sep ent w/prkg, util/tv incl, use of pool & bkyd, no smkg/pets. \$1,100/mo. Beatrice, Ext. 3642.
MASTIC – share spacious hse w/lots of privacy, Exit 68 off LIE, reasonable cost, call for details. Frank Colletti, 917-832-2863 or frankcoletti@yahoo.com.
MASTIC – huge 1 bdrm apt, patio overlooking water, full kit & bath, l/r, incl all, ideal for 1 person, no smkg/pets. \$1,150/mo neg. Sally, 281-6780.
MEDFORD – 2 bdrm, grnd level apt, eik, new appl, 15x10 bdrm, 20x25 l/r, f/p, lg bath,heat/water/cable incl, sep elect, pvt ent/use of yd. \$1,400/mo. 347-901-1468.
MIDDLE ISLAND – spacious 1 bdrm apt, lg eik, l/r, bath cac, priv ent, all util incl, no smkg/pets, 1 mo sec. \$1,200/mo. 516-769-5370.
MILLER PLACE – share lg furn Col. home in prof resid area, 8 mi to BNL, own bdrm, full kit cac/heat, tv/int, fen backyd w/deck/grill, no smoker. \$675/mo. 744-8386.
ROCKY POINT – 20 min to BNL, furn 4 bdrm Col., den w/fp, 1.5 bath, kit, d/r, l/r, 1/3 acre in Tides Beach Comm, 1 block to 25A, s'mrkt. \$2,600/mo. 786-9516.

Employee Lunchtime Tour of PHENIX: Today, 8/20

On the Employee Lunchtime Tour today, Friday, August 20, the Lab community is invited to see and learn about PHENIX, one of the two giant detectors at the Relativistic Heavy Ion Collider. Meet the group at noon in Berkner Hall upper lobby to go to PHENIX, return to Berkner by 1 p.m. No reservations are necessary.

Car-Wash by AdoptaPlatoon, Today, 8/20

The Brookhaven Veterans Association's AdoptaPlatoon team is hosting a car wash at the BNL Fire House today, Friday, August 20, from 11 a.m. to 1 p.m., (raindate on Friday, August 27) to raise funds to support troops in Afghanistan. Please have your car washed!

Starfish Swim Lessons — for Four-Year-Olds Only!

At the BNL swimming pool on Saturday mornings from September 11 through October 23, swimming lessons will be offered for four-year-old children of BNL families. Only children who are four by June 2010 may register. Two half-hour classes, 9-9:30 a.m. and 9:30-10 a.m., will be held. The cost is \$80 per child. To register, send your name and life number; the name, age, and date of birth of your child; your home phone and cell-phone number, email, and a check for \$80 made out to BERA, to Joanne Rula, Recreation Office, Bldg. 400, by Friday, August 27. For more information, call Rula, Ext. 2873.

BERA Updates

School Supply Drive

Donations of all sorts needed, from pens, pencils, notebooks and folders to calculators, lunchboxes, and backpacks. All will be given to children who otherwise will lack the proper equipment when school opens. Please drop off your gifts to the bins in Bldg. 400 lobby or at the BERA Store. No time to shop? Christine Carter will do the shopping. To give a cash donation, call Ext. 5090.

BERA End of-Summer Bash

Join friends and dance at the BERA End of Summer Bash at the Brookhaven Center on Friday, September 10, 6-11 p.m. Buy tickets at the BERA Store, \$5 per person — only 150 tickets are available.

Atlantic City

Saturday, October 9 - 21 and over only for a trip to Atlantic City. The casino and incentive will be announced. Leave BNL at 9 a.m., leave casino at 8 p.m. \$30 per person.

Family Activities, Outings

Want to join other families in various activities? Go to www.Meetup.com and sign up for the BNL Playgroup. Julie & friends go to free or low-cost concerts, farms, organize children's book time, and more! Note that BNL Play Group, Knitting, & Hospitality will meet again starting September 14 at the Rec Hall, Bldg. 317. See <http://www.bnl.gov/hospitality>.

Beware of Tick Larvae and Chiggers

Now is the season of biting tick larvae and chiggers, which live in tall and short grass, weeds, and brush and can attach to you as you walk by. The larvae are barely visible to the naked eye. Chiggers produce intensely itchy bites that can last for weeks, but do not transmit any known diseases. Tick bites are less itchy. Larval ticks do not transmit diseases associated with nymph or adult ticks, such as Lyme disease.

So, stay on sidewalks when possible. Outdoor workers should use knee boots and eliminate gaps in clothing that allow access of the larvae to the skin. Apply insect repellents containing permethrin or DEET to pants cuffs and boots. K70766 Deep Woods Off for skin and clothing treatment and K70764 Sawyer Clothing Treatment are available to staff through Central Stores. If exposed, immediately shower and wash with soap and water all areas of potential skin exposure and bites. Use duct tape to remove visible larvae from pants, and run clothes through a hot dryer to kill the larvae.

Reporting and Treating Bites

Employees should come to the Occupational Medicine Clinic (OMC) if they believe they have gotten tick or chigger bites on site. If bitten off site, you can also come to OMC for first aid and guidance. Treatment consists mainly of controlling the itch through ointments of benzocaine, hydrocortisone, calamine lotion, etc. Oral Benadryl (antihistamine) can be helpful but should not be used at work or before driving or operating machinery due to drowsiness. Occasionally an individual will have a more severe allergic-type reaction, with symptoms such as skin swelling. This requires prompt medical attention.

For more information, see the Tick and Chigger Prevention links on the Safety and Health Services website at <http://www.bnl.gov/esh/shsd/> and the Tick Information links on the OMC website.

SELDEN – 1 bdrm bsmt apt, high ceilings, eik, all new pergo flrs, prkg, non smkr, no pets, util/cable incl. \$995/mo. 846-1352.
SHIRLEY – rm for rent, microwave kitchenette, priv ent & bath, 1mo sec/no smkg/pets, close to lab/LIRR/all major hwy's, beach. \$550/mo. 804-8609.
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. \$750/mo neg. 821-4318.
SOUND BEACH – spacious 5 rm, 1 bdrm, pvt ent, patio, garden, prkg, avail 9/1, no smkg/pets. \$1,500/mo neg. 816-6401.
WADING RIVER – Apt.: Lge 1 b/r & l/r w/dbl closets, laundry rm w/linen closet, EIK w/pantry, side yard, back deck, beach rights. No pets/smkg. \$1,100/mo. 886-1642.
WADING RIVER – Studio Apt, pvt ent/pkg, grnd level, sm kit, ba w/shwr, part furn. All util incl cable/wireless/AC. No smkg/pets. Single pref. Refs req'd. \$750/mo. 774-8261.

For Sale

BAYPORT – Gt. S. Bay, F. L. Wright style flat-roof house, .83 acr, v priv. 3 bdrm, 2 & half bath, den, lr/dr, kit, util, rm, screend prch, carport. Pssve solar, heat in flrs. 617-332-6264.
MASTIC BEACH – Ranch, 6 rms, 3 bdrm, newly renov, eik, l/r, d/r, new ba., full bsmt, big yard/fenced, nr schools, only 10 mi to Lab. \$199,900. Ext. 7472, loftus@bnl.gov.
NESCONSET – Expanded & updated 4br home. Lg eik, 2.5 updated baths, den/fpl, hwd flrs, Anderson windows, igs, more! Smithtown schools. \$409,000. 656-0727.
SHOREHAM – 3 bdrm hse w/study/office, fencd ½ acre, SWRSD, tax \$6060 w/Star, renov, hrdwd flrs, cac, kit w/ss cabs, sunrm, deck, hottub, more. \$329,000. 849-2493.
WEST ISLIP – 3 bdrm ranch, 2 renov. baths, f/p, fdr, 1/2 fin bsmt, 2car gar, exntdwd workshop, refin kit, exp b/fast area, oak cath ceilings, 1/2 acre, \$549,000 neg. 327-0106.