

## Advanced Accelerator Concepts Progress at 11th Workshop

"The best AAC workshop ever," said participants of the 11th Advanced Accelerator Concepts (AAC) Workshop that was held at Stony Brook University (SBU), June 21-26. Sponsored by the Advanced Technology R&D Group, Office of High Energy Physics, within DOE's Office of Science; SBU; BNL; and Advanced Energy Systems of Medford NY, the workshop attracted over 190 participants from nine countries, including 47 students.

"This unprecedented level of attendance reflects the advances being made in this field," said

AAC Workshop Chair Ilan Ben-Zvi, who leads BNL's Accelerator Test Facility (ATF).

Advanced accelerator physics covers long-term research and development (R&D) in accelerator physics, including R&D of new concepts, devices and technologies in accelerator and beam physics. At BNL, this research is carried out mostly at the Physics Department by two groups: the Advanced Accelerator group led by Senior Physicist Robert Palmer and Ben-Zvi's ATF team. The ATF is the first advanced accelerator facility designed and built to serve the

community of advanced accelerator research.

Some of the topics in Advanced Accelerator R&D are laser acceleration of ions and electrons, wake-field acceleration, novel high power radio frequency sources, new diagnostics, free-electron lasers, and high-brightness electron-beam generation.

Laser acceleration methods cover many approaches, such as the use of beam or laser driven plasma wake-fields, electromagnetic structure-based acceleration, and others.

The scientific program of the June workshop included 21 plenary invited talks and eight parallel working groups. The presentations of the plenary talks and the summary of the working groups are available on the workshop's web site at <http://www.bnl.gov/atf/AAC04.htm>.

Talks on some research highlights included Chan Joshi, University of California, Los Angeles, who described accelerating electrons by a plasma wake at SLAC's E164X experiment, where electrons at 28 billion-electron-volts (GeV) gained 4 GeV in 10 centimeters of plasma; Lawrence Berkeley National Laboratory's Wim Leemans, who discussed generating and accel-



Ilan Ben-Zvi, Accelerator Test Facility (ATF) Director, talks with a group of workshop participants who are visiting the facility.

erating electrons by a laser-plasma wake field, achieving over 85 million-electron-volt (MeV) energy with excellent beam quality over a distance of a few millimeters in a tabletop device; and Victor Malka of the *Laboratoire d'Optique Appliquée*, France, who spoke on high beam quality high-energy 170 MeV produced by laser plasma wake-field acceleration.

The workshop program included a visit to BNL, including the ATF, the Relativistic Heavy Ion Collider, and the National Synchrotron Light

Source, a user's facility plenary session at Berkner Hall and dinner, hosted by BSA.

Said Ben-Zvi, "Organizing the workