

Five BNL Scientists Named AAAS Fellows

The American Association for the Advancement of Science has awarded five BNL scientists with the distinction of Fellow. Howard Gordon, Fritz Henn, Serban Protopescu, Thomas Roser, and Betsy Sutherland will be among 486 AAAS members to receive this honor for their efforts toward advancing science applications that are deemed scientifically or socially distinguished. The new Fellows will be presented with their official certificate and rosette pin on Saturday, February 14, during the 2009 AAAS Annual Meeting in Chicago.

Howard Gordon

Howard Gordon is recognized for his “distinguished contributions to the field of experimental high-energy physics, and, in particular, for leadership of the U.S. ATLAS construction project.”

Gordon helped coordinate the design and construction of the ATLAS detector at the Large Hadron Collider, the world’s most powerful particle accelerator, which recently began operating at CERN, in Geneva, Switzerland. Gordon has held several leadership positions within the U.S. branch of the ATLAS collaboration since 1996 and is currently the head of the U.S. ATLAS Program Office and deputy U.S. ATLAS operations program manager. He oversees nationwide and BNL-specific efforts to maintain and operate the detector and provides the computing and physics-analysis support to enable U.S. physicists to make discoveries with the data.



Howard Gordon

Roger Stoulenburgh D2861208



Fritz Henn

Joseph Rubino D2590406



Serban Protopescu



Thomas Roser

Roger Stoulenburgh D2861208



Betsy Sutherland

Roger Stoulenburgh D0030606

Fritz Henn

Fritz Henn is cited for “outstanding contributions to understanding neurodegenerative diseases and depression, for extensive service to the mental health community, and for inspired leadership of several psychiatric hospitals and research institutions.”

Henn is an expert in the neuroscience of depression, an area of research he has pursued for his entire career. Recently, he discovered a new neural circuit

that, if stimulated electrically, can ease depression. He also found evidence that calls into question the theory that depression may be due to a decrease in the generation of new nerve cells. This research may lead to new, more effective treatments of depression.

Serban Protopescu

Serban Protopescu is recognized for “distinguished leadership in the DZero experiment at Fermi Lab, specifically involving

the discovery of the top quark, and initiating studies of processes with tau leptons.”

Protopescu was one of the original proponents of Fermi’s DZero particle detector and was a leader in the development of software for the detector. He coled the top quark analysis group, developing analysis techniques for identifying this most massive quark, a subatomic particle discovered in 1995. In 2008, he joined Brookhaven’s ATLAS team to study final states with tau leptons and is presently at the Linear Accelerator Laboratory in Orsay, France, for a nine-month sabbatical leave.

Thomas Roser

Thomas Roser is cited for “distinguished contributions to the field of accelerator science, particularly for the development of polarized proton colliding beams at high energy.”

Roser significantly contributed to the design and construction of a string of magnets called Siberian snakes for Brookhaven’s

world-class collider, the Relativistic Heavy Ion Collider (RHIC) and the Alternating Gradient Synchrotron (AGS), the accelerator that feeds polarized protons — subatomic particles that all spin in one direction — into RHIC. The partial “snakes” that Roser developed for the AGS stabilize polarization during acceleration, making it easier for physicists to study the particles.

Betsy Sutherland

Betsy Sutherland is recognized for “her outstanding contributions to understanding and characterizing the impact of DNA damage induced by low-dose radiation in higher organisms and repair of that damage.”

Sutherland has made numerous significant discoveries in her field of expertise — radiation research. Her current studies help NASA assess the hazards that astronauts face during space travel. With colleague Brigitte Paap, Sutherland developed a new technique that uses fluorescent “tags” instead of radioactive ones to monitor repair of damage to DNA, thereby reducing hazardous waste and the cost of research. This technique earned both biologists a “Best in Class” pollution prevention award from the U.S. Department of Energy’s Office of Science.

— Satya Shanmugham & Kendra Snyder

For more information on these AAAS Fellows, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=891.



John Tranquada and Genda Gu

Roger Stoulenburgh D1050506

Disappearing Superconductivity Reappears — in 2-D

‘Striped’ material offers more clues to high-temperature superconductivity

Scientists studying a material that appeared to lose its ability to carry current with no resistance say new measurements reveal that the material is indeed a superconductor — but only in two dimensions. Equally surprising, this new form of 2-D superconductivity emerges at a higher temperature than ordinary 3-D superconductivity in other compositions of the same material. The research, conducted in part at BNL, appeared in the November 2008 issue of *Physical Review B*.

“Our basic research goal is to understand why and how

these materials act as superconductors,” said John Tranquada of the Physics Department, who led the research. “The ultimate practical goal would be to use that understanding to develop improved bulk superconductors — ones that operate at temperatures warm enough to make them useful for real-world applications such as high-efficiency power lines.”

Co-authors with Tranquada on this study include: Genda Gu, Markus Hücker, Qian Jie, Quiang Li, Jinsheng Wen, See *Superconductivity* on pg. 2

446th Brookhaven Lecture, 2/18

When Crystallography Won’t Show You the Membranes

High fever, stomachache, coughing, sneezing, and fatigue: These are all painful signs that you may have caught the flu virus. But how does your body actually “catch” a virus? Somewhere along the way, the virus infected your body by penetrating the membranes, or surfaces, of some of your body’s cells — and then it spreads.

Cell membranes are permeable surfaces made of proteins and lipids that allow vital materials to enter and exit cells. Many proteins and cell structures are studied at Brookhaven’s National Synchrotron Light Source (NSLS) using a procedure called “protein crystallography,” but they sometimes have unique characteristics that do not allow them to be easily studied using this widely adopted method. These characteristics make it difficult to understand the cell membrane structure and its ability to both welcome and refuse certain materials and viruses, such as the flu, on behalf of the cell’s internal components.

On Wednesday, February 18, join Lin Yang of Brookhaven’s NSLS for the 446th Brookhaven Lecture, titled, “When Crystal-



Roger Stoulenburgh D0070209

lography Won’t Show You the Membranes.” All are invited to attend this free talk, which is open to the public and will be held in Berkner Hall at 4 p.m. Refreshments will be offered before and afterward. All visitors to the Lab ages 16 and older must carry a photo ID while on site.

During the lecture, Yang will explain the protein crystallography procedure, the simple structure of the cell membrane, and the unusual characteristics of its proteins and lipids. He will also discuss a new, unique method being developed at the NSLS to study proteins and lipids within their native environment as they

form the essential permeable surface of a cell membrane.

Yang earned a bachelor of science for physics from Beijing University in 1995 and a master’s degree and Ph.D. in physics from Rice University in 1998 and 2001 respectively. He worked as a post-doctoral research associate at the NSLS from 2001–2003 until becoming an assistant physicist in 2003 and an associate physicist in 2005. In 2007, Yang was promoted to physicist at the NSLS.

To join Yang for lunch at a restaurant off site on February 19, the day following the lecture, contact Angela Bowden, bowden@bnl.gov, Ext. 5169. — Joe Gettler

CALENDAR
OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See www.bnl.gov/esol/schedule.html for schedule. Jen Lynch, Ext. 4894

Mondays: BNL Social & Cultural Club
Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Mondays & Wednesdays: Pilates
12:15-1:15 p.m. Mons.; 5:15-6:15 p.m. Mon. & Wed. Rec. Hall. \$65/once/wk., Ext. 5090

Mondays & Thursdays: Kickboxing
\$5 per class. Noon-1 p.m. in the gym. Registration is required. Ext. 8481

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

Tuesdays: Hospitality Coffee
10:30 a.m.-noon, Rec. Hall lounge. Restarts 9/9. All welcome. Ext. 5090

Tuesdays: BNL Music Club
Noon, B'haven Center, N. Room. Come hear live music. Joe Vignola, Ext. 3846

Tuesdays: Knitting Class
2 p.m. Rec. Hall. All levels of skill. Ext. 5090 for information

Tuesdays: Jiu Jitsu
6:30-7:30 p.m. Gym. All ages, 6 yrs. to adult. \$10/class, pay as you go. Tom Baldwin, Bldg. 452, Ext. 4556

Tuesdays: Toastmasters
3 monthly meetings: 2nd Tuesday: Noon, Berkner, Rm. D: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests, visitors welcome. www.bnl.gov/bera/activities/toastmasters/

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

Tuesday & Thursday: Aerobic Fitness
5:15 p.m., Rec. Hall. 10 classes for \$40 or \$5 per class. Pat Flood, Ext. 7866, flood@bnl.gov

Tuesday & Thursday: Aqua Aerobics
5:30-6:30 p.m., Pool. Starts Tues., 9/9; Thurs., 9/11. 8-wk session, \$20 1x/wk, \$40 2x/wk. Mail chk to Recreation Office, Bldg. 400.

Tuesday & Thursday: Jazzercise
Noon-1 p.m. Rec. Hall. 8-wk session, \$90 2x/wk. Holbrook & Wading River locations too. Mail chk to Recreation Office, Bldg. 400.

Wednesdays: On-Site Play Group
10 a.m.-noon. Rec. Hall. Infant/toddler drop-in event. Parents meet while children play. Restarts 9/10. Petra Adams, 821-9238

Wednesdays: Ballroom Dance Class
B'haven Center, N. Ballroom. Instructor: Giny Rae. New series starts 2/25. Three 1-hr. classes, starting at 5:15 p.m. Ext. 3845

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

1st Wednesday of month: LabVIEW
1:30-3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379

Thursdays: BNL Cycletrons Club
Noon-1 p.m., First Thurs. of month. Berkner, Rm. D. Toni Hoffman, Ext. 5257

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

Fridays: Family Swim Night
5-8 p.m. BNL Pool. \$5 per family

Fridays: Family Gym Night
5-8 p.m. Family gym activities. Free

Fridays: BNL Social & Cultural Club
Noon-1 p.m., B'haven Center, S. Room, free beginners dance lessons. 7-11:30 p.m. N. Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov

CIGNA Representative

A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIGNA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide all pertinent documentation. To schedule, call the Benefits Office, Ext. 5126.

'Advancing Diversity in Science & Engineering,'
Talk by Abigail Stewart, U. of Michigan, 2/25

Sponsored by the Director's Office, Abigail Stewart, who is the Sandra Schwartz Tangri Distinguished University Professor of Psychology and Women's Studies at the University of Michigan (UM) and director of the UM ADVANCE Program, will give a talk titled "Advancing Diversity in Science and Engineering" at noon on Wednesday, February 25, in Berkner Hall, Room B. The UM ADVANCE Program is a National Science Foundation grant-funded project to promote diversity with respect to women faculty in science and engineering. The entire BNL community is invited to attend the talk.

Beginning in 2001, UM undertook a campus-wide effort to increase the diversity of the faculty in science and engineering. Recognizing that organizational change was a necessary precondition for the success of these efforts, the university has focused on recruitment, prevailing attitudes, and institutional policies. Stewart will describe areas in which the university has been relatively successful and areas in which progress has been slow. She will conclude with suggestions about efforts that might be fruitful for other institutions.

Stewart received a B.A. from Wesleyan University, an M.Sc.



from the London School of Economics, and a Ph.D. in psychology from Harvard University. She was director of UM's Women's Studies Program from 1989 to 1995, and director of UM's Institute for Research on Women and Gender from 1995 to 2002. From 2002 to 2004, she was Associate Dean for Academic Affairs in UM's College of Literature, Science and the Arts.

Before joining UM, Stewart was on the faculty of Boston University, from 1975 to 1987. She has received many awards, including the American Psychological Association's Henry Murray Award for research in personality psychology, and the Carolyn Wood Sherif Award for research on the psychology of women. She has published over 100 scholarly articles and several books, focusing on the psychology of women's lives, personality, and adaptation to personal and social changes.

— Diane Greenberg

BNL Awarded Commute
Alternatives Grant
Informational Meeting, 2/24, 8:30 a.m.

Long Island Transportation Management (LITM) has announced that the Lab has been awarded a Long Island Region Improving Commuting (LIRIC) one-year grant in the amount of \$99,730. A one-hour kick-off breakfast will be held in Berkner Hall lobby on Tuesday, February 24, beginning at 8:30 a.m., to provide additional information to employees who wish to participate in the LIRIC grant rideshare incentives program. To register to attend the breakfast, contact Jeff Williams of the Environmental Services Division, jwilliams@bnl.gov.

The approved grant proposal provides the Lab with funding to initiate an incentive-based program to encourage increased employee participation in carpools and to encourage the formation of vanpools through the new LITM Easy Street Vanpool Program.

The grant allocates funds to purchase \$20 monthly gas cards to be distributed as incentives to employees involved in carpools. To be eligible to receive a monthly gas card, employees must carpool to and from work a minimum of 12 days each month, and must record their monthly rideshare trips on the NuRide website at <http://www.nuride.com/nuride/main/main.jsp>. Employees involved in existing carpools are also eligible to receive the gas cards.

The grant also provides up to \$15,000 to purchase cash cards as incentives to encourage the formation of vanpools. During the first two months in a new vanpool, employees will receive \$50 cash cards to help offset the cost of monthly vanpool fares. Employees will then receive \$20 monthly cash cards for up to ten months to encourage their continued participation. To be eligible to receive the cash cards, employees must ride in a vanpool for a minimum of one month, and the vanpool driver must record all daily trips in the NuRide website.

At the meeting on February 24, representatives from LITM will be present to answer question about ridesharing, to help with NuRide registrations, to provide ride-matching assistance for those looking for carpool partners, and to provide information and answer questions about the Easy Street Vanpool Program.

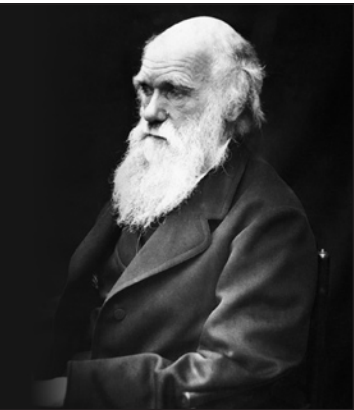
The grant itself is the culmination of a lengthy application process that began last April when a survey on commuting alternatives was distributed to BNL staff. The goals of the survey were to identify the commuting habits of Lab employees and to measure the likelihood of their participation in a Lab-sponsored program that reduces single-occupant vehicle travel to BNL.

The survey results revealed that:

- 86 percent of respondents commuted to work alone the week prior to the survey
- 8 percent carpooled in two-person carpools
- 1 percent commuted in a three-person or larger carpools
- 58 percent expressed interest in ridesharing with one other person
- 78 percent would consider ridesharing if financial incentives were offered
- 24 percent expressed interest in three or more person carpools
- 14 percent of the respondents expressed interest in vanpooling

After completing its analysis, LITM staff submitted a LIRIC grant proposal to the New York State Department of Transportation on behalf of BNL, and the grant was awarded in January.

Remembering
Charles
Darwin
On His
200th Birthday



Two hundred years ago, on February 12, Charles Darwin was born in Shrewsbury, England. A naturalist, he studied the transmutation of species and conceived his theory of natural selection in 1838. In 1859, he published *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*, which explained diversity in nature by demonstrating that all species of life evolve and are modified by what Herbert Spencer, a Darwin contemporary who believed in evolution, described later as "the survival of the fittest." At the same time in 1859, Arthur Russel Wallace, 14 years Darwin's junior, also published an essay on evolution and is recognized as the co-discoverer of the concept. Darwin's thesis forms the basis of modern evolutionary theory and is a founding principle of biology.

For more information about Darwin's ideas, life, and times, including a marvelous account, with maps, of his approximately five-year voyage on *H.M.S. Beagle*; descriptions of his friends and people who influenced him; news about anniversary celebrations around the world; and more — visit a great website, <http://www.aboutdarwin.com/index.html>.

Superconductivity from pg. 1
Guangyong Xu, Zhijun Xu, and Juan Zhou, all of BNL; Hye Jung Kang of the National Institute of Standards & Technology (NIST); Rüdiger Klingeler and Natalia Tristan of the Leibniz Institute for Solid State & Materials Research, Dresden, Germany; and Martin von Zimmermann of HASYLAB, Germany. This study was supported by DOE's Office of Science (Basic Energy Sciences) and by the U.S. Department of Commerce.

The basic idea behind superconductivity is that electrons, which ordinarily repel one another because they have like charges, pair up to carry electrical current with no resistance. Conventional metallic superconductors do this at temperatures near absolute zero (0 kelvin or -273 degrees Celsius), requiring costly cooling systems. More recently, scientists have discovered materials that transition to superconductivity at higher temperatures, sparking the hope for future room-temperature devices.

Tranquada and his colleagues studied a layered material made of lanthanum, barium, copper, and oxygen (LBCO) in which the ratio of barium to copper atoms is exactly 1 to 8. At a range of compositions with lower and higher levels of barium, LBCO acts as a "high-temperature" superconductor, with a peak operating temperature of 32 K. But at the mysterious 1:8 ratio, the transition temperature at which superconductivity sets in drops way down toward absolute zero.

Now, the latest measurements suggest that a hard-to-detect form of superconductivity does occur in the LBCO 1:8 composition.

One of the key measurements, made by BNL's Li, was of electrical resistance parallel to the planes of the layered material and also perpendicular to them. At a particular temperature, Li detected a big drop in resistance when the current was flowing parallel to the layers, but not when it was flowing perpendicular to them.

At the same time, Hücker, along with Li, measured the onset of weak "diamagnetism," an effect in which magnetic fields are pushed out of the sample. "This is one of the key properties of a superconductor — the Meissner effect," Tranquada said.

Like the drop in resistance, the Meissner effect occurred in only two dimensions, within the planes.

"Combining these results with a variety of other measurements, we now propose that there is a subtle form of superconductivity confined within the two-dimensional planes of copper oxide in LBCO 1:8," Tranquada said.

The scientists are particularly intrigued by this new form of 2-D superconductivity because it sets in at an even higher temperature (40 K) than that at which 3-D superconductivity occurs in other forms of LBCO.

— Karen McNulty Walsh
For more information see www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=865.

Ballroom Dance Lessons: New Series Begins 2/25

Three new six-week sessions of weekly ballroom dance lessons, sponsored by the BNL Ballroom Dance Club and given by instructor Giny Rae at \$30 per person for each session will start on Wednesday, February 25. The new schedule is as follows: beginner cha-cha lessons, 5:15-6:15 p.m.; intermediate waltz lessons, 6:15-7:15 p.m.; and intermediate samba, 7:15-8:15 p.m.

Classes and practice sessions are held in the North Ballroom of the Brookhaven Center. Lessons are open to all BERA members: BNL employees, retirees, official BNL visitors and their immediate families (spouse and children). Each member may bring a partner, but a partner is not necessary to participate. For more information contact: Donna Grabowski, Ext. 2720; Vinita Ghosh, Ext. 6226; Gail Donoghue, Ext. 2838; or Kathleen Tuohy, Ext. 3845.



Brookhaven Advocacy Council members: (from left) John Reddy, Ken White, Debbie Pettit, Omar Gould, Fred Horn, Rippie Bowman, Al Borrelli, Betty Elder, Fernando Comina, Gloria Bennett and Susan Wong

Ready to Help You: The Brookhaven Advocacy Council

Have you exhausted all avenues to get your concerns heard? Did you know that BNL has a diverse group of employees who are ready to listen? Why not seek the assistance of the Brookhaven Advocacy Council (BAC)?

The BAC is a key component of the Lab's system of justice. The members advise and make recommendations to

the Lab Director on resolving employee/guest/user concerns or issues that are brought to the BAC's attention. The BAC has the authority to receive and respond to these concerns or issues, analyze and research data, and propose resolutions. Members have access to all pertinent, uncensored information, within BNL's guidelines regarding confidentiality, to

assist them in resolving these concerns or issues.

The BAC functions independently of the Human Resources & Occupational Medicine Division, reporting directly to the Lab Director. For more information about the Brookhaven Advocacy Council, including its mission and confidentiality guidelines, visit www.bnl.gov/bac.

Employee Lunchtime Tour: RHIC 'Brain,' 2/20

The next employee lunchtime tour will be held on Friday, February 20, when the group will visit the "Brain" of the Relativistic Heavy Ion Collider (RHIC) complex — the control center of operations for not only RHIC

but four other accelerators. As the group will learn, RHIC begins its ninth run this month. Meet in the lobby of Berkner Hall at noon to be taken to the control room. No reservations are necessary.

Chasman Scholarship for Women

Applications are now being accepted for the Renate W. Chasman Scholarship for Women, established in 1986 to encourage women who have taken a break from formal education to resume their studies in natural sciences, engineering or mathematics. The winner will receive a one-time award of \$2,000 from BNL's Brookhaven Women in Science (BWIS), a not-for-profit organization whose aim is to promote the advancement of women in science.

Candidates for the scholarship must be U.S. citizens or resident aliens who live in Nassau or Suffolk County, or in the boroughs of Brooklyn or Queens and are accepted for credit in a degree-oriented program at an accredited institution. Their program of study for 2009-2010 must be either at the junior or senior undergraduate or first-year graduate level, on a half-time or greater basis. The deadline for applications is April 1. A committee of Lab scientists will choose the winner. The award will be made directly to the recipient, who will be expected to complete at least two consecutive school terms in good academic standing.

For application forms and more information, write to: bwisawards@bnl.gov, or by mail to: Chasman Scholarship Fund, P. O. Box 183, Upton, NY 11973, enclosing a stamped, addressed envelope. Download applications at: www.bnl.gov/BWIS/scholarships.asp.

Renate W. Chasman (1932-1977) was a noted physicist at BNL. Her work influenced particle accelerator design around the world. The Renate W. Chasman Scholarship Fund is supported by fund-raising events and tax-deductible contributions from individuals and organizations, including Brookhaven Science Associates, the company that manages BNL.

Defensive Driving: Two Parts, 2/23 & 26

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday, February 23 and 26, in the Brookhaven Center South Room, 6-9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families, at \$38 per person. Preregistration is required. To register, call Ed Sierra, (631) 821-1013, and leave a message. Include your phone number. For more information, call Sarah Wiley, Ext. 4207.

American Red Cross Lifeguard Training

Registration is now open for a course for certification in lifeguarding, waterfront lifeguarding, CPR for the professional rescuer, automated external defibrillator (AED) usage, and first aid. Trainees must be at least 15 years old, pass a mandatory swimming pre-test on 3/22, 10 a.m. – 2 p.m., and attend all training sessions, 10 a.m.-3 p.m.: 3/29; 4/5, 19, 26; and 5/3, 10, 17, at the pool in Bldg. 478. The course and certifications cost \$325 per person, including a \$50 non-refundable deposit. For more information and to register, call Heidi Jochen, (631) 921-6218.

Inside Information Concert: Time Together, 2/27

Yvette Malavet-Blum, a senior administrative secretary in BNL's National Nuclear Data Center, is also a talented singer. She will be performing in "Time Together With Time to Spare," at 7 p.m. on Friday, February 27, at the North Shore Library, Wading River, with Robert Boutcher on piano and guitar, and Brian Wishin on percussion. The program, which is free and open to the public, includes songs from *West Side Story* and *The Great American Songbook*, and some favorite Spanish songs.

Arrivals & Departures

— Arrivals —	
Dennis Donaldson	C-AD
Jeffrey Keister.....	NSLS-II
Jason Katz	Physics
Poornima Upadhy.....	Intel Prop.
Sujit Tandel	ES&T
— Departures —	
Patricia Williams	ESH&Q

BSA Noon Piano Recital, 2/18

All are welcome to the next BSA Noon Recital when pianist Vassily Primakov will perform on Wednesday, February 18, at Berkner Hall. This free concert, open to the public, is sponsored by Brookhaven Science Associates. Visitors to the Lab of 16 and over must carry a photo ID.

Primakov began his American career after winning First Prize in the 2002 Young Concert Artists International Auditions. He won First Prize in the Rachmaninoff International Young Pianist Competition, placed among the top two laureates of the Cleveland International Piano Competition (1999), and won both the silver medal and the Audience prize in the 2002 Gina Bachauer International Artists Piano Competition. In 2007, he was named the Classical Recording Foundation's

Meetings on Deer Management, 2/24, 3/10

Findings from a survey on deer management at BNL held last fall showed that 75 percent of the 825 Lab employees who responded think it is important for the Lab to have a deer management program. However, there was significant disagreement on the best method of management. The Lab scheduled three informational sessions for the BNL community, designed to provide in-depth understanding of the options. Feedback from the Lab community will be solicited and used to help determine the best way to manage deer on site. The first meeting was held on 2/10 on contraceptive management and trap and transport. The remaining meetings will be held at 4 p.m. in Berkner, Room B on **Tuesday, 2/24** – Hunting options and deer management assistance programs; and **Tuesday, 3/10** – Culling options and various combinations of options. Comments submitted by employees will be compiled and posted on the deer management website at http://www.bnl.gov/esd/wildlife/Deer_management.asp.

Beginners' French Language Class for Children, 2/16

An informal introductory French language class for children of ages 3 to 8 years old will be held on Monday, 2/16 and Monday 2/23, 4:30-5:15 p.m. in the Recreation Building. A parent must be present with the child. If there is significant interest, the classes, which will be given by mom and daughter teaching team Tatiana and Polina Tchoubar, will be continued. You must register for this class. To register, or for more information, contact Jen Lynch, who is the coordinator for BNL's English for Speakers of Other Languages program, at jlynch@bnl.gov or Ext. 4894.

BERA Daffodil Sale To Benefit American Cancer Society

BERA is selling daffodils to benefit the American Cancer Society. Make a \$10 donation and BERA will deliver to you 10 fresh-cut daffodils. Proceeds will go to help in the fight against cancer.

Prepay for your order at the BERA Sales Office in Berkner Hall, weekdays between 9 a.m. and 3 p.m. The flowers will be delivered during the week of March 16.

Hispanic Heritage Club Offers \$500 Scholarships

The BERA Hispanic Heritage Club is accepting applications for five \$500 scholarships for high-school seniors. Applicants should:

- Be a high school senior graduating in 2009
 - Have a minimum 3.0 cumulative GPA on a 4.0 scale (or equivalent)
 - Be accepted by a college for fall 2009 classes to pursue a degree in science or engineering
 - Be a Long Island resident attending Bellport, Longwood, Patchogue-Medford, Riverhead or William Floyd High Schools
 - Have some degree of Hispanic ancestry
 - Be a U.S. citizen or legal permanent resident with a valid permanent resident card
- For information, see www.bnl.gov/bera/activities/hispanic, or contact Carmen Alvarado, alvarado@bnl.gov, Ext. 8900.



Young Artist of the Year. At BNL, he will be playing *Impromptu in C minor, Op. 90, No. 1* by Franz Schubert; *Kreisleriana, Op. 16*, by Robert Schumann; and *Sonata No. 14, Op. 27, No. 2, "Moonlight,"* by Ludwig van Beethoven.

CALENDAR

Note: At events open to the public, visitors to the Lab of 16 or older must carry a photo ID.

— WEEK OF 2/16 —

Monday, 2/16

President's Day Holiday

The Lab will be closed for President's Day. No Bulletin will be issued on Friday, 2/20.

Tuesday, 2/17

'Exercise Anywhere, Any Time'

Noon. Berkner Hall, Room B. Amy Shapiro, registered dietician, will give a talk on exercise. All are welcome. Register with Michael Thorn, mthorne@bnl.gov or Bldg. 490.

Wednesday, 2/18

*BSA Noon Recital

Noon. Berkner Hall. Award-winning pianist Vassily Primakov will play Schubert, Schumann, Beethoven. All are welcome to this free public event, sponsored by Brookhaven Science Associates. See notice, left.

*446th Brookhaven Lecture

4 p.m. Berkner Hall. Lin Yang, National Synchrotron Light Source Department, will talk on "When Crystallography Won't Show You the Membranes." All are welcome to this free public lecture. See story, pg. 1.

Friday, 2/20

Employee Lunchtime Tour

Noon. Berkner Hall lobby. Meet the group to go visit the RHIC complex control room. See notice, left.

Saturday, 2/21

*Rock Bands Electrix, Reckoning

7 p.m. Berkner Hall. The Electrix and Reckoning concert, open to the public. Tickets: \$15 in advance at the BERA Store or www.ticketweb.com — or \$20 at the door. See pg. 4.

— WEEK OF 2/23 —

Monday, 2/23

IBEW Meeting

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

*Defensive Driving, Part I

6-9:15 p.m. Brookhaven Center. See notice, left.

Tuesday, 2/24

*Deer Management Meeting

4 p.m. Berkner Hall, Room B. See notice, left.

Thursday, 2/26

*Defensive Driving, Part II

6-9:15 p.m. Brookhaven Center. See notice, left.

Friday, 2/27

Sam's Club Membership Drive

11 a.m.-2 p.m. Berkner Hall lobby. Sam's Club representatives will offer two cards at \$43.45 for 12 months.

Pick a Student

Student applications for the summer 2009 undergraduate science internship programs sponsored by DOE's Office of Workforce Development for Teachers and Scientists are available for review on an electronic database. Contact Kathy Gurski, Office of Educational Programs (OEP), Ext. 4503 or gurski@bnl.gov for the database address and passwords. Selections for the first-round choices must be submitted by February 28. Students will be here for ten weeks, from June 1 to August 7. Stipends, housing, and travel are funded through OEP with a \$1,000 cost share requested from the hosting department. For more information, see www.bnl.gov/education.

Classified Advertisements

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

POSTDOCTORAL RESEARCH ASSOCIATE (Physical Organic Chemistry) – Requires a Ph.D. in chemistry or a related field. Strong background in physical inorganic chemistry, especially in chemical kinetics and thermodynamics. Experience in redox catalysis, analysis of reaction mechanisms, spectroscopic techniques (UV-vis), XANES/EXAFS), fast kinetic methods (pulse radiolysis, stopped-flow, flash photolysis), aqueous chemistry, and preparation and characterization of metal oxide nanoparticles are desired. The successful candidate will conduct basic research towards the development of novel catalysts for solar energy conversion into fuels. The emphasis will be on inorganic nanoparticulate materials for water-oxidation catalysis to molecular oxygen. This work involves: chemical synthesis of the catalysts; their characterization by various spectroscopic, analytical, and structural methods; investigation of the kinetics and molecular mechanisms of the catalytic processes using state-of-the-art pulse radiolysis and flash photolysis facilities. Under the direction of S. Lymar, Chemistry Department. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply to Job ID #14737.

ELECTRICAL ENGINEER/PROJECT ENGINEER II (P-7) – Provide detailed design and fabrication of custom electronics, specification and procurement of commercial vacuum instrumentations, ladder logic and function block programming of PLC, design and layout of electronic chassis, wiring and racks, and interface to other accelerator subsystems. Will be responsible for the design, procurement, construction, commission and operation of the NSLS-II vacuum instrumentation. Requirements: BS degree in electrical/electronic engineering and a minimum of seven years of experience in low noise analog electronics, analog and digital signal processing, and PLC ladder logic codes and controls; extensive experience with electrical safety and codes, and ES&H policy. Must possess excellent written and verbal communication skills and interpersonal skills are required to interact with a diverse group of scientists and technical staff. Preferred Requirements: MSEE degree, experience with vacuum system electronics and instrumentation, accelerator and light source vacuum systems, DCS or SCADA systems. Reports to NSLS-II Vacuum Group Leader. National Synchrotron Light Source II. ERAP Eligible: \$1000. Apply to Job ID #14739.

Motor Vehicles

06 VW GTI MK5 - 2.0L turbo 6 spd manual pkge 2 lthr htd seats sat. radio loaded ext warr. 21K mi. \$17,500. 849 2520.
06 HONDA CIVIC - excel, all opts, 4cyl, 4-dr, a/c etc., fctory instltd rem start, blk w/ tan inter. 76K mi. \$11,500/neg. Ext. 7941.
99 NISSAN ULTIMA - silver 4dr. 4cyl, a/c, p/l, p/w, remote start. gd. on gas. 108K mi. \$3,500/neg. 275-8110.
99 KAWASAKI VULCAN CLASSIC - 1500 Classic. 2-tone white/gray. Runs excel. Must sell. \$3,500/neg. 631-834-6637.
99 TOYOTA CAMRY - org. owner, runs well. 126K mi. \$3,000. 821-9338.
99 HYUNDAI ELANTRA - 4cyl, 4dr, 2.0L, a/t, 33mpg, a/c, am/fm/cass., w/clean, runs excel. 110K mi. \$2,750/neg. Eugenio, Ext. 2079.
98 CHEVY SUBURBAN LT - K1500 4X4 5.7L a/t abs f&r ac new 17 whls/tires barn drs, tow pkg no rust. 108K mi. \$4,500/neg. 849-2520.
94 GMC 3500 - Dual rear wheels, crew cab, 4wd, 7.4 ltr, runs/tows well, no dents, seats 5, 5th whl setup. 86K mi. \$6,000/neg. 369-1992.
TRAILER - Motorcycle/Landscape, 2008. Side door, back ramp, holds 3 bikes. Black & Silver. Never Used. \$3,500 firm. 834-6637.

Audio, Video & Computers

DVDS - 3 sets of "The Office", 12 DVDs total, seasons, 1,2,3, like new, \$30/all, jlonien@bnl.gov. Jo, Ext. 4262.
GPS - Garmin - nuvi 200, brand new in sealed plastic pkg, never opened. \$115. Rich, Ext. 7294.
MOBILE 23-CHANNEL CB RADIO - brand new, 2-way, deluxe mdl W80, \$15; Magnavox recdplyr & radio, c60, fair, \$35. 949-7412.
SONY TV - 27" flat screen, PIP, like new, Model KV27FS200, \$150. 821-0521.
TV - 27" Sony, gd for use w/games, \$20. Tom, Ext. 3085 or 872-8992.
VIDEO CARD - Evga e-GeForce 7200 GS, 256MB, pcie, new, \$20. Ext. 3485.
Sports, Hobbies & Pets
DRUM SET-CHILD SIZE - Looks professional, for ages 6 to 12, gd cond, orig \$150, now \$60. Denise, Ext. 4289 or 219-8941.
HOCKEY SKATES - Mens, Nike, size 10.5, excellent cond. Chris, 741-9169.
Tools, House & Garden
SAW HORSES - 2 sets, \$10 per set; B&D 7 1/4 cir. saw w/3 new blades, \$30; B&D Model 9517 Inflator 200 12.6V, \$10. 949-7412.

Miscellaneous

CHOCOLATE NOVELTIES - in all shapes for parties, Sweet 16, Communion, Sport events, Graduations, Easter, 516-607-7523.
LADIES LEATHER BOOTS - knee-high, never worn, size 7M, blk, 2" stack heal, orig./\$120, ask/\$60. Linda, Ext. 4887.
Happenings
FREE CONCERT - Fri., 2/27, 7 pm. N.Shore Lib., Wading River. Yvette Malavet-Blum sings from W. Side Story, The Grt American Songbook, & Spain, w/Robert Boutcher on piano & guitar, Brian Wishin on percussion.
Farewell Gathering
BILL HEMPFLING - Retirement Party, Friday, Feb. 27, B'haven Center - South Rm, 5:30-8pm, \$35/pp. Leesa, Ext. 2700.
Free
COMPUTER CORNER DESK - Large L-shaped desk w/hutch, grt shape. Have pics. Use email, shrey@bnl.gov. 555-1212.
HOCKEY SKATES - Men's, Nike, size 10.5, excel. cond. Chris, 741-9169.

Wanted

2009 IKEA CATALOG - Anyone have one? Pam, Ext. 3097.
A BOX SPRING FOR FULL-SIZE BED - Good condition & reasonable. Ext. 5286.
ADOPT-A-PLATOON - Monetary donations gratefully accepted towards purchase of items to support our platoon. Thank you. Joanne, Ext. 8481.
BABY SITTER - looking for on-site babysitter for 9yr old boy during winter recess Feb. 17-20 while mom works on site. Wei-Min, Ext. 8355 or 689-3748.
CHINA CABINET - 375-2680.
FUTON - excel. cond., for college student, reasonable, thank you! 295-7216.
MONITOR - flat screen, for Middle School student, reasonable, please. 708-4778.
SNOW PLOW SERVICE/CONTRACT - for Residential Driveway in Manorville. John, 878-6761.
TI 83 GRAPHING CALCULATOR - for college student, anyone have one not being used? Kelly, Ext. 4901 or 275-0235.

Lost & Found

NOKIA 2610 CHARGER, BLACK CABLE - A black wall cable for my cellphone. Lost somewhere in the Lab. Ext. 5351.

For Rent

BELLPORT VILLAGE - 2 bdrm, 2 bath house, lg kit., d/r, l/r w/fp, wood flrs, 2 screen porches, fenced yd, patio, +utils. \$1,600/mo. Brooke, 286-9203.
E. PATCHOGUE - executive colonial 4 bdrm 2.5 bath, cac heated igp, f/p, 2 car gar. S of South Country Rd., walk to club & beach. \$2,200/mo. Al, 553-6993.
HOLTSVILLE - 1 bedroom apartment, includes all. No smk, no pets. 15 mins to Lab. \$1,100/mo. 698-6090.
JAMESPORT - 3 level condo, priv. walk on beach 3.5 baths, 2 kit., 2 car gar., 3 zone basebrd heat, deck & patio club house, tennis avail, 6/1. \$2,500/mo. 369-0781.
MIDDLE ISLAND - One bdrm basement apartment, kit, bath, priv entr, cable/elect/heat incl., v. clean, non smoker, no pets. \$900/mo. Ext. 5350 or 786-3620.
PATCHOGUE - bright, clean loft apt, l/r, kit, bath, loft, close to shopping and train station, no smkg/pet, 1 mo. sec. \$950/mo. Lorraine, Ext. 7814.
PORT JEFF VILLAGE - 3 bdrm Col. house, 1.5 bath, a/c, f/p, deck, bsmt, new kit appli, l/r, d/r, prvt yard, beach rights, 1 yr lease, 1 mo sec. \$2,200/mo. April, Ext. 2206.
ROCKY POINT - charming 2 bdrm apt., priv. ent/drway, incl. heat. \$1,200/mo. 849-2908.
WADING RIVER - lg studio apt, priv., comm., huge bath, wood flrs, walk-in closet, plenty of storage, gar. avail., cable/util. incl. \$900/mo. 793-4598.
WEEKI WACHI, FL - Gulf Coast Ranch, 70mi/ Orlando, 50mi/Tampa, fly SW dir. Screen/ingrd pool, fruit trees, 3BRM, 2BTH, DR, fp, 2x gar -photos. \$500/wk. Ext. 5537.

For Sale

JAMESPORT - 3 level condo, priv. walk on beach, 3.5 baths, 2 kit., 2 car gar., club house & pool, tennis, 3 zone basebrd. heat, deck & patio, many upgrades, \$825,000. Carmine, Ext. 5101 or 369-0781.
SHOREHAM - 4 bdrm., 2.5 bath Col., frml l/r & d/r, den w/fp, fin. bsmt, 12 x 20 deck, igs, new granite counters, SWRS, 7 mi to Lab. \$499,900/neg. 821-3320.

Adult Swimming Classes at BNL Pool, 3/4 – 4/22

Adult swimming classes will be offered at the BNL pool on Wednesdays, 5:30-6:30 p.m., from March 4 until April 22. Each adult will be scheduled for one lesson each week for a total of eight lessons. American Red Cross certificates will be awarded to qualifying adults. No make-up classes will be offered. The class is open to all employees, Lab visitors and guests, facility users, retirees, and immediate family members of 18 or more. The cost is \$80. To register, mail your contact information and a check, payable to BERA, to the Recreation Office, Bldg. 400, by 2/27. For more information, call Sue Dwyer, Ext. 3496, 10 a.m. – 2 p.m. or 4:30 – 8:30 p.m., or the Recreation Office, Ext. 2873.

