



#### May 28, 2010

### Newsflash: Scientists of the DZero **Collaboration at Fermilab** Find Evidence for Significant Matter-Antimatter Asymmetry

New physics results that might help answer one of nature's most puzzling questions: why is there more matter than antimatter in the universe?

The following article is taken from a press release distributed by Fermi National Accelerator Laboratory, 5/20/10, to describe new physics results that might help answer one of nature's most puzzling questions: why is there more matter than antimatter in the universe? The research was conducted at the DZero experiment, part of Fermilab's Tevatron accelerator. Scientists from BNL built pieces of DZero and also *made significant contributions to* the experiment's software, computing, and performance.

In addition, the following Brookhaven scientists were coauthors on the Physical Review D paper that announces the result: Michael Begel, Anatoli Evdokimov, Thomas Gadfort, Abid Patwa, Marc-Andre Pleier, Serban Protopopescu, Scott Snyder, and Kin Yip.

Scientists of the DZero collaboration at Fermi National Accelerator Laboratory announced on Friday, May 14, that they have found evidence for significant violation of matter-antimatter symmetry in the behavior of particles containing bottom quarks beyond what is expected in the current theory, the Standard Model of particle physics. The new result, submitted for publication in *Physical Review D* by the DZero collaboration, an international team of 500 physicists, indicates a one percent difference between the production of pairs of muons and pairs of antimuons in the

decay of B mesons produced in high-energy collisions at Fermilab's Tevatron particle collider.

The dominance of matter observed in the universe is possible only if there are differences in the behavior of particles and antiparticles. Although physicists have observed such differences (called "CP violation") in particle behavior for decades, these known differences are much too small to explain the observed dominance of matter over antimatter in the universe and are fully consistent with the Standard Model. If confirmed by further observations and analysis, the effect seen by DZero physicists could represent another step towards understanding the observed matter dominance by pointing to new physics phenomena beyond what is known today.

Using unique features of their precision detector and newly developed analysis methods, the DZero scientists have shown that the probability that this measurement is consistent with any known effect is below 0.1 percent (3.2 standard deviations).

"This exciting new result provides evidence of deviations from the present theory in the decays of B mesons, in agreement with earlier hints," said Dmitri Denisov, who, with Stefan Soldner-Rembold,... See Matter/Antimatter on pg. 2

# All Hands Meeting With Daniel Poneman, **Deputy Secretary of Energy, Tuesday, 6/1**

Deputy Secretary of Energy Daniel Poneman has called an all hands meeting with BNL employees for the morning of his scheduled visit to the Lab on Tuesday, June 1 (exact time to be announced). All are encouraged to attend.

# RHIC/AGS Users' Meeting, 6/7-11

The annual Relativistic Heavy Ion Collider (RHIC) and Alternating Gradient Synchrotron (AGS) Users' Meeting will be held at BNL from Monday to Friday, June 7-11. All are welcome to attend with no registration the June 9, 10, and 11 events described below.

Monday and Tuesday, June 7-8. Five parallel workshops. To register and obtain more information, go to: www.bnl.gov/rhic\_ags/users\_meeting/default.asp.

Wednesday, June 9. 9 a.m. Berkner Hall. Special all-day symposium organized with the National User Facility Organization (see below), focusing on education and outreach. No registration. For more information, go to: http://www.bnl.gov/nufomeeting/.

Thursday, June 10. 8:45 a.m. Berkner Hall. RHIC/ AGS Users Meeting plenary session featuring highlights from Run-10 at RHIC and future perspectives from DOE and National Science Foundation funding agencies. All welcome.

Thursday, June 10. 1 p.m. BNL's special 90-50-10 Celebration, through June 11. See sidebar, right.

### 2010 NUFO Meeting, 6/7-9

The National User Facility Organization (NUFO) Annual Meeting will be held at BNL from June 7-9. NUFO represents the interests of all users who conduct research at U.S. national scientific user facilities, as well as scientists from U.S. universities, laboratories, and industry who use facilities outside the United States. This year's meeting is being hosted by BNL's RHIC, the National Synchrotron Light Source, and the Center for Functional Nanomaterials.

#### **RHIC/AGS/NUFO Special Symposium: Educational Outreach**, 6/9

All are welcome to attend this special symposium, which will cover educational outreach from various perspectives, including invited talks from the National Science Foundation, DOE Office of Science Workforce Development, American Chemical Society, CERN, Adopt-a-Physicist Program, Physics Olympics, FIRST, MARIACHI, and other outreach efforts. See NUFO Annual Mtg. on pg. 2 Courant

(Birthday)



(Operations)

### The 90-50-10 Celebration

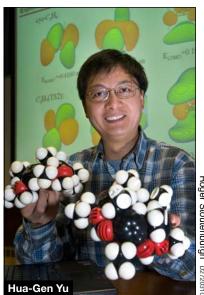
On June 10 and 11, all are invited to attend a celebration entitled "90-50-10" to celebrate the 90th birthday of Ernest Courant (of "strong focusing" fame), the 50th anniversary of the startup of the Alternating Gradient Synchrotron (AGS, home of three Nobel Prizes), and the 10th anniversary of first collisions at the Relativistic Heavy Ion Collider (RHIC).

For more information, see the Calendar, pg. 3, and http://intranet.bnl.gov/memo/mm.asp?lssueld=1 72&StoryId=2.

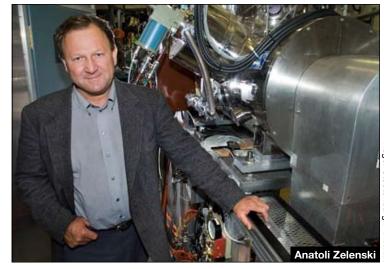
A workshop on "Laboratory History" will take place immediately after the 90-50-10 Celebration at BNL on Friday, 6/11, at 6:30 p.m., and at SBU on Saturday, 6/12. See Lab History on pg. 2

# **Eight Brookhaven Lab Scientists Are Granted Tenure**

**Brookhaven Science Associates** (BSA) granted tenure effective December 1, 2009, to eight Brookhaven scientists: Mei Bai, *Collider-Accelerator Department;* Alexander Bazilevsky, Physics Department; Richard Ferrieri, Medical Department; David Jaffe, Physics Department; Ferdinand Willeke, National Synchrotron Light Source II; Guangyong Xu, Condensed Matter Physics and Materials Science Department; Hua-Gen Yu, Chemistry Department; and Anatoli Zelenski, Collider-Accelerator Department. The articles below on Yu and Zelenski conclude the Bulletin's series featuring the outstanding contributions of these scientists.



complex molecular systems that others were unable to solve definitively," said Chemistry Chair Alex Harris. "His original theoretical contributions are highly appreciated in the DOE chemical physics program and by the wider chemical physics community. We look forward to having his breadth and drive contribute to the future of theoretical chemical sciences research at Brookhaven." Yu earned his B.Sc. in chemistry and M.Sc. in atomic and molecular physics from Chengdu University of Sciences and Technology, China, in 1985 and 1988. After completing his Ph.D. in physical chemistry at Göteborg University, Sweden, in 2000, he came to Brookhaven as a research associate and was selected as one of the initial Goldhaber Fellows in 2001. He was then promoted to a tenure track scientific staff position in the Chemistry Department, becoming an assistant chemist in 2004, associate chemist in 2005, and chemist in 2007. He is pursuing research within the Gas Phase Molecular Dynamics Group in the Chemistry Department.



#### Hua-Gen Yu

Hua-Gen Yu, Chemistry Department, has been awarded tenure for his outstanding contributions in theoretical chemistry. These include innovative and elegant algorithmic and computational advances in molecular quantum dynamics, particularly those allowing exact solutions of increasingly large molecular problems; and insightful new approaches to diverse other applications such as dissociative recombination

and mixed classical/quantum models for polyatomic reactions. He has made key contributions to BNL's chemical physics program through his independent scientific accomplishments and productive collaboration with experimental and theoretical scientists in the program.

"Hua-Gen has become a recognized leader in developing methodologies and algorithms that allow accurate quantum dynamics to be applied to

— Tianna Hicklin

#### Anatoli Zelenski

Anatoli Zelenski of the Collider-Accelerator Department (C-AD) received tenure on the basis of his creative, world-class contributions in the development of a new type of optically pumped polarized H- ion sources with an intensity 100 times higher than was possible in old-generation polarized sources. These achievements are based on his pioneering studies of spin-exchange polarization collisions.

The polarized proton source is recognized as a key element in the successful highluminosity spin physics program at BNL's Relativistic Heavy Ion Collider (RHIC).

Zelenski is also the leading scientist in the design and construction of the hydrogen jet and proton-carbon polarimeters, devices that allow for highly accurate measurements of proton polarization in RHIC.

'Anatoli is a scientist of the highest caliber and reputation," said Derek Lowenstein, former C-AD chair. "He is known internationally for his expertise in producing polarized beam... See Zelenski on pg. 2

Roger Stoutenburgh

#### The Bulletin

#### Lab History Workshop continued from pg. 1

Convened by Robert P. Crease, this is the Sixth Laboratory History conference - a gathering of scholars interested in the history of laboratories. It is free and no registration is necessary. For more information and a program, contact Crease at rcrease@notes.cc.sunysb.edu.

# Service Anniversaries

The following employees celebrated a service anniversary during February:

25 Voor

#### Matter/Antimatter from pg. 1

... is co-spokesperson of the DZero experiment, one of two collider experiments at the Tevatron collider. Last year, physicists at both Tevatron experiments, DZero and CDF, observed such hints in studying particles made of a bottom quark and a strange quark.

When matter and anti-matter particles collide in high-energy collisions, they turn into energy and produce new particles and antiparticles. At the Fermilab proton-antiproton collider, scientists observe hundreds of millions every day. Similar processes occurring at the beginning of the universe should have left us with a universe with equal amounts of matter and anti-matter. But the world is made of matter only and antiparticles can only be produced at colliders, in nuclear reactions or cosmic rays.

"What happened to the antimatter?" is one of the central questions of 21st-century particle physics.

The precision of the DZero measurements is still limited by the number of collisions recorded so far by the experiment. Both CDF and DZero therefore continue to collect data and refine analyses to address this and many other fundamental questions.

#### Zelenski from pg. 1

...sources. His contributions have been crucial to the RHIC spin physics program, and there is no doubt that he will continue to make valuable contributions to the field of accelerator science in the future."

Zelenski earned a Ph.D. in 1986 from the Institute for Nuclear Research (INR) in Moscow for his work in developing the first optically pumped polarized ion sources, and a second Ph.D. from INR in 2003 for work on spin-exchange methods of proton and H- minus ion beam polarization for high-energy accelerators and colliders.

After working at TRIUMF, Canada's National Lab for nuclear and particle physics in 1992-99, Zelenski moved to C-AD as a physicist in 2000. He won BNL's "Science and Technology Award" in 2003, and in 2006, he and a colleague won the prestigious Veksler Award, granted once every three years by the Russian Academy of Sciences, for "outstanding achievements in accelerator physics." — Tianna Hicklin

#### NUFO Annual Mtg. from pg. 1 **Other Opportunities**

Prior to the symposium, on Monday, June 7, user administrators will discuss issues on metrics, user agreements, and surveys. This meeting is open to all members.

Tuesday will kick off with a keynote talk from the Office of Science followed by presentations on long-range plans for Basic Energy Sciences and Nuclear and High Energy Science as well as what NUFO has undertaken, accomplished, and what they have done for users during the past year.

NUFO facilitates communication among users, user organizations, facility administrators, and other stakeholders. All User Representatives, User Administrators, and General Members are invited to attend this meeting. For more information, see *http://nufo.org/*.

# **Arrivals & Departures**

- Arrivals -

Margaret-Ann Douglas... Diversity Lee Pearce.....P&PM Jon Stulhut..... Info. Tech. Jeffrey Stewart..... C-AD

### - Departures -

William Abele ..... Biology John Primiano..... Lab. Protec.

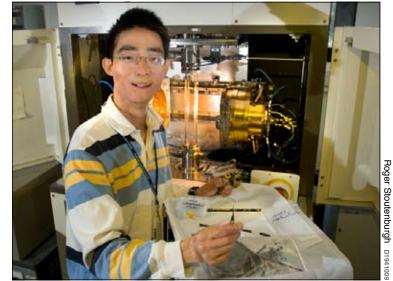
# **SBU Student at BNL Wins Award From Chinese Government for Energy Research**

Jinsheng Wen, a Stony Brook University (SBU) graduate student from China who researches new energy technologies at BNL, has been named a winner of the 2009 Chinese Government Award for Outstanding Self-Financed Students Studying Abroad.

Wen is one of 23 winners in the Northeast U.S. to receive the 2009 award, which includes a \$5,000 prize and a certificate. The China Scholarship Council gives these awards annually to recognize the academic merit and research accomplishments of exceptional self-financed not government-financed - students from China who are pursuing doctoral degrees in foreign countries. The awards will be given at the Chinese Consulate in New York City in June of 2010.

At BNL, Wen is a member of the Neutron Scattering Group in the Condensed Matter Physics & Materials Science Department (CMP/MS). He is also a part of the Lab's Energy Frontier Research Center — the Center for Emergent Superconductivity — a DOE Office of Science initiative to make alternative and renewable energy viable as large-scale replacements for fossil fuels.

Wen focuses his research on unique materials and their properties. In particular, he works with superconductors materials that conduct electricity without any resistance, so



Jinsheng Wen shows a sample superconductor.

that no energy is wasted. With 100 percent efficiency, superconductors are a promising piece in solving the nation's energy challenges.

"We are quite proud, though not surprised, that Jinsheng has won this award," said John Tranquada, a CMP/MS senior physicist and one of Wen's mentors. "He has been an extremely productive student and is a credit to the Center for Emergent Superconductivity, the energy frontier research center through which he is supported."

"This is a prestigious award for Chinese graduate students around the world," added Genda Gu, a CMP/MS physicist who is also Wen's mentor. "Jinsheng has made a number of original

and innovative contributions that have major impact and significance in the superconductivity and ferroelectric fields. He is growing into an exceptional young scientist."

Wen has already won numerous awards and has also authored or coauthored 20 papers, some of which have been published in Science, various Nature journals, Physical Review Letters, Applied Physics Letters, Physical Review B, and the Journal of Crystal Growth. He expects to receive his Ph.D. in materials science from SBU in summer 2010. Wen was featured in a BNL Today web article, 10/14/10, http://www.bnl.gov/today/story. asp?ITEM NO=1379.

- Joe Gettler

## Acoustic Bluesman Paul Geremia to Play, 6/18

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

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

### REMEMBER THE **BNL FOOD DRIVE**



Pink Anderson, to name a few.

Geremia's harmonica and piano playing, combined with his finger-picking talent on sixand twelve-string guitars and his

# Young Musicians Play BNL, 6/19

cians' Showcase on Saturday, June 19, at 7:30 p.m. in Berkner Hall. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo I.D. Featured artists at this performance will be "The Sheppard Brothers," "Calico Galaxy," and "The Well." The aim of this new musical series at BNL is to offer performance opportunities to young musicians with exceptional talent at the college, high school and middle school level. The Sheppard Brothers of William Floyd High School include Kenya Sheppard, lead guitar and vocals; Camara Sheppard, keyboards and backup vocals; Ryan McCloskey, drums and backup vocals; and Angelica Franzino, bass and vocals. The band will play a mixture of blues and rock, featuring songs of Jimi Hendrix, Prince, and Led Zeppelin.

husky, soulful voice, has earned him accolades thoughout the United States and Europe. Wanting to keep traditional acoustic blues alive, Geremia has never switched to electric. He has recorded 10 solo albums and appeared on numerous compilation discs

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

— Jane Koropsak

A number of up-and-coming lo- Medford High School features cal musicians will get a chance to twin brothers Nick Rufolo on strut their stuff at a Young Musi- bass and Mike Rufolo on drums; Josh Smith (currently majoring in music at the City College of New York), keyboards; Anthony Romano, guitar; Dan Minogue and Jon Greene, both on sax; and Daniel Pessalano (currently studying at Ithaca College School of Music) on vibraphone. The band describes their music as a collision of Frank Zappa and Jaga Jazzist. The Well — of Smithtown High School East and West, is a recently formed combo performing original compositions of jazz-fusion inspired rock. The band consists of brothers Eddie Bickard on drums, Alex Bickard on bass, and John Romano and Dylan Larese on guitar. Tickets for this concert are available at the BERA Store and www.ticketweb.com. To promote young talent and provide music at a reasonable cost, the BNL Music Club is offering all tickets for this show for \$5. This performance is appropriate for all ages, including children. — Jane Koropsak

The DZero result is based on data collected over the last eight years by the DZero experiment: over six inverse femtobarns in total integrated luminosity, corresponding to hundreds of trillions of collisions between protons and antiprotons in the Tevatron collider.

DZero is an international experiment of about 500 physicists from 86 institutions in 19 countries. It is supported by DOE, the National Science Foundation and a number of international funding agencies.

For more information, see http://www.bnl.gov/bnlweb/pubaf/ pr/PR\_display.asp?prID=1139.

## **Borrow-A-Bike**

The BERA Borrow-a-Bike program is available for those without a car: For more information, go to http://www. bnl.gov/bera/recreation/bicycle.asp, or call Ext. 8481.

# **Blood Drive**, 6/16, 17

Blood is always in short supply, and once again, BNL asks generous donors to give blood at a Blood Drive on Wednesday and Thursday, June 16 and 17, 9:30 a.m. - 3 p.m. in the Brookhaven Center. Donors must be 16 to 75 years of age, in good health and weighing over 110 lbs. Restrictions may apply to some from the UK and Europe. Donors must have a photo ID and know their social security number.

