



Meet the New DOE SC Director

Office of Science Director William Brinkman to present his 'Initial Perspective on the DOE Science Program,' 7/30

In his new capacity as Director of DOE's Office of Science (SC), William F. Brinkman will be making his first visit to one of his Office's ten national laboratories on Thursday, July 30, when he visits BNL in conjunction with the RHIC Renaissance Celebration being held that day (see story at right).

At 3 p.m., as part of the series of RHIC Renaissance talks that start at 2 p.m. in Berkner Hall, Brinkman will present his "Initial Perspective on the DOE Science Program." The Lab community is invited to attend, and a reception will be held after the talk.

Sworn in as the 18th Director of the Office of Science on June 23, Brinkman oversees the nation's largest sponsor of basic research in the physical sciences. In addition to providing 40 percent of the funding for high-energy and nuclear physics and basic energy sciences. The largest single funding agency of research in material sciences and chemistry, SC also provides significant funds for research in the biological and environmental sciences, including work in global climate change, computational science, and science education.

Condensed-matter physicist William F. Brinkman took his B.S. and Ph.D. in physics from the University of Missouri in 1960 and 1965, respectively. After a year as a National Science Foundation postdoctoral fellow at Oxford University, he joined Bell Laboratories in 1966. In 1972, he was made Head of the Infrared Physics & Electronics Research Department; in 1974, Director of the Chemical Physics Research Laboratory; and, in 1981, Director of the Physical Research Laboratory.

During the 1980s, Brinkman

Save the Date, You're Invited: 7/30 RHIC Renaissance **Celebration**

Lab to honor Renaissance Technologies, Inc. with road re-dedications, 'Collide the Ions' walk for autism, distinguished speakers

Federal funding constraints and an unexpected increase in electricity costs almost led to a cancellation of the scheduled polarized-proton run at Brookhaven Lab's Relativistic Heavy Ion Collider (RHIC) in 2006. But thanks to several partners at the Setauket-based hedge fund Renaissance Technologies, Inc., who provided \$13 million, RHIC received enough funding to support 20 weeks of polarized-proton collisions that year.

On Thursday, July 30, the entire Lab community is invited to attend the RHIC Renaissance Celebration in honor of Renaissance Technologies' vital support of RHIC.

- **11:30 a.m.:** Attend the ceremony at the STAR experimental hall, Bldg. 1006, as the Lab community honors the Renaissance Technologies partners and re-dedicates two Laboratory roads.
- **12:15 p.m.:** Participate in the "Collide the Ions" 1.8-mile walk for autism around the newly re-dedicated Ring Road. Brookhaven Science Associates will donate \$10 toward autism research for every walker who participates and there will be free ice cream and commemorative T-shirts.* During the walk, groups of walkers will symbolically and safely "collide" by walking past each other en masse and this "particle collision" will be recorded for posterity by BNL photography and videography.
- **2 p.m.:** A series of RHIC talks will be held in Berkner Hall. Speakers will include Lab Director Sam Aronson, Robert Jaffe of Massachusetts Institute of Technology, Dmitri Kharzeev and Steven Vigdor of BNL, and William Brinkman, DOE's new Director for the Office of Science, who will deliver the keynote address, titled "Initial Perspective on the DOE Science Program." Since the Office of Science provides approximately 85 percent of the Lab's funding, Brinkman's talk should be of interest to both research and support staff. A reception will follow. — Marsha Belford

* This event is open to walkers only - no running, bicycling, etc.

The agenda for this event will be available on the web at 3 p.m. on Wednesday, July 29: http://www.bnl.gov/today/story.asp?ITEM_NO=1314.

All-Hands Meeting

Wednesday, July 29, 2–3:30 p.m., Berkner Hall Lab Director Sam Aronson invites all employees to attend an all-hands meeting in which he will discuss topics that will include the "BlueprintProject" to improve Laboratory science and operations.



July 24, 2009

First Concrete Poured For NSLS-II Ring Building

The first parts of the National Synchrotron Light Source II (NSLS-II) ring building are now taking shape after the concretepouring process for the new, world-class facility began on Monday, July 20. Once complete, the 400,000 square-foot building will house the accelerator ring, the largest component of the machine.

"This is the first structural concrete we've poured," said Marty Fallier, NSLS-II Division Director for Conventional Facilities. "It's an important milestone in that we're actually beginning construction of the building itself. People have been watching us perform earthwork for two months, and now we'll have something to show for it."

In total, the ring building will require about 40,000 cubic yards (a little more than one million cubic feet) of concrete, which will take about 18 months to pour. Much of this extraordinary amount of concrete is needed to form the building's massive concrete tunnel and experimental floor, and to meet requirements for radiation shielding and vibration reduction, Fallier said.

Steel beams will begin to arrive on site as early as September, with the bulk of the steel erection starting in December. The installation of underground utilities is also underway and will ramp up in the next few months.

The work is being done by Torcon, Inc., a New Jersey firm with many projects in New York State. — Kendra Snyder

For more information and to see videos of the concrete pouring, see the BNL web at *http://www.bnl.gov/today/story. asp?ITEM_NO=1349*.

National User Facility Organization Meeting: Focus on Industry



managed research for three years at DOE's Sandia National Laboratories, then operated by AT&T. In 2001, he retired from Bell Labs and joined the Princeton University Physics Department, until he was invited to take his present post. — Marsha Belford



Participants in the 2009 National User Facility Organization Annual Meeting, which was held from June 10–12 at Argonne National Laboratory.

Eleven BNL facility users and user administrators were among about 100 representatives from across the U.S. who attended the 2009 National User Facility Organization (NUFO) annual meeting, which was held this year at Argonne National Laboratory on June 10-12.

NUFO brings together users, user administrators and other interested stakeholders at its annual meetings to discuss and implement two main goals: exchange and streamline administrative tools to optimize user access and productivity at scientific user facilities, and formulate and activate an outreach and education agenda on behalf of users in the U.S. and abroad.

Harriet Kung, DOE's Associate Director of Science for Basic Energy Sciences, gave the keynote address at the meeting, speaking about the important role of user facilities in tackling the nation's energy challenges. DOE owns many of the largest user facilities in the U.S., including accelerators, colliders, supercomputers, light sources and neutron sources, and facilities for studying the nano-world, the environment, and the atmosphere.

Wayne State University's Rene Bellwied, one of three elected Co-Chairs of NUFO's Steering Committee, gave a talk on how NUFO fits into the national science agenda. He noted that more than 27,000 researchers use 30 of the largest user facilities, which are all represented by NUFO, and more than 7,000 students annually receive their college degrees based on work at user facilities. The health and vitality of U.S. science and technology depends on these facili ties and the researchers who use them to facilitate advances in numerous fields of science.

Brant Johnson from BNL's Physics Department, also a Co-Chair of NUFO's Steering Committee, gave a talk on "Expectations for Users and User Facilities." His main message was that user administrators and user institutions should strive for uniformity of rules and procedures for users.

"The key to mutual success is clear communication among facilities and users," Johnson said.

"We currently have about 4,500 facility users at BNL," said Susan White-DePace, Manager of BNL's Guests, Users and Visitors Center, who is one of three elected Co-Coordinators and a founder of NUFO in 1990. "The annual NUFO meetings are important to discuss administrative issues, such as visa issues, master user agreements, and cyber security, and to formulate a uniform standard for best practices in all areas that affect users. This year, the meeting focused on the special needs of users from industry."

Amy Flatten, Director of International Affairs for the American Physical Society (APS), spoke about the events that have affected visa processing and foreign national entry into the U.S. since 9/11. She encouraged foreign nationals who experience difficulty in obtaining a U.S. visa to complete a visa questionnaire through the Board of International Scientific Organizations.

The second day of the meeting centered on industrial access to user facilities, starting with a presentation from Mike Lubell,... See NUFO on pg. 2

International Year of Astronomy: BNL Views, Then & Now

BNLers and NASA's Apollo XI, '69 This year, 2009, is being celebrated as the International Year of Astronomy, in honor of Galileo Galilee's discoveries in 1609 (see story by Phil Harrington, pg. 3). As a bonus, the world can celebrate another astronomical first: that the NASA astronauts of the Apollo XI Mission landed on the Moon 40 years ago — the first time that people from planet Earth had set foot on a different world.

And 40 years ago, BNL sci-

entists were among the first to analyze the rocks brought back from the lunar surface. Raymond Davis, Warren Lyman, and Raymond "Dutch" Stoenner of the Lab's Chemistry Department awaited the astronauts' return, eager to conduct low-level radiation research on rock samples collected from the moon's surface. The gases trapped in these rocks would be used to determine how long the moon's surface had been exposed to cosmic rays.

On July 24, 1969, the

Brookhaven Bulletin published an article to highlight BNLers' work that would follow the Apollo XI Mission. The article is available on BNL's homepage at http://www.bnl.gov/today/story. asp?ITEM_NO=1338 or by clicking on the Past Editions of the Bulletin at www.bnl.gov/bnlweb/ pubaf/bulletin/default.asp.

Now, BNL has another exciting link with outer space — BNL scientists are participating in the Large Synoptic Survey Telescope project.



BNLer Rick Jackimowicz of the NSLS took this photo of the Rosette Nebula, NGC 2244, located in the constellation of Monoceros. According to NASA, NGC 2244 is about 50 light-years across and about 4,500 light-years away.

BNL: A Key Player in Instrumentation, Research Plans For World's Largest Wide-Angle Survey Telescope

Dark energy and dark matter the mysterious "elephants in the sky" that many physicists are seeking — fascinate everyone. The known forms of energy and matter occupy about 4 percent of the universe, but what about the dark 96 percent? To learn more, an instrument is currently being planned for construction high on a mountain top north of Santiago, Chile: the Large Synoptic Survey Telescope (LSST), which will take pictures of the sky using a gigantic camera within a ground-based telescope.

The LSST, expected to start work in 2016, will be the world's largest, most powerful wideangle survey telescope, providing time-lapse digital imaging across the entire available night sky every three days. It will chart objects that change or move: from exploding supernovae to potentially hazardous near-Earth asteroids, and it will look for the distorted images of faint galaxies, which is the sure signature of dark matter.

BNL's Instrumentation Role in the LSST

Brookhaven has the lead role in developing the "film" for this camera, which is composed of electronic sensors — just as in a digital camera — but hundreds of times larger and sensitive to near-ultraviolet and infrared as well as visible light. These sensors, which will provide more than 3 gigapixels of resolution when complete (more than 500



Holding prototypes of a precision optical bench being developed by the Instrumentation Division team for the Large Synoptic Survey Telescope are: interns Justine Haupt and David Lawrence, with team leader Paul O'Connor (left) and intern Sachin Sharma (third from left). Team members (from right) Ivan Kotov and Peter Takacs are monitoring a cryostat holding the charge-coupled device being tested.

times the amount of information captured by a conventional digital camera), are the focus of a group led by Paul O'Connor, along with Peter Takacs and Ivan Kotov of the Instrumentation Division. The team is experimenting with charge-coupled devices (CCD), which will capture light that has taken billions of years to reach Earth from distant galaxies.

"We assemble the CCDs, which each measure just 42 square millimeters, into 'rafts' made of nine sensors," explained Takacs. "Each sensor must be adjusted to form a flat mosaic in the camera's focal plane."

"Precision is key here," said O'Connor. "There are more than

200 CCDs and they must lie almost perfectly flat, with no more than a 10-micron [ten millionths of a meter] tilt in any direction. It's quite a challenge."

BNL Plans Research for The LSST

In addition to developing instrumentation for the LSST, Brookhaven scientists are key participants in another area the scientific research plans. The Physics Department's LSST team, which includes Morgan May, Jim Frank and Erin Sheldon, is involved in planning for LSST through sensor development, calculations and simulations. Since last September, data from other telescopes have been avail-



Silhouetted against a photo of the visible night sky are: (from left) Morgan May, Erin Sheldon, and James Frank of the Physics Department, who are working on research plans for the Large Synoptic Survey Telescope, seen in an artist's impression in the poster in the foreground.

able to help with the plans. May explained that BNL now has an active role in two surveys using telescopes which are precursors to LSST: the Dark Energy Survey (DES) and the Baryon Oscillation Spectroscopic Survey, known as BOSS.

"Both DES and LSST use techniques based on Einstein's theory of general relativity, which gave us our present understanding of gravity, to allow us to "see" dark matter and dark energy," said May. "There is great excitement in the Physics Department about the astrophysics initiative. In addition to those doing astrophysics research, many who have day jobs in other fields of physics are interested, learning and contributing by attending seminars and through an astrophysics discussion group."

- Liz Seubert and Kendra Snyder For more information, see www.lsst.org.

NUFO from pg. 1

... APS Director of Public Affairs, of science policy lessons. John

Annual BERA Softball BBQ, 8/7

whose talk covered fifteen years All are welcome to attend the annual T. Farmer BERA Softball BBQ at the Gazebo on Friday, August 7, beginning at 5:30 p.m.

Sociology: SCCC Course Offered on Site

Suffolk County Community College (SCCC) will offer the following course on site for the fall 2009 semester that is a core course for most SCCC degrees and fulfills the SUNY General Education Requirement for Social Sciences.

Palafoutas, Co-Chair, Task Force on the Future of American Innovation, followed with a presentation on lobbying for American innovation.

The remainder of the workshop focused on industrial stories from small and large businesses that outlined what works well at national laboratories and where improvements can be made. The meeting ended the following day with a discussion of administrative issues.

Posters highlighting user facilities were displayed throughout the meeting. These posters will ultimately be displayed at the User Facility Exhibition on October 15, in Washington, DC.

Next June, BNL will host the annual NUFO meeting, in which the focus will be education and outreach.

– Diane Greenberg

Come for the great food and the great company.

Softball players must RSVP with their team captain for \$5 per person. Lab employees who are not members of the BERA softball league can RSVP for \$10 per person at the BERA Store. You must RSVP by 3 p.m. on Friday, July 31, no tickets will be sold at the door (or porch, or lawn). Children age eight and younger are invited to attend free. Please bring your own beverages.

BWIS Reception, Presentation Of Chasman Scholarship, 8/6

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, August 6, at 5:15 p.m. in the Collider-Accelerator Department main lobby, Bldg. 911.

Named after Renate Chasman, a renowned physicist who worked at BNL, 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. For details about the scholarship, see this website: http://www.bnl.gov/BWIS/scholarships.asp#Chasman.

Refreshments will be served at the reception. For more information, contact Loralie Smart, Ext. 2425, or *lsmart@bnl.gov*.

SOC101: Introduction to Sociology

Fundamental principles and concepts of sociology including culture, interaction, norms, values, institutions, stratification and social change. No prerequisite - 3 credit course.

Employees who take college courses may apply for tuition assistance. BNL offers tuition advances or reimbursements at 75 percent for undergraduate courses. For more information, contact Starr Munson, munson@bnl.gov, or Ext. 7631.

A Reminder from the Benefits Office

The birth of a child, adopting a child or getting married are all exciting life events. Please remember to enroll any newly attained dependents in your medical and/or dental programs within 30 days from the date your new dependent is born, adopted, or otherwise becomes eligible for coverage. If you do not, you will be required to wait until the next Open Enrollment Period. Please call the Benefits Office at Ext. 2877 or 5126 if you have any questions.

Singles BBQ, 8/14

Join the Singles Club for a barbeque at the gazebo on Friday, August 14th, at 5 p.m. New members are welcome, so come join us and have some fun! To RSVP, contact Kim Hayes, Ext. 7465 or khayes@bnl.gov.

The Bulletin

From Galileo, Looking Up!

Editor's Note: For this "starry" issue, the Bulletin invited Phil Harrington (see photo, right), a member of BNL's Training & Qualifications Program Office and a lifelong amateur astronomer, to write a short article. Harrington is familiar to many amateur astronomers from the books he authored, including: Touring the Universe Through Binoculars, Star Ware, Star Watch, and others. He is a contributing editor for Astronomy magazine and authored Astronomy's monthly Binocular Universe column 2005-2009. In June, his column moved to www.cloudynights.com. See also www.philharrington.net/. * * *

The solar system formed 400 years ago.

That is not scientifically correct, but in a sense, the solar system as we know it today was created in 1609 when Galileo Galilee turned his crude telescopes toward the night sky. Although Galileo did not invent the telescope, he was the first to recognize its scientific potential.

Before Galileo's observations, it had been well established for more than a millennium that ours was a geocentric universe. Everything went around Earth. The idea of a heliocentric, or Sun-centered universe, was advanced by the Polish astronomer Nicolaus Copernicus in 1543. Without proof, however, his theory never gained acceptance.

Although Copernicus would not live to see it, Galileo was able to show, by studying how Venus went through phases like our Moon and how four moons orbited Jupiter, that Earth was not the center of the

There were only two competi-

tors in the first great space race

of the 1950s and 60s. Today, 19

teams from around the world are

registered for the Google Lunar

X PRIZE competition, the second

great race to the Moon. BNL's

Gary Stevens of the Information

Technology Department is now on

that roster.

universe after all. Instead, earth is just one of now eight planets orbiting the Sun. The modern solar system was born.

To commemorate Galileo's amazing observations and discoveries, the International Astronomical Union, the governing body for all things astronomical, has declared 2009 the International Year of Astronomy

(IYA2009).

Many terrestrial events are being held this year to mark this important anniversary. Perhaps the most significant here in the US is the display of one of Galileo's two surviving telescopes at the Franklin Institute in Philadelphia. The exhibit "Galileo, the Medici and the Age of Astronomy" will remain open until September 7, when it returns to the Istituto e Museo di Storia della Scienza in Florence, Italy. Check www2. fi.edu/exhibits/traveling/galileo/ for more information.

But you don't have to leave home to see Venus and Jupiter, the two planets that Galileo used to reinvent the solar system. You do have to stay up late or get up very early, however.

Look for Jupiter in the southeast around midnight. Binoculars will show the four Galilean moons as faint points standing either side of the planet's bright globe.

To the Moon, Gary



Venus hangs low in the eastern sky about an hour before sunrise. You can't miss it. The brilliant "morning star" outshines everything in the sky, save for the Moon and Sun. In fact, with sharp eyes, you just may be able to see the planet even after sunrise.

Looking for a little excitement? During the early morning hours of August 11-13, we get to enjoy the annual Perseid meteor shower. Under optimal conditions, the Perseids can fire off as many as 60 "shooting stars" an hour at observers far from city lights. Unfortunately, moonlight will lower that number this year, but we still hope for a nice show. No telescope or binoculars needed! Just pull up a chaise lounge and look high in the northeast for the most action.

No doubt about it. Whether you travel to Philadelphia, visit Venus and Jupiter from home, or just wish upon a shooting star, astronomy is really looking up this summer.

his team members on terra firma

primarily communicate using

- Phil Harrington

New Entry for Bikes At North Gate

The Site Services Division and Environment, Safety & Health Directorate have teamed up to provide bicycle commuters a safer alternative for entering the Lab via the North Gate. Instead of using William Floyd Parkway, bicyclists can now access an entrance at the north end of Upton Road where it meets Deer Leap Lane in the housing development just south of Rt. 25.

A map is accessible from a link in the Monday Memo of 7/20/09, see www.bnl.gov/maps/ point.asp?Lat=40.89205&Lng=-72.88365.

Site Services has modified the guardrail near the end of Upton Road so that bicyclists can now enter the Lab at the Upton Road and Deer Leap Lane intersection. Bicyclists riding east or west on Rt. 25 can get to that entrance by turning south on Half Moon Pond Road (at the Ridge firehouse), making an immediate right on Francis Mooney Drive, and following that to Deer Leap Lane.

The new entrance was added in response to concern about unsafe conditions. Now, bicyclists approaching from the north or from Rt. 25 are strongly encouraged to use this access point to get into the Lab.

Bicyclists using the new entrance and drivers using the North Gate should take extra care where the two groups merge to enter the Lab site. All are asked to "share the road" and remember that traffic laws apply to motorists and cyclists alike.

BERA Trips

Buy tickets weekdays, 9 a.m.-3 p.m. at the BERA Store in Berkner Hall. Coaches depart BNL from the Brookhaven Center. See www.bnl. gov/bera/recreation/events.asp.

Yonkers Raceway & Empire City: Sat., 8/8. More than 5,000 slot machines, live horse racing, more than four dining rooms. \$20/person, 18 and over only. Depart BNL 2 p.m. and leave Yonkers 10 p.m.

Central Park NY Bike Tour: Sat., 8/22. Two-hour bicycle tour through Central Park. \$40 /person, for coach; bike and helmet rental; and tour. Depart BNL 8 a.m., Depart NYC 4 p.m.

US Open Tennis, Billie Jean King Tennis Center: Tues.,

CALENDAR - THIS WEEKEND -

Sunday, 7/26

Summer Sundays: Featuring Family Fun & Firehouse

10 a.m.-3 p.m. Interactive displays at Berkner Hall and BNL's Science Learning Center and Firehouse. See pg. 4 and also http://www.bnl.gov/ bnlweb/pubaf/pr/PR_display. asp?prID=977.

— WEEK OF 7/27 —

Monday, 7/27

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.

*Defensive Driving Class, Part I

6-9:15 p.m. Brookhaven Center. See notice, below. Part II is on 7/30.

Wednesday, 7/29

BSA Noon Recital: Pianofest

Noon. Berkner Hall. Prize-winning participants in Pianofest, a summer workshop in the Hamptons, will play pianistic showpieces. Sponsored by BSA, the company that manages the Lab, BSA Recitals are free and open to the public. Visitors to the Lab age 16 and over must bring a photo I.D.

*All-Hands Meeting

2-3:30 p.m. Berkner Hall. Lab Director Sam Aronson invites all employees to attend. See pg. 1.

Thursday, 7/30

*RHIC Renaissance Celebration

11:30 a.m. STAR experimental hall, Bldg. 1006. All are invited to the ceremony, see pg. I.

12:15 p.m. Collide-the-Ions Walk after the ceremony to benefit autism research. BSA to donate \$10 per walker, see pg. 1.

2 p.m. Berkner Hall. Talks on RHIC from distinguished speakers, with keynote speech by DOE Office of Science Director William Brinkman. See pg. 1.

An agenda of events will be available on the web on 7/29, at 3 p.m., at www.bnl.gov/today/ story.asp?ITEM_NO=1314.

Defensive Driving Class, Part II 6-9:15 p.m. Brookhaven Center. See notice, below.

Sunday, 8/2

*Summer Sundays: National Weather Service, Environment 10 a.m.-3 p.m. See weather predictions made, storms tracked, more. See also pg. 4.

Defensive Driving Course In Two Parts, 7/27 & 30

The next six-hour Defensive 9/8. \$55 /person, includes Driving (Point and Insurance Reduction) course will be held in two parts on Monday and Thursday, July 27 and 30, in the Brookhaven Center South Room, 6 p.m.-9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families. at \$38/person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Include your phone number.



Skype, a free software program used for making voice and video calls through the Internet. "For the most part, we haven't had any problems. The hardest part is coordinating everyone because we have team leaders in the U.S., Germany, and Vietnam — so someone always has to stay up late," said Stevens. The team also communicates via e-mail and online forums, which according to Stevens, is very conducive to the team's open source commitment.

Gary Stevens holds two open source microcontrollers that will be used to help Team FredNet communicate

"There's been a space race of some kind as far back as I can remember," recalled Stevens. "I saw Sputnik fly overhead and watched every single NASA mission when I was younger. I would be glued to the television set the whole time space exploration has always been a passion of mine."

in order to win the competition.

Stevens, who at the Lab monitors more than 200 on-site servers and the New York Blue supercomputer that can perform 100 trillion calculations per second, first learned of the X-PRIZE competition from an article on SPACE. com. Eager to join the race, he researched the various registered teams and contacted Team Fred-Net to see how he could help.

Team FredNet, named after the team's founder and leader Fred J. Bourgeois, is based in California and made up of an international group of collaborators. It is also the only registered team that is specifically dedicated to creating

with its spacecraft and rover.

and developing open source technologies that will be freely available to the public after its rover has successfully landed on the Moon and completed its mission.

"I'm a strong advocate for open source development," explained Stevens. "I don't feel that anyone should profit from space exploration. Developments should be done as cheaply as possible and should then passed on for the benefit of others."

With an amateur radio license, strong command of the Unix computer operating system, and experience working at the Johnson Space Center, Stevens is now developing an extraterrestrial communications system for Team FredNet. This system will allow the team on Earth to send commands to its rover on the Moon while also receiving data, images, and video. In the meantime, Stevens and

to keep vegetables fresh, and so much more," Stevens said. "It is a tough legacy to follow, yet I hope we can give the world such gifts. And indeed, open source space access is a legacy unto itself."

"Moon 1.0 gave the world

things such as Teflon, integrated

circuits, computers, computer

joysticks, insulin pumps, ways

The first team to complete the Google Lunar X-PRIZE objectives by December 31, 2012, will be awarded \$20 million dollars. If Team FredNet wins the award, all the money will be donated to educational programs and charities that have not vet been determined, said Stevens.

To learn more about the Google Lunar X-PRIZE competition, go to the X-PRIZE website. And if you think you have the legs to join the second race to the Moon, Team FredNet is recruiting people with skills ranging from office work to rocket science. Those interested in joining the team should contact — Joe Gettler Stevens.

coach bus and upper promenade tickets. Leave BNL 8:30 a.m., leave stadium 7:30 p.m.

NYC Dinner Cruise: Fri., 9/11. \$95 per person includes open bar, dinner buffet, and dancing. Depart BNL 6 p.m. and leaves NYC at midnight.

BIG E State Fair in Springfield, MA: Sat., 9/19. \$15/person (adult or child). Depart BNL 7:30 a.m., depart fair 5:30pm. www.thebige.com/docs/ Fair_info/09Brochure.pdf

Bronx Zoo: Sat., 9/26. \$23/ person includes coach and "Total Experience" ticket. Leave BNL 9 a.m., leave zoo 5 p.m. Children two and under who sit on your lab are free.

NASCAR, Dover Internat'l **Speedway:** Sun., 9/27. \$120 /person includes coach, race, picnic. Four-ticket max/person for first 2 weeks of sales.

Arrivals & Departures – Arrivals –

Douglas J. Durfee	NSLS
Jonathan C. Hock	C-AD
Amanda J. King	NSLS
Andrew N. Steszyn	C-AD
Juergen Thieme	NSLS-II
Kewei Zhang	Biology

- Departures -

Dean Atchison Env. Restoration Manojeet Bhattacharya.....EST Jonathan Rochford......Chemistry Willem De Jong..... C-AD

Classified Advertisements

To apply for a position, go to www.bnl.gov. Select "Job Opportunities," then "Search Job List." LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires formal secretarial or office administration training, plus four years of relevant experience that demonstrates competence in administrative secretarial skills. Knowledge of Microsoft Office products (Word, Outlook, Excel, and Power Point) and Adobe Acrobat is required; familiarity with maintenance management software such as Maximo and PeopleSoft products is highly desirable. Must possess a high level of competence in processing information using a personal computer and related software, and knowledge of Lab practices, policies, and procedures. Must exercise initiative, good judgment, be a team player, and willing to assist other managers and supervisors within the Division. May be required to work in different locations within the Division. Assignment is in a facilities maintenance/operations environment. Under minimum supervision will perform a variety of skilled and complex secretarial tasks under the direction of the Maintenance & Fabrication Services Division Manager. Will maintain confidential administrative and personnel records, arrange and schedule meetings, travel, and assist in monitoring attendance at training classes. Responsibilities will include but not be limited to correspondence, preparation of presentations, procedure updates, planning and scheduling of meetings, setting up a filing system, assisting in coordination of training and physical exams, processing travel, purchasing office supplies, processing web requisitions, and routinely maintaining records for the Division. Maintenance & Fabrication Services Division. Apply for Job ID # 14961.

OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE (Organic Materials and Polymer Synthesis) Requires a Ph.D. in organic chemistry, polymer chemistry or materials chemistry. Well-qualified candidates will have at least two years of experience in the design and synthesis of polymers, block copolymers, and/or organic amphiphiles that self-assemble on the nanometer-scale. A strong interest in applying these materials to energy gy conversion applications is also preferred. Will require close interaction with physicists and engineers in material design and device development. The research project involves the synthesis and characterization of polymer and small-molecule amphiphiles related to energy conversion applications. This project is laboratory-intensive and requires experience with a range of techniques for the synthesis of novel organic materials. Under the direction of R.B. Grubbs and C.T. Black, Center for Functional Nanomaterials. When applying for a position, please add the contact and email address of at least three references in the Reference box located on the application page. Note that if you have applied for multiple positions under one application, the same reference information is attached to all those positions. If you elect to use different referees for different positions, apply for each position separately. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply for Job ID #14967.

ENVIRONMENTAL SCIENCE ASSOCIATE IV (P-1, term appointment) - Requires a bachelor's degree in an engineering or science discipline, excellent oral and written communication skills, and knowledge of personal computer operations. The ability and willingness to climb and work on towers that are up to 100 ft. tall and to adopt a flexible work schedule with occasionally protracted hours, that may include week ends and holidays, is necessary, Experience in construction trades, electronics, and maintenance of personal computers is highly desirable. Responsibilities include identifying, prioritizing, and accomplishing objectives under minimal supervision and interacting, both verbally and in writing, with scientists, trades people and other profescility operation and maintenance, analyzing operational data, preparing operating reports and providing a key interface between facility operations and the scientific user community. Will supervise temporary and contract employees and have oversight of outside contractors. This is a full-time term position that is located near Chapel Hill, NC, at the Free-Air Carbon Transfer and Storage facility in the Duke University Research Forest. Environmental Sciences Department. Apply for Job ID # 14956.

response team while on shift. Collider-Accelerator Department. ERAP Eligible \$1,000. Apply for Job ID #14963.

MECHANICAL STAFF/PROJECT ENGINEER (P-5/P-7, term appointment) - Duties include working on an engineering team in preparation for the preliminary design, specification, fabrication, procurement, installation, and commissioning of various mechanical subsystems of NSLS-II; building and evaluating prototypes of these systems, and proposing upgrades and improvements as needed. Requirements include: BS degree or equivalent in mechanical engineering or closely related field; minimum three years of progressively responsible related work experience; substantial knowledge of mechanical designs, analysis, materials and manufacturing processes; experience in the use of 3-D CAD (Inventor or Pro-E) tools, drawing standards and engineer ing codes; excellent communication skills and the ability to work effectively with the scientific, technical and procurement staff of the project. Preferred requirements include knowledge of accelerator magnets, vacuum system, instrumentation, detectors and beamline hardware. Will report to the NSLS-II mechanical engineering group leader. Candidate will be hired at the Staff or Project Engineer level commensurate with the amount and relevance of previous experience. Apply for Job ID #14953.

ELECTRICAL STAFF ENGINEER (P-5) - Requires a bachelor's degree in electrical engineering and three years of relevant experience in power converter design and operations. Some experience with both high power thyristor controlled devices and switch mode converters is desirable. Familiarity with electrical circuit analysis software such as MicroCap is a plus. Responsibilities will include overall system engineering, detailed design, and preparation of equipment specifications for procurement of new equipment. Will direct the efforts of technicians during all phases of construction of new equipment, during the repair and upgrade of existing equipment, and during operations. The Collider-Accelerator Department Electrical Engineering Group is responsible for operation and upgrade of various power supply systems that support the operation of the Relativistic Heavy Ion Collider (RHIC) complex of particle accelerators, the Energy Recovery Linac, and other existing and planned accelerator systems. Collider-Accelerator Department. ERAP Eligible: \$1,000. Apply for Job ID # 14962.

SENIOR APPLICATIONS ANALYST (I-5, term appointment) - Requires bachelor's degree, preferably in computer science or related discipline, or equivalent experience and 1+ years of relevant experience. Experience in Linux/UNIX, solid programming skills in at least one high-level language (C, C++, and/or FORTRAN), and good organization, problem solving and communication skills. Experience with IDL or Matlab is strongly desired, as is experience with analysis and graphical rendering of scientific data. Experience writing automated scripts in Perl and/or shell scripting languages is preferred; demonstrated knowledge of HTML, Java, and/or database management skills is a plus. A background in atmospheric or other related physical sciences would be extremely beneficial, but not essential. The analyst will assist in scientific data analysis and the development of data products for use in testing and evaluating atmospheric models. Responsibilities will include writing data processing and analysis codes and developing tools for the management of large data sets from models, satellite and surface sensors (experience with DOE Atmospheric Radiation Measurement datastreams is a plus). Atmospheric Science Division. Apply for Job ID #14957.

SR. MECHANICAL DESIGNER (T-4, term appointment) - Responsibilities include generating complex 3D models and 2D drawings of accelerator and beam line components such as BPMs, slits, electromagnets, vacuum components and stages; interpreting and ensuring conformance to applicable standards, codes and policies including ASME Y14.5M; document designs through detailed drawings including bill of material, ECN and catalog items; successful interaction and working closely with engineers and other members of a team. Requirements include AAS degree in mechanical technology or equivalent, and a minimum of six years chanical components and systems; demonstrated ability to perform professional level design functions; working knowledge of engineering fundamentals and handbook formulas, machine shop practices and vendor products; considerable experience managing layouts, parts and assemblies in the drawing database. Preferred requirements include substantial experience in specifying drive components such as motors, gears bearings, actuators, switches and connectors; experience with Autodesk Inventor CAD software; knowledge of accelerator magnets, vacuum systems, instrumentations and beam line hardware; work experience in an accelerator or light source facility. Position reports to NSLS-II Design Room Supervisor. ERAP Eligible: \$1000. Apply for Job ID #14955.

sembly of precision prototype components. Must have the ability to use hand tools, as well as a working knowledge of manufacturing/machine shop processes, material properties, and mechanical drawings. The ability to work from electrical schematics, the use of standard test and measurement equipment (function generators, oscilloscopes, multi-meters) is highly desirable. Work experience with vacuum system components, high voltage/high current systems, RF systems and cryogenics is a plus. Under general technical direction and with engineering support responsibilities will be to assemble test, install, and maintain components used in particle accelerators such as magnets, power supplies, RF systems, and electronic diagnostics. Will report to the Beam Components/Instrumentation Group Leader, C-AD. Collider-Accelerator Department. ERAP Eligible: \$500. Apply for Job ID #14964.

ELECTRO-MECHANICAL PRINCIPAL TECHNICAN (TW-4) - Requires an AAS degree or equivalent plus at least two years of equivalent relevant experience in the assembly, testing, and/or troubleshooting of electro-mechanical equipment. Must have the ability to use hand tools, as well as a working knowledge of manufacturing/machine shop processes, material properties, and mechanical drawings. The ability to work from electrical schematics, the use of standard test and measurement equipment (function generators, oscilloscop multi-meters) is highly desirable. The ability to use computers and MS Office software is a definite plus. Under general technical direction and with engineering support, responsibilities will be to assemble, test, install, and maintain components used in particle accelerators such as magnets, power supplies, RF systems, and electronic diagnostics. Will report to the Beam Components/Instrumentation Group Leader, C-AD. Collider–Accelerator Department. ERAP Eligible: \$500. Apply for Job ID #14965.

ELECTRONIC PRINCIPAL TECHNICIAN (TW-4) - Requires an AAS degree in electronic technology and at least two years of relevant work experience. Must be experienced with electronic test equipment and in design, construction, and troubleshooting of custom built electronics circuit boards. Experience with RF systems required as well. Good communication skills and the ability to work from electrical drawings are necessary. Should be capable of analyzing and solving system problems. Under minimum supervision will design and build custom circuits from schematic drawings and assemble chassis using basic mechanical fabrication techniques and help maintain operating RF systems. May occasionally direct the work of other technical support personnel. Knowledge of vacuum tubes is a plus. Will support Stochastic Cooling project. Collider-Accelerator Department. ERAP Eligible: \$500. Apply for Job ID #14966.

ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires formal secretarial training or equivalent, plus four years' experience in a secretarial or administrative role. Demonstrated proficiency in MS Office, including Word, Excel, and Outlook, is required. Must have strong communication, organizational and problem-solving skills, as well as the ability to work independently, handle multiple and parallel projects, prioritize workload, and handle non-routine office matters. Knowledge of Lab practices, policies, and procedures is preferred. Familiarity with BNL's Guest Information System registration, PowerPoint, PeopleSoft Financials. travel and web requisitions is also preferred. The ideal candidate will have strong multitasking skills and experience with the following: arranging conferences and meetings, processing travel, setting up appointments and services, information gathering, taking minutes, processing GIS registrations and badging for contractors. Will be responsible for both routine and non-routine administrative assignments such as: preparing reports and correspondence including Power Point presentations, maintaining database system for records control: taking minutes at meetings, assisting with contractor badging and training, processing travel, coordinating and scheduling appointments and meetings, assisting with workshops and reviews, maintaining duplicate files. Will share responsibility for administrative duties in the NSLS-II Conventional Facilities Divison and will divide time between the NSLS-II site and main S site office. Will assist other NSLS-II ad-

BNL's Summer Sundays Family Fun Day, 7/26

BNL invites you to attend a new Summer Sundays experience to explore world-class facilities, see a different science show each week, and catch a "View from Space" at a hands-on exhibit in Berkner Hall lobby. Summer Sundays visits are free, handicapped accessible, with no reservations needed. The BNL Cafeteria in Berkner Hall will be open 10 a.m. to 3 p.m. The main gate will be open to incoming Summer Sunday visitors 10 a.m.-3 p.m. Visitors of age 16 and over must bring photo ID. This Sunday, bring the fam-



ily out for a hands-on science fun-filled day! Play with science at our Science Learning Center. Hop aboard a fire truck at our firehouse. Take fire extinguisher training, walk through safe smoke, and learn about emergency preparedness. Be entertained by Mr. Fish's "Phenomenal Physics" show.

Laboratory Protection and Plant Facilities

Meet the team that helps the Laboratory go and grow safely; take fire extinguisher training; visit a "safe house"; use a thermal imaging camera to see in the dark; climb aboard large construction equipment and fire engines; obtain a free DNA ID kit. Walk to activities from parking or Berkner Hall; no tickets needed. Activities take place 10 a.m. – 4 p.m. Main gate closes to visitors from 3 p.m.

Science Learning Center

Discover science at the Science Learning Center where you can see in 3-D; drive a Mars Rover; experience interactive exhibits that demonstrate basic scientific principles. Bus Tickets to the Science Learning Center will be available at the Berkner Hall Reception Desk. Buses leave Berkner Hall for the Science Learning Center every 20 minutes; last facility visit begins at 3 p.m.

Phenomenal Physics With Mr. Fish

Berkner Hall Auditorium 12 noon, 1:30 p.m., 3 p.m.

ence writing experience is preferred. A minimum of 15 years' experience with media relations and communications is required, including traditional and new media, as well as print and web-based publications. Management experience and a demonstrated ability to cultivate internal and external relationships with a wide range of customers and colleagues are necessary, as are demonstrated consensus-building and crisis management skills. Creative, strategic leadership and a demonstrated ability to develop and implement a strategic communications plan in a complex R&D setting are key requirements for success. Excellent written and oral communication skills; facility with Mac computers; competence in budgeting and cost control; willingness to be on-call after hours and on weekends as necessary, as well as experience in recruiting and training communications talent are necessary. Is responsible for developing and implementing strategic communications plans and activities based on industry best practices that are aligned with and promote the Lab's science and operations priority programs and initiatives, and for providing informed and results-oriented counsel to Lab management on matters related to upholding and building the image of the Lab and managing its reputation. Specific responsibilities include: Working to enhance awareness of Brookhaven National Laboratory's mission and vision, core scientific competencies, and how those competencies support the major activities and initiatives of the US

Boats

8' ACHILLES LEX88 - Inflatable boat, '05. v/gd cond, wood firbrds, oars, storage bag, retractabl wheels attchd. \$400. Ext. 5149. KAYAK - 10' pelican pursuit 100SE, new/\$400, now like new/\$200. Dennis, Ext. 4028, 375-8519

Department of Energy (DOE); advancing a strong and consistent identity-brand for the Lab's programs and initiatives on a regional, national and international scale; providing science and operations managers with customized public relations plans and activities to promote their priority initiatives, helping manage risk and ensuring that public relations issues are understood and used to inform institutional decisions; developing excellent relationships with targeted media reporters, editors, and feature writers on an international, national, and regional basis; facilitating a coordinated approach to communications with Brookhaven Science Associates, Battelle and Stony Brook University, and DOE; managing all institutional-level internal and external communications; developing and insuring compliance with policies, processes, and procedures for internal and external communications and overseeing their implementation across the Lab, ensur ing that best-in-class measurement tools are used to determine effectiveness of programs; managing special events from strategy development to final implementation. managing the external public relations activities and communications challenges in times of crisis or emergency; serving as the central source of information and the official channel of communication between the Lab and media, and developing content for the Lab's external and intranet websites. This position reports to BNL's Assistant Laboratory Director for Community, Education, Government & Public Affairs. Apply for Job ID #14971.

ESTATE SALE - Drexel d/r set, hutch, velvet couch, 2 glass-top tbls, 2 lmps, ampex stereo, wing chr, sewg mach, pics avail. 929-6442.

Happenings

CONCERT, SKYVIEW - 7/25, 8-10 p.m. Concert of Beethoven, Arvo, more, afterward, Aquarid shower viewing, \$5 at Custer Observatory, 1115 Main Bavview Rd.. Southold, www.custerobservatory.org/. SHEN YUN PERFORMING ARTS - Sun. 8/2, 7 p.m. Purchase Coll., http://shenyun.us/ westchester, brilliant, inspiring. Ext. 4033.

PHYSICS ASSOCIATE III (P-3) - Requires a BS in physics, three years' experience as an accelerator operator and excellent written and oral communication skills. Background experience in high power pulsed power supplies, digital electronics, computer controls and programming, as well as laboratory test and measurement techniques is preferred. Primary duties, as part of a rotating shift team, include the operation and troubleshooting of the Collider-Accelerator (C-AD) Complex for the experimental physics program. Will be part of C-AD emergency

ELECTRO-MECHANICAL SR. TECHNICAL SPECIALIST (T-3) - Requires an AAS degree or equivalent plus six years of equivalent relevant experience in the assembly and testing of electro-mechanical equipment with an emphasis on the manufacture and asministrative staff as needed with administrative responsibilities for the NSLS-II Project. National Synchrotron Light Source-II. ERAP Eligible \$500. Apply for Job ID# 14968.

CABINETMAKER A (LG – 9) Under minimum supervision lays out, constructs, modifies and maintains furniture, laboratory equipment and buildings and component parts. Works with wood, wood substitutes, and combination materials and flooring, roofing and wall materials. Uses hand, portable and fixed tools common to building construction and cabinet-making trade. Works from prints, rough sketches and verbal instructions. Requires broad shop skills to perform difficult operations requiring ingenuity on complex jobs where previous standards or methods of operation do not offer complete solution. May perform Carpenter duties as required. Maintenance & Fabrication Division. Apply for Job ID# 14960.

MANAGER. MEDIA & COMMUNICATIONS (M-2) - Requires a bachelor's degree in journalism, communications, public relations or a related field. A graduate degree and sci-

Tools. House & Garden

COLEMAN GENERATOR - 5000w, 5500 start up, 4 yrs old, like new cond, 5 gal gas tank, oil safety shutdown. 872-9268. PERENNIALS - Hostas, coneflowers, lily of the valley, hydrangeas, iris, \$4 per plant. I'll deliver to BNL. Beth, 905-8222.

Lost & Found

PEARL NECKLACE - Lost, delicate string of pearls with significant sentimental value to me. Pat Carr. Ext. 7192.

Yard & Garage Sales

SOUND BEACH - Mvg Sale, furn, tools, pic, 3 Adams Av, crnr Adams/North Cntry rd, 7/25 & 7/26, 9am-2pm.Ext. 5476, 872-9268.

Furnishings & Appliances

BEDROOM SET - Lane 6 pc Q/poster bed, 2 nt/stnds, armoire, 12 drwr-dresser, mirror, orig/\$8K, sell/\$2K, u pic up. Kim, Ext. 7439. BEDROOM SET - Medit. style, dresser w/2 mirrors, 2 end tables, armoire. \$100, u pic up, can hlp arrange transport. 219-1660.

Miscellaneous

SOUTHWEST AIR VOUCHERS - Two \$100 vouchers. Good as cash BUT expire Aug 31. \$180. Mike, Ext. 2947 or hanson@bnl.gov. TOOL BOX - used, Polyethylene Gull Wing, fits sm truck bed, grt shape, \$60. Ext. 8611.

In Appreciation

On behalf of my family & myself, I would like to take this opportunity to thank my friends & coworkers for such an outpouring of love & support during the sudden passing of my husband. May God continue to Bless you all. - Cheryl Winston

The ads are on pg. 5 of this week's Bulletin pdf, www.bnl.gov/bnlweb/pubaf/bulletin/ default.asp. We are sorry to leave so many out. Call Ext. 2346 for a printout.

Bulletin

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

Motor Vehicles & Supplies

07 KAWASAKI ZX-6R NINJA – all black bike, approx. 2,700 mi, Akrapovic exhaust. \$6,700 neg. 942-4335.

04 FORD FOCUS ZTS – 62K mi. 4dr, 5spd manual, pl, pw,ac, cc, spoiler, am/fm/cd, pwr m/roof, grt cond, \$5,000. 736-0562.

02 JEEP WRANGLER – 95K mi. a/t, 6cyl, 4wd, stereo/cd hardtop, 31" tires, hitch, safari cargo rack, \$9,000 neg. Leo, Ext. 3823. 02 KAWASAKI KLR 650 DUAL SPORT – 5K mi. grt shape, 45+ mog. extras tires

- 5K mi. grt shape, 45+ mpg, extras, tires less than 2500 mi. \$2,750 neg. 836-1558. 98 ISUZU AMIGO - 160K mi. 5 spd. man-

ual, 4WD, new A/C cndnsr, conv. back w/ rollbar, orig. owner, \$3,800 neg. 775-8160. 98 HONDA CIVIC EX – 148K mi., 2dr coupe,

4cyl, fwd, a/t, a/c, c/c, pwr locks, am/fm/cd/ aux plug in, alarm. \$2,995 neg. 399-3098. 96 CHEVY IMPALA SS – 37K mi. well

equipped = needs nothing, can use classic insurance. \$14,000. 286-1164.

94 GEO PRIZM LSI SEDAN – 103 mi. 4dr, 4cyl, 1.6L, a/t, grt cond, b/o. \$1,900. 682-1386.

82 MERCEDES BENZ 300TD STATION WAGON – gd cond, ask/. \$2,200. 576-5102. 67 ROLLS ROYCE SILVER SHADOW – gd running cond. \$7,800. 576-5102.

TRUCK CAP – Fiber glass cap for 8'bed, Black, 2 sliding windows w/ screens, Locks do work, \$500. Joseph, 924-7476.

Boats

8' ACHILLES LEX88 – Inflatable boat, '05, v/gd cond, wood flrbrds, oars, storage bag, retractabl wheels attchd. \$400. Ext. 5149. KAYAK – 10' pelican pursuit 100SE, new/\$400, now like new/\$200. Dennis, Ext. 4028, 375-8519.

Furnishings & Appliances

BEDROOM SET – Lane 6 pc Q/poster bed, 2 nt/stnds, armoire, 12 drwr-dresser, mirror, orig/\$8K, sell/\$2K, u pic up. Kim, Ext. 7439. BEDROOM SET – Medit. style, dresser w/2 mirrors, 2 end tables, armoire. \$100, u pic up, can hlp arrange transport. 219-1660. DISHWASHER – Kitchenaid, stainless steel

tub, white, runs well \$100. 924-7476.

ESTATE SALE – Drexel d/r set, hutch, velvet couch, 2 glass-top tbls, 2 lmps, ampex stereo, wing chr, sewg mach, pics avail. 929-6442. HOODED BASSINETT – blue/cream Toile

cover d/ruffle, sheet, basket below, like new, pd/\$125 ask/\$60 obo. 849-3411. LIVING RM SET – beige/burgndy chrry wd

trim; 3 ch-wd tabls, 2 lamps; 3 burg. rugs, l area rug, pics, \$1,100 neg. 445-4027.

SOFA - floral print, \$150, u-pic-up. Ext. 3008 or ddaniels@bnl.gov.

SOFA & ENTERTAINMENT UNIT – Grey 6pc sectral sofa \$200 obo; IKEA Ent/tain unit, adj. shelves, beech wood \$70 obo. 831-8331. SOFAS – 2 leather sofas, 82", 3 cushion, burgundy; gd cond, \$175/ea. 766-7701. VACUUMS – 7, from \$10-\$25. 924-3522.

Audio, Video & Computers

CAMCORDER – Canon ZR800 digital video, never used, new in box w/manual, incl 4 digital video cass & optional carry case, new/\$489, sell/\$275/firm. Ext. 2913.

VOICE RECORDER – Olympus D1000 digital, never used, new in box w/manual, record notes, lectures, etc., palm-sized, \$90/firm. Ext. 2913.

Sports, Hobbies & Pets

ELLIPTICAL MACHINE – Schwinn 438 . Like new.... Used about 10 times... Bought for \$1200, ask \$650, Katie, 241-1557.

NIKON SLR W/ LENS – 35mm N70 w/80-200 zoom lens f/2.8, incl case & uv filter, \$875/all, extra N70 body, \$95. 219-1660. STRATOCASTER – Fender Artist Sries, J. Vaughn tex-mex, olympic wht w/maple neck, gig bag, stand, \$475. corbin@bnl.gov. SUBARU TRAILER HITCH BIKE RACK – fits 1 1/4" trailer hitch, carries 2 bikes, ask/\$150. Ext. 7316 or rohlsen@bnl.gov.

Tools, House & Garden

COLEMAN GENERATOR - 5000w, 5500 start up, 4 yrs old, like new cond, 5 gal

Happenings

CONCERT, SKYVIEW - 7/25, 8-10 p.m. Concert of Beethoven, Schosakowitsch, Arvo, \$15, &/or after, Aquarid shower viewing, \$5 at Custer Observatory, 1115 Main Bayview Rd., Southold, http:// www.custerobservatory.org/.

SHEN YUN PERFORMING ARTS – Sun. 8/2, 7 p.m. Purchase Coll., http://shenyun.us/ westchester , brilliant, inspiring. Ext. 4033.

Wanted

ACOUSTIC GUITAR PARTS – for free, old/ unwanted that you are willing to part with, please let me know, thanks. Ext. 5322.

ARTISTS – for Voices & Visions of Creation, Exhibit/Recptn at Congregational Church of Patchogue, 9/19 @ 7:30. all mediums, art wanted related to creation. Call 475-1235. KG/FIRST GRADE TOYS – activity toys

for school, e.g. wooden puzzles, for newly open Charter Sch. in PA. Ext. 2456. RUNNING OUTBOARD MOTOR – small, 2, 4, 6, 8, 10, 15, 20, 25, 30, 35 or 40hp - 20"shaft.

6, 8, 10, 15, 20, 25, 30, 35 or 40hp - 20"shaft. Reasonable. Ed, Ext. 7251, 516-924-4299.

Lost & Found

PEARL NECKLACE – Lost, delicate string of pearls with significant sentimental value to me. Pat Carr. Ext. 7192.

For Rent

BELLPORT VILLAGE – 1 furn bdrm, sground level sep ent, Ir, full bath, a/c, single person, no smkg/pets. \$900/mo. Fatimi, 286-8740.

BOHEMIA – 1,000 Sq. Ft Commercial unit 12' overhead door, small office, bthrm, prof area near Islip Mac Airport. \$1,050/ mo. Dom, 576-5195 or dsavino@bnl.gov. E. PATCHOGUE – rm(s) in elegant house w/sec alarm & prkg, pvt/ent, furn, incl util, shared kit/bath, min. 3 mo stay. \$550/mo

neg. 289-1040. MASTIC – Fully furn, new apt. 1 lg bdrm attach full bath, high spd int, dish network, kit, util incl, nr LIRR, nr. shopping, no smkg/ pets 1 mo. sec. \$975/mo neg. 335-4907.

MATTITUCK – 3 bdrm, 2 bath, f/p, new appli, w/d, gar, bsmt, lg yd, move-in-cond, plus sec/util. \$1,900/mo. 728-0992.

MIDDLE ISLAND - 1 bdrm, I/r, full kit & bath bsmt apt, 10 min to BNL, priv ent/drwy, no smkg/pet, int/phone, incl all, 1 mo sec, BNL empl only. \$800/mo. 672-2451.

MIDDLE ISLAND – 4 b/r, 2.5 bath, Victorian home,Ig ktch, fam rm, den, d/r, 1 acre , Ig deck, 2 car gar, 12 min. to lab., \$2,800/ mo neg. 775-0266 or damonmh@aol.com. PORT JEFF – master bdrm, aprox 20x18,

full bath, shared w/grad student, w/d, 15 min to lab, + util. \$620/mo. 344-2328. PORT JEFF - rm, mstr bdrm, approx 20x18,

full bath, shared w/grad students, w/d, 15 min to Lab + util. \$620/mo. 344-2328. RIDGE – 5 bdrm house. 2.5 bath. 2 car dar.

bsmt, Ig fen yd, nr BNL. \$2,200/mo neg. Roman, 384-5984 or rosamu@bnl.gov. SHIRLEY – 1rm studio fit for 1. full bath.

beach/LIRR/all major hwys/7min to lab, no smkg/pet, 1mo sec. \$650/mo. Ext. 2964.

SHOREHAM – Furn apt.,all appls, 1 bdrm, I/r, d/r, full kit, bath, a/c., util. incl. no smkg/ pets, pvt.ent./drv. Use of b/yard. Single or cple only. 1 mth sec. \$1,150/mo. 375-7959.

SOUND BEACH – Studio for one w/effic kit, a/c, utils, beach rights, newly furn, priv prkg/entr, i/net, closets, pics avail. \$675/mo. 707-3079 or lbarrett@bnl.gov.

SOUND BEACH – furn 4 bdrm house, 1 bath, kit, I/r, oil heat, full yd, v/priv, no smkg/pet, nr beach, avail 10 mos: 9/8/09-6/8/10, \$800/mo. 718-704-6877.

For Sale

AQUEBOGUE – 5 br, 3.5 ba Col. cul de sac, 9' ceilgs, 2-car gar, igs, multi-zone cac, built '05, see http://tinyurl.com/m3aowe. \$519,900 neg. Ext. 5826, satogata@bnl.gov.

CORAM – Condo at Bretton Woods - Galaxy ranch, 2 bdrms, 2 bath, EIK, d/r, l/r, quiet area, move-in condition, golf course nearby. Call for info. Bob, Ext. 5588.

MANORVILLE – 3 bdr 2.5 ba, 1,900sqft, T/house, 2-car gar, l/r, d/r, eik w/new fixture/shutters, pergo firs, cust. bkcase, f/p, slate patio, extra insul, ceiling fans,pond view. \$367,500 neg. 874-3400. ADULT CARE GIVER – Certified in: PCA, HHA & CNA Available Weekday Nights and Weekend Nights . Christy, 682-2471. AIRPORT SERVICE – we go to all airports and nyc lab discounts call ask for tony. 589-5555.

BABY SITTING – college student home for summer w/9yrs experience from newborn-12yrs of age. Carolynn, 613-514-5447.

BABYSITTING – 14 year old honors student, will babysit in your home, eve's and weekends. Reliable. Manorville and surrounding area. Amanda, 874-8631.

BABYSITTING – Responsible college grad is available to babysit your children in the evening and on weekends. Lots of experience with kids! References available. Emily, 516-662-5896.

BABYSITTING & PETSITTING – Retired nurses aide will watch your children or pets while you are away. Donna, 398-8024.

BABYSITTING/HOUSEKEEPING – experience woman will babysit and give TLC to your child, day/evening avail; will clean your house to meet your standards. 874-4049.

BABYSITTING/MOTHER'S HELPER – 14 year old honors student, will babysit or give an extra hand in your home, eve's/wkends, reliable, reasonable rates, Rocky Point and surrounding area. Megan, 744-6309.

BOAT STORAGE – Out/inside boat storage avail. @ CM yd., trailered boats welcome, summer boat slip avail. for 15' boat. 878-2577.

BOUNCE HOUSES/INFLATABLES – Summer Party?! We've got the best babysitter you can rent! Our bounce houses, Obstacle course, wet/dry slides keep kids entertained for hours!!! www.Liinflatables. com. Party Playgrounds, 681-7711.

BRICKWORK – Reset your existing walkway, pool area, or patio to look brand new. No job too small. BNL discount. . Tony, 736-7942.

BROOKHAVEN PSYCHOLOGY – Psychotherapy & biofeedback; Stress, anxiety, depression, insomnia, PTSD, pain, parenting, ADHD, LD, neuropsychological assessment. 5 Min. from BNL. Ron Turner PhD, Lic. Clinical Psychologist, 504-6135.

CAR DETAILING SERVICE – Great service, reasonable prices, call for info & appointment. Chris, 960-6243.

CARPENTER/CONTRACTOR – General Contracting, Home Improvements and Maintenance on Large and Small Jobs. 30 yrs Experience, Excellent References, Reliable, Licensed and Insured. Tony, 727-6550 or agkas@hotmail.com.

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