Valentine's Day Notes

AB1234...we "found" one another in this very column 15 years ago, are still going strong, and will be forever. Mr. Arb

JUN – You are my Best Friend, my Sweetheart & my Loving Husband of 30 yrs. Happy Valentine's Day. Love you - SHA

CJ: Marrying you was the best thing I ever did. Happy Valentine's Day to the Love of My Life. HSIRT
Captain Joe: I love 2B hibernating wit U, but when do we splash de boat? Barbados soon come. dj
Rish, I love you, I thank you. Sempre, SZB
Spicy Dumpling: You're the best partner in crime and I'm proud of us. Love you, so much!

Happy Valentine's Day, "Indu." From your one and only "Love Guru." At the World's Best Asylum (BNL)

To Sara: A king can give his son many things, but a good wife is a gift from God. Love, Bill

Bob, you are the love of my life. "Everything I do, I do it for you." Love, Trish

Bryan you're the best son two parents could ever ask for. We love you so much. Happy Valentine's Day. Love, Mom and Dad

I C Paris, I C France, let's go to Paris and DANCE, DANCE, DANCE! Happy Valentine's Day! Love, Joseph

To My Ron2shuz, it's you and me against the world. I love you more each day! Love, Your Bun

Life is like a roller-coaster ride but I still believe in love and happy endings. Keep the faith! J

to the "Empress," All my love, always. the "King"

Daddio – I love you more than chocolate, and can't wait till we can walk to the water again. KittyKat

Dear Uncle Mario, Happy Valentine's Day. Thanks for being such a great Godfather. Love, your little angels Emma and Abbie.

Ppyne – The question this Valentines' Day is whether it's "weather or not" or not. Love always - Me
To Teresa. In 911. Call Me...you drive me crazy... Ex smoker...

Roses are red, flowers have bugs, do you still love me when I have my earplugs? Love, Sambuca

Gui: I love you then, I love you now and I know I always will. Tigger

Hey Desk, We've lived through the worst of times and still have the best of times.

Much Love, Mr. Sageman

NL, You will always be my special Valentine – even though we have to have a dog! Love BL

Dear You, I miss you very much, can't wait to see you. I LOVE YOU, Me.

To My Loving Valentine Donna-Marie. Each of us have went through many. This year will reign. Stevie.

Hey Sweetie, two chairs in the Caribbean Sun, romantic dinners for two, you, me, and six beautiful nights. Who needs more?

You are still my number one. Hugs and Kisses, Love, Your Man...

JAS: I love spending simple ways and quiet nights and gentle days with you. Love EAS

Abosede, you make me proud and complete on this day of love. I love you very deeply. Happy Valentine.

Dear Bernadette, Every day with you is Valentine's Day. I Love You. Jim

Dear God, I'd have nothing without You. I love You today and always. Your humble servant

Pooh-pie & Pooffie – We love and cherish you Larry & Carrie; You light up our lives! Love always, Mommy & Daddy

Hon: After all our Valentine's Days, I can report that it's still getting better. Sooo glad you're mine. luv, wm

LINDA – God's love; we have all seen it in you. Your altruistic heart provides warmth and cheer to all.

BNL = Buzz 'N Linda. Happy Saint Valentine's Day!

To Maria: Happy Valentine's Day my love. With all my love, Rich

In the canvas of life, when you paint love with hope, expect a Masterpiece! Thanks for painting my heart happy! ZIM

Rich, every year just gets better and better. All my love now and always, Me

Ed, Alexis, Dylan, Olivia, & Loralie, Thanks for being the best part of my life! I love you all so much...Forever & For Always. Happy Valentine's Day! xxxxxxxooooo, Mommy (Tammy)

Joyce, Thanks for being my valentine. I love you. Joe

VALENTINE - D, No matter what the weather, you bring a special kind of sunshine to my life, I Love You, Happy Valentine. Baby Muf.

Luv Muffin, I Love You, Happy Valentine's Day.

To all, I'm printed in black and white but love being read, all over. Happy Valentine's Day! – The Bulletin

Service Ads Spring Clean!

SERVICE ADVERTISERS, READ THIS: The Bulletin is spring cleaning the service ads. We find that many ads are out of date, and the service is often discontinued. Therefore, on March 13, ALL CURRENT SERVICE ADS WILL BE DISCONTINUED. To run a service ad, you will have to submit a new ad AFTER March 13. By March 20 – when Spring begins – ONLY NEW ADS received after March 13 will appear. You may enter new ads by web form after March 13. If you send ads from off-site by e-mail, send them after March 13. If you send stamped mail, or interoffice mail, address your ad to Updated Service Ads, The Bulletin, Bldg. 400C, BNL, Upton, NY 11973-5000.

Also, please read and observe the following Bulletin Classified Ad Policy:

Only active and retired employees of BNL, on-site employees of BSA, DOE, and permanent employees of service organizations on site, as well as APS employees and retirees, may place classified advertisements with The Bulletin.

Use the Services form to advertise that you or members of your immediate family living within the same household are willing and qualified to perform work for others.

Services must be performed by the employees who are advertising them or members of their immediate family living within the same household.

No advertisement for services offered in association with regular businesses or commercial enterprises are accepted.

Use no more than 20 words for your ad.

BERKNER HALL

ROCK SHOW THE ELECTRIX, RECKONING FEBRUARY 21 @ 7 P.M.



Local rock band The Electrix (above), together with the band Reckoning, will give a concert on Saturday, February 21, at 7 p.m. at Berkner Hall. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

Tickets are available at the BERA Store or through www.ticketweb.com — at \$15 in advance or \$20 at the door.

The show will open with a unique acoustic set from members of each group, representing the best of the region's improvisational musicians. Then, each band will perform separately.

The Electrix is a six-piece band comprised of seasoned Long Island musicians playing acoustic and electric guitars, mandolin, fiddle, keyboard, and drums to perform classic rock songs from well-known bands such as The Grateful Dead and Allman Brothers, as well as original compositions.

Reckoning, also a Long Island six-piece band, is comprised of musicians who play tunes from the catalog of The Grateful Dead and Phish, as well as original compositions. — Jane Koropsak