To make an appointment, log on to the Human Resources webpage, click on "Blood Drive," then "Schedule an Appointment." Or, call Liz Gilbert, Ext. 2315.

### Got/Need a School Textbook to Give/Sell? **Contact Diversity!**

BNL employees who are attending college have probably noticed that many textbooks are expensive and have little resale value at the school bookstore.

In response to a suggestion from the Information Services Division's LaRosa Collins, who is attending St. Joseph's College in Patchogue, the Diversity Office has volunteered to make a list of gently used textbooks to be sold or given to BNLers and try to match the list with a "wanted" list for textbooks sent in by other BNLers.

If you are interested, send a list of textbooks that you want to get rid of or that you want to obtain, to the Diversity Office's Marge O'Loughlin, *moloughlin@bnl.gov*.

Calico Galaxy of Patchogue-

#### The Bulletin



# **Building Arches Of Honor For Fallen Firefighters And Soldiers**

Most Americans vividly remember where they were and what they were doing on September 11, 2001: 9-11. While events of that day will be a dark stain in history books forever, it was also a day that sparked an unusual sense of patriotism in many Americans.

For one BNLer, it sparked an idea on how to further honor fallen firefighters.

Jim Vaz, an employee in the Laboratory Protection Division, remembers the sadness he felt when he was notified that some of his firefighter friends lost their lives at the World Trade Center that day.

"I've been a volunteer firefighter for many years," said Vaz. "As we all know, it is never easy to say goodbye to a friend. It was especially difficult under those circumstances."

Vaz said that one day, short-



ly after the events of 9-11, as he was having a cup of coffee and conversation with a friend at his hometown firehouse in Brookhaven Hamlet, the two came up with a new idea to express their sympathy and gratitude to their fallen comrades. The idea: Raise "arches of honor" on the day of each funeral. Arches of honor are formed when ladder trucks park across from each other and a large American flag is suspended between the two ladder trucks.

"So, in the days following 9-11, we spent a lot of time in our full dress uniforms, saluting, mourning, and standing under arches of honor," said Vaz.

But the idea did not end there. Vaz and his firefighter friends thought they should extend this honor to fallen soldiers - to pay tribute to them and show their families

how much their supreme sacrifice is appreciated. In order to honor soldiers in the same manner that fallen firefighters are being honored, Vaz made contact with the United States military.

'The military has been extremely cooperative and grateful," said Vaz. "When I receive a call from the military that a Long Island soldier has died, I know that neither snow, rain, nor glaring sunshine will keep firefighters from putting on their dress uniforms and volunteering their time to raise arches of honor. These soldiers have died for our freedom and we all want to honor them appropriately."

One of the first soldiers to have his funeral motorcade driven through multiple arches of honor at the entrance to Calverton National Cemetery was

Specialist Thomas J. Wilwerth of Mastic, NY. Specialist Wilwerth was killed in action in Iraq by an improvised bomb on February 22, 2006. Although his family was devastated, his mother, Elaine Wilwerth said, "Tommy just wanted to serve his country. When 9-11 happened, it made him want to go more. We're so sad he was taken from us, but proud that he died with such honor."

Vaz said, "From the moment the first soldier's motorcade drove under the arches, we all knew this was the right thing to do. Expressing our sympathy by forming arches with a large American flag flying freely in the wind to honor our fallen soldiers is the least we can do. I think it helps to show their families their loss is felt by all of us."

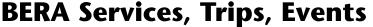
- Jane Koropsak



BERA's Hispanic Heritage Club will hold its Academic Scholarship Ceremony on Friday, June 4 at noon in Berkner Hall, Room B. This year, six college-bound local high school seniors will receive the \$600 prize. All BNL employees are invited to participate, but due to the limited seating space, we ask all who wish to attend to RSVP by June 1, to Yvette Malavet-Blum, *malavet@bnl.gov*.

### Gym & Pool Now Closed on Weekends

The gym and swimming pool will be closed on Saturdays and Sundays from this Saturday, May 29, through Monday, September 7, reopening on Saturdays beginning September 11.





### CALENDAR

#### Friday, 5/28

#### **BVA Memorial Day Ceremony**

Noon. By the flag at the Brookhaven Center. The Brookhaven Veterans' Association will salute the armed forces, especially those on active duty who are related to BNLers. All are wel-come to participate.

#### \*Employee Lunchtime Tour

Noon. Berkner Hall lobby. Meet the group to go to learn about green energy production. All are welcome. No reservations. Back by 1 p.m. See pg. 4.

#### Sat., Sun., Mon. 5/29-31

Cafeteria Open 7:30 a.m.-2 p.m. (Brookhaven Center closed.)

#### — WEEK OF 5/31 —

Monday, 5/31

#### **Memorial Day**

The Lab will be closed in honor of Memorial Day. No Bulletin on Friday, June 4.

#### Friday, 6/4

#### \*Hispanic Heritage Presentations

Noon. Berkner Hall, Room B. See notice at left.

#### \*BERA's Annual Plant Swap

Noon-1 p.m. Berkner parking lot. Bring plants to swap.

#### **WEEK OF 6/7**

#### Monday, 6/7

#### \*RHIC/AGS Users' Meeting

Workshops start, see pg. 1 and http://www.bnl.gov/rhic\_ags/ users\_meeting/default.asp

#### \*NUFO 2010 Annual Meeting

9 a.m. Bldg. 400. For more inwww.bnl.gov/nufomeeting/. See also pg. 1.

#### Tuesday, 6/8

\*RHIC/AGS Users' Meeting http://www.bnl.gov/rhic\_ags, users\_meeting/default.asp

#### \*NUFO 2010 Annual Meeting

#### www.bnl.gov/nufomeeting/

#### Wednesday, 6/9

#### \*NUFO Education Symposium

9 a.m.-5 p.m. Berkner Hall. Special Symposium on education and public outreach sponsored by the RHIC & AGS Users' Executive Committee and the Na-tional User Facility Organization (NUFO). All are welcome. See pg. 1 and http://www.bnl gov/rhic\_ags/users\_meeting/ agenda/symposium\_wed.asp

#### Thursday, 6/10

\*RHIC/AGS Users' Plenary Session 8:45 a.m. Berkner Hall. Welcoming remarks and talks. Poster session, 11:30 a.m. See www.br users\_meeting/default.asp.

#### \*90-50-10 Celebration

All are welcome to attend the

**Swap**, Berkner Parking lot, noon-1 p.m. Bring something to share from your garden if possible! Ext. 5090.

2010 Mets Games - will be sold Fri., 6/4 from 9 a.m. at the BERA Store. Two tickets per person, per game for first week of sales, all for age 21 or older, or accompanied by parent.

Tues., 7/27 - Mets vs. Cardinals: Leave BNL 4 p.m. for 7:05 p.m. start, leave after game, no later than 11:30 p.m. Promenade reserved Section 521, \$43 each. Fri., 8/13 - Mets vs. Phillies: Leave BNL 4 p.m. for a 7:05 p.m. start, leave after the game, no later than 11:30. Promenade reserved Section 521, \$38 each. Sat., 6/12 - Atlantic City Resorts Casino. Depart B'haven Center 9 a.m., depart 8 p.m. \$25 per person (21 and

Fri., 6/4 - Annual Plant older only), with a \$20 slot play for each person. Only 52 seats! Sat., 7/10 - Promises Promises at the Broadway Theater (Broadway between W52 & W53). Coach will leave BNL 9 a.m. for 2 p.m. show, leave NYC at about 4:30 p.m. 55 tickets. \$116 per person.

Sun., 7/25 - Addams Family Show, Lunt Fontanne theater (205 W. 46 St.), leave BNL 10:30 a.m. for 3 p.m. show, leave after show about 5:30 p.m. 55 tickets, \$107 each.

**Discount tickets for Splish** Splash - \$24/\$30 at the BERA store, or buy online for another \$1 off. BNL code: 2010106.

Would you like to join in the social scene at BNL and meet other people with your interests: sports, public speaking, music, travel, camping, and much more? See www.bnl. gov/bera/recreation/clubs.asp.

# **Summer Science Explorations At BNL's Science Learning Center**

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

These programs, offered by BNL's Office of Educational Programs (OEP), center on research done at the Lab. In addition to OEP science educators, the children are mentored by research staff and pre-service teacher interns.

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

celebration of Ernest Courant, 90; AGS Operations, 50; and RHIC Operations, 10.

1 - 3 p.m. Berkner Hall. Celebration chaired by Nicholas Samios. 3:25-6:15 p.m. Session chaired by Peter Bond. 6:15 p.m. Berkner lobby. Reception.

#### Friday, 6/11

#### \*90-50-10 Celebration

9 a.m.-12:15 p.m. Berkner Hall. Session chaired by Satoshi Ozaki. 1:45-5 p.m. Session chaired by Derek Lowenstein.

#### \*Laboratory History Conference

6:30-8 p.m. Berkner Hall. Panel Discussion: "Laboratory Man-agement." Moderator: Robert Crease, SBU. All are welcome.

#### Saturday, 6/12

#### \*Laboratory History Conference

8 a.m.-3:45 p.m. Conference continues at Stony Brook University, 249 Harriman hall. For more information and a program, contact Robert Crease, rcrease@notes.cc.sunvsb.edu.

### Classified Advertisements

#### To Find BNL Job Ads

Human Resources now advertises most positions available at BNL only on the HR "Jobs" webpage: http://www.bnl.gov/HR/careers.

These positions are no longer advertised in the Bulletin. This change to essentially an allweb-based process allows immediate, realtime posting of positions and aligns BNL's job posting policy to that of other labs and organizations. Union positions will continue to be advertised in the Bulletin, as may certain other positions that are identified by HR and hiring managers as appropriate for the Bulletin readership (specifically, but not limited to, those jobs open to Lab employees only).

#### Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882. Access current job openings on the World Wide Web at www.bnl.gov

#### To apply for a position, go to <u>www.bnl.gov</u>. Select "Job Opportunities," then "Search Job List."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

MACHINE SHOP SUPERVISOR (T-6) - Requires the equivalence of a technical institute or associate's degree in a related scientific or technical field, considerable technical and job relevant training, and ten years' related experience in a broad technical field which includes demonstrated technical leadership and significant working knowledge of machining techniques and services. Responsible for the direct supervision of all Machine Shop production activities for Fabrication Services. Responsibilities include scheduling requirements and assignment of work for machining work orders, technical direction, training and handling of union matters. Provides customers with technical advice and reports on the status of assigned work orders. Represents Machine Shop in ES&H committee activities and initiatives. Reports to the Manager, Fabrication Services and supervises Tool & Instrument Makers and their Group Leaders. Maintenance and Fabrication Division. Apply to Job ID # 15378.

#### **Motor Vehicles & Supplies**

05 POLARIS 500 PREDITOR – 100 mi. troy lee spec. ed, many upgrades low hrs, dealer maintd, must sell. \$2,800 neg. 875-9426. 04 AUDI A4 1.8 TURBO – 88K mi. Ultrasport pkg, awd, a/t, tons extras, clean well maintd. \$14,700 neg. awund@bnl.gov. 03 NISSAN ALTIMA 2003 – 161K mi. blk,

V6 eng, excel cond, orig owner, runs well, b/o. \$4,500 neg. Sameer, 205-8615. 02 HONDA CIVIC EX – 171K mi. rem strt,

m/roof, rear spoiler, a/t, a/c, p/w, new parts, inspec 5/22/10. \$4,000. 516-658-6983. 01 LINCOLN CONTINENTAL – 32.5K mi.

Ltd Ed, loaded, rem strt, stainless stl trim, vinyl top, gar, grt cond. \$8,500. 208-0009. 99 HYUNDAI ELANTRA WAGON – 55.6K mi. maroon, new tires, gd cond, neg. \$3,595. Ted, Ext. 5645.

98 NISSAN MAXIMA – 126K mi. blk, grey int, 5/spd standard shift, all pwr. \$2,800 neg. Warren, Ext. 2080 or jappe@bnl.gov. 98 TOYOTA CAMRY LE – 154K mi. 2.2L 4cly, a/t, a/c, p/w, p/m, p/l, cass, am/fm/disc w/ Sirus, runs v/well. \$2,900 neg. 704-7607. 96 SATURN SL SEDAN SEDAN – 117K

96 SATURN SL SEDAN SEDAN – 11/K
mi. 4 dr, gd cond. \$850 neg. 525-7875.
94 JEEP GRAND CHEROKEE LIMITED – 122K mi. 4wd, great for beach & snow, gd running cond. \$2,900. Karl. Ext. 3116.

gd running cond. \$2,900. Karl, Ext. 3116. 93 BMW GREEN – 113 mi. excel cond, runs well, b/o. \$3,800 neg. 205-8615. 91 VW JETTA – 88K mi. red, 4dr, 4 cyl, a/t, a/ c, s/roof, am/fm/cass, gd cond, 2/new tires, Furnishings & Appliances BABY'S CHANGING TABLE, TUB – on rollers, quality solid wood, w/mat, util drwr, safety belt; also tub, make offers. Ext. 3621. CHERRY PLATFORM BED – Q/size w/wo Queen mattress; cust. made: "Georges Woodworking" \$100/obo. Sue, Ext. 4931. COFFEE TABLE – glass top, end tables w/ matching lamps, black metal frames/\$175/ moving, must sell. 384-6401.

CRIB – light-colored solid wood, excel cond, made in Italy, mattress incl, Ext. 3621.

ELECTRIC STOVE – white, excel cond, \$260, proceeds go to charity www. hopeww.org, pics avail. Nina, Ext. 5894. ELECTRIC WHEELCHAIR – brand new, Jet 3 Ultra, 300 lb capac, pic avail. 821-1271. LIFT CHAIR – pride, 2-position, burgundy, great cond, photo avail, 821-1271.

OAK ENTERTAINMENT CNTR – 6'w, 4'L 2'd, will hold 30" tv, horiz meas., storage, 4 cmponents, pics, \$750. Richard, Ext. 3932. POWERCHILL – hot/cold thermoelectric cooler, 40 quart capacity, \$50. Donna, Ext. 2716, 878-2425 or storan@bnl.gov. ROLLATOR WALKER – less than 1 yr old, has basket on front and a folding seat, burgundy, photo avail, \$65. 821-1271. SOFA, CHAIRS 6 PC. SET – (1)3 seats Chr,

(1)Sngle seat Chr, (1)Rocking Chr, Coffee Tble; (2)End Tbles, gd cond, \$35. Ext. 3207. SOLID CHERRY FURN. – dresser w/sep wall mirror; excel cond, orig owner, 7 Eng. dovetail drwrs; pics, price neg. Ext. 4931. WALL MURALS – any wall or size, kids theme to I/r or den beach scene, see pics, price to size, detail. Ron, 379-0742. WATER COOLER – Poland Spring Water Dispenser/\$20/neg. Joe, 281-4459.

#### Audio, Video & Computers

AUDIO GEAR – 16CH rack mount mixer, 48 pnt patchbay, DSP1224P & DSP1200P FX procrs, more, gd.cond, \$450/all. Ext. 2854. RECORDS - OPERA, SHOWS, CLASSICAL – Collection, will bring in records to see, make offer. Cheryl, Ext. 2272, 732-7634.

YAMAHA RX-V1600 RECEIVER – needs fix: turns on, then turns off, new/\$1100 have box, manuals, etc, ask/\$150. Ext. 3970.

#### Sports, Hobbies & Pets

2000 KOUNTRY COMFORT RV - 36' – cust Ltd Ed lux., w/d, 2 slide outs, cust cabinets/ couches/lseat, lo mi, mint, \$9,950. Ext. 3005. 89 TERRY CAMPER – 29' master bdr, sleeps 2 w/bunkbds, kit table, 6 spkr stereo, all works! \$6000/obo. Sue, Ext. 4931. DOG CRATE – Blck Teflon 24x18x18 for small dog. Slide out tray, easy clean. 1 dr. Carry handle. Grt Cond. \$30. 902-8375. HIP & THIGH MASTER – Body by Jake exercise equip, orig owner, barely used, \$30/obo, signorel@bnl.gov.

ION PAINTBALL MARKER – Smart Parts ION w14" aftrmarkt barrel, 48ci Nitro Tank, gun case, \$200/obo, Andrew, Ext. 4891. KITTEN – for adoption, Tabby, all black, green eyes, 8 wks old. Anthony, Ext. 2484

or adilieto@bnl.gov. TREADMILL - Sears, \$200/obo, 289-0072. WOODEN DOLL ROCKING BENCH - painted blue w/pink hearts, 18 1/4"W x 15"H x 12"D, pics. \$17. Linda, Ext. 2733.

#### Tools, House & Garden

PERENNIALS – Iris, vinca vine, hosta, liatris, shasta daisy, cone flower, hydrangea, \$4/ea, will deliver to BNL. 905-8222. SINK – old-fashioned, white cast-iron and porcelain, w/drainboard attchd, gd cond, b/o. Kathleen, Ext. 7114. TABLE SAW/BLADES - Sears \$50/obo; 289-0072.

#### Miscellaneous

FOOD PROCESSOR – KitchenAid, unused/\$50; Bissell carpet cleaner, used twice/\$50; 289-0072.

HAND PAINTED BIRDHOUSES – Yankees, will add fav player, more; glass/wood/ metal items; pics; \$25-\$50. 379-0742.

IN-POOL STAIRS – 4' pool w/remvble railings fr pool to deck or patio, w/3 sand bags for wt, pics, ask/\$150, u pic up. Ext. 5920. LADY GAGA TICKETS – 2 Tickets on the Floor in Atlantic City for July 4 Concert; \$150/ticket. Joe, Ext. 3137, labas@bnl.gov. ARTHUR DOLL HOUSE – 23hx18wx13d, 4 ms w/fr. porch, silk scrned wndw, gingerbrd trim, assembld., painted, \$15. Ext. 3207.



Security Police officers of the Lab's Protection Division recently assisted the Smithtown Guide Dog Foundation to train "VetDogs." These special canines will be sent to military hospitals to help provide physical and stress therapy to recuperating soldiers. Shown from left: David Peter with VetDog Donna-K; Brian Buckheit with VetDog Stephanie; Ralph Vega with VetDog Timmy; and Justin Merrow with VetDog Apollo.

# Training Some Unusual Soldiers At BNL

Security police officers from the Laboratory Protection Division recently participated in an unusual training exercise — helping train America's "VetDogs."

Four Labrador retrievers two black and two yellow — and their handlers from the Smithtown Guide Dog Foundation (GDF) put on safety goggles ("doggles") and ear protection while BNL officers fired rounds into targets at the on-site target range. The purpose of this exercise was to train the dogs to become familiar with the sound of gunfire. These special dogs are part of the GDF's VetDog Program, and will be transported to military hospitals to provide occupational, emotional, and physical therapy to active soldiers. The dogs will not be in harm's way, but may hear distant gunfire. Captain David Peter and Police Officers Brian Buckheit and Ralph Vega fired shots at targets while the dogs

Security police officers from the and their handlers stood nearby.

"These dogs are amazing," said Peter. "They were unwavering and seem ready to leave the GDF to begin their new careers."

According to the VetDogs' website, these specially trained canines offer emotional support for servicemen and women dealing with combat stress. Vet-Dogs have also been helpful for physical and occupational therapy rehabilitation. For instance, the dogs can be trained to brace recuperating soldiers when they transfer from a bed to chair, and to help them get up if they fall. Through innovative tug-of-war exercises, the dogs can also help soldiers as they learn to work with new prosthetic limbs.

Buckheit, who has been a liaison between the Lab and GDF, said "I think the GDF is providing a great service for American soldiers. I am personally grateful that Lab management has supported my efforts in bringing these extraordinary service dogs to BNL for training. As a long-time Lab employee and friend of the Lab's Veterans Association, I am proud to be even a small part of this important program. For veterans in our police group, like Ralph, it's a great opportunity to have a connection with our soldiers overseas."

The VetDog program is even more personal for BNL Police Officer Justin Merrow, who drove directly to the shooting range to visit the dogs when he reported to work that day. "I served two tours in Iraq," said Merrow. "I know first-hand the difficulties our soldiers face. These dogs will certainly provide comfort to those serving in our military. Just looking at these dogs brings a smile to your face."

For more information on Vet-Dogs go to: *http://www.vetdogs. org/.* — Jane Koropsak

#### Wanted

BICYCLE – 3/spd, older style, Schwinn, Raleigh or Ross preferred, some rust ok. Benjamin, Ext. 4299. DOUBLE STROLLER – back-to-back, must be in gd working cond. 678-2457. HELP WANTED – Small company looking for a P/T office professional for a seasonal business. Billing, computer, phones, filing, etc. for new office. 928-3669. MINI REFRIGERATOR – sm, compact, working. smaramra@bnl.gov.

PATIO CHAIRS – want 2 or 4 for sm deck, gd cond, free or reasonable. Ext. 7132.

#### Lost & Found

FOUND KEYS – 2 sep key rings turned in from 911 vicinity, 1) Ford key w/a brass disk 236; 2) key chain says "god never shuts 1 door without opening another" w/a black key. Ext. 5090.

#### For Rent

KISSIMMEE, FL - 2/bdrm unit, sleeps 8, avail in Orlando, may split to accom 4 ppl for \$500/wk. 15 mins to Disney World: www. calypsocay. \$1,000/wk. Nina, Ext. 5894. ORLANDO, FL - Orlando/Disney Marriott T/share, 15 min to Disney, Sleeps 6-8, most wks avail, other destins, v nice. \$800/wk neg. Mike, Ext. 2947. NEW BERN, NC - T/share; relax at Waterwood Townhouses on Lake, 2 bdrms, sleeps 8. full kit. w/d. 7/18-25/10. \$450/ wk. Linda, Ext. 3750. CENTER MORICHES - 4 bdrm hse, 2 bath, eik, waterfront dock, sweeping view of bay, plus util. \$1.950/mo. Elaine. 261-7908. E. PATCHOGUE - 1 bdrm/carpet, full bath + closet, coat closet, pvt ent/fen yd, lr/kit w/fp, incl all utilis/cable/wireless int, no pets/non smkrs. \$1.150/mo. 806-7327. MANORVILLE – 1 bdrm apt, full bath, pvt ent, v/quiet, 9 mi to Lab, util, incl, single only, no smkg/pets. \$800/mo. Ext. 3849, 591-1315.

### Employee Lunchtime Tour Today, 5/28

At the Employee Lunchtime Tour today, Friday, May 28, the Lab community is invited to learn about the current research of using poplar trees and other plants for green energy production. Lee Newman of the Biology Department will discuss her research and show the plants she works with. The group will meet at Berkner Hall upper lobby at noon to be taken to the greenhouses and return by 1 p.m. No registration is necessary.

MILLER PLACE – share Ig furn 2 bdrms Col. home, prof resid area, 8 mi to Lab, cac, full kit, int/tv, fenc bckyd, deck/grill, all incl, rspnsib non-smkr. \$675/mo, 744-8386.

N. PATCHOGUE – rooms in comfortable, clean hse, safe n'hood, furn, utils, shared kit & bath, prkg, hse alarm w/sep ent, min 3 mos. \$500/mo neg. 447-6899.



WADING RIVER – 2 bdrm ranch on quiet dead end st, bsmt w/d, d/w, no smkg/pets, sec/refs, avail 6/1. \$1,300/mo. 929-6511.

#### For Sale

AQUEBOGUE - 3 level, 3000 sq ft condo-3.5 bath cwnt, a/c, vacc upper deck,

#### ployee Lunchtime , Friday, May 28, munity is invited out the current reng poplar trees and s for green energy

new alt, batt, more, \$1,400 neg. Ext. 2854. ARE FB/GLASS CONTRCTR CAP – fits shrt bed, 72"-95" Silverado, Sierra, Ram, etc. W/ tlbox pkg, ask/\$1200. Andrew, Ext. 4891. TIRES – 4 new in 12/09 P195/70R 14" on chevy rims, \$200. Kevin, 882-0519. WHEELS/TIRES – Bridgestone Turanza P205/55R16, hubcaps, lug nuts incl, new from '08 Civic LX, \$200. Jay, Ext. 4994.

#### **Boats & Marine Supplies**

38' CHRIS CRAFT COMMANDER - '67 Fglss, twin 260hp merc/cruisers, 800hrs repwred '89 generator, \$10,500 neg. 386-492-3953.
17' STARCRAFT F/GLASS - '70 w/88 Evinrude ran well 2/yrs ago, needs cosmetic touches. \$440 neg. 375-8519.
16' MFG TRI-HULL - 70 HP Johnson Outboard w/trailer, gd shape, priced to sell, moving. \$800 neg. Joe, 384-4302.
15' JY JY15 - clean boat on custom trailer, ready to sail! in Shoreham. \$1,500. John, Ext. 3414, 356-4299, shanklin@bnl.gov.
YAMHA MOTOR - '02, 50hp, 2 stroke outbrd w/controls, elec start, trim/tilt, motor runs but needs work, make offer. 484-6173. TRUTH CALVIN KLEIN PERFUME- – spray, 3.4 oz, never opened, in box w/ shrink wrap, purch. Aug '09, \$20. Kathleen, Ext. 7114.

#### Yard & Garage Sales

MEDFORD – 5/22-23, 10a-3p, hsehold, games, dishes, glassware, electronics, tools, more, 139 Robinson Ave, 289-0072.

#### Happenings

CRUISE – 7-Day Caribbean Cruise, Apr. 10/2011, to Cayman Islands, Cozumel, Isla Roatan & Belize, w/2 fun days at sea. \$789. 72pp dbl occ.. balcony. 399-3098.

#### **Farewell Gathering**

FRED WAHLERT – Please join us wishing a wonderful retirement to Fred! 6/18, 6PM at Sea Basin in Rocky Point. \$45/pp incl gift, RSVP by 6/7, contact Lynn, Ext. 5960 or. Tom, Ext. 3085.

#### Free

DRESSER – long, w/9 drawers for storage, 2 drawer end table, dark walnut, Manoville, exit 69 off LIE. Fred, 648-3848. MASTIC – new apt, 1 bdrm kit l/r combo, full bath, priv ent, quiet, own thermo, util incl, nr LIRR, no smkg/pets, walk to shop, 8 min to Lab, 1 mo sec. \$725/mo neg. 335-4907. MASTIC – 1 bdrm, eik, full bath, den, own ent/ drway, all incl, 10 min to Lab, no smkg/pets, 1 mo sec. \$850/mo. joe mondi, Ext. 3499, 219-7241.

OCEAN BEACH - F.I., Ocean Beach 4 bdrms, 8 people, 2 ba, cable, air, int, bikes, linens, http://aardvarkfireislandrentals.com/ \$2,000/wk neg. 316-4972. ROCKY POINT - 2 bdrm, 1 bath ranch, compl. renov, encl porch, full bsmt, all new appl, dd end st, no smkg/pets, refs/sec./lease util. extra. \$1.400/mo. hoffman1@bnl.gov. S. SETAUKET - spac 3 bdrm house, Ig office rm, eik, l/r, fmr, d/r, 2 full bath, lg bkyd, no smkg/pets, Thr Vill SD. \$2,600/mo neg. Al. 278-4241 or blue55ag@gmail.com. SHIRLEY - rm for rent/microwave kitnet/l/r comb, 1mo sec, priv bath/ent, no smkg/pets, 14min to lab/close to stores/ beach/lirr. \$550/mo. 344-4324.

SHOREHAM – spacious, clean, 1 bdrm furn studio apt, sep ent & thermo, full bath, kit, patio, big yd, cable TV, no smkg/pets, 7 min to Lab, avail now. \$775/mo neg. 747-3495. SND BEACH – studio, full kit, bath w/tub, sep ent, therm; new carpet/paint, no smkg/ pets, 1 mo rent & sec; 1 yr lease min, MUST fill rental applic. \$800/mo. 516-650-3852. lower patio, 2 car gar, indr hot tub, walk on priv beach, 3 zone basebd heat, pool, tennis, upgrades. \$775,000. Ext. 5101.

CENTER MORICHES – bldg lots; 1/one acre & 2 two-acre lots, horses allowed on all, borders on Suff cty owned prop, will hold mort if needed. \$125,000 neg. George, 878-1178 or murdock@bnl.gov.

S. PATCHOGUE – v/lg 3 bdrm ranch, 1 block to Bay, cac, eik, newly renov, l/r, for d/r, den, full bsmt on .5 acre. \$339,900 neg. Jim, Ext. 4705, 929-4978 or mjulian@bnl.gov.

SAYVILLE – hse, quiet dead end st, 2 bdrm, 1 bath, Ig 2.5 car det gar, 111x130 (.33 ac) landscaped prop, encl. front porch, hardwood firs, cac, 200A elect, low \$6K taxes. \$349,000. 750-2859.

#### In Appreciation

Thanks to the person who found and returned my wallet to the police headquarters. – Courtney Patterson

A list of services offered by BNLers is available by calling (631) 344-2346.

# Bulletin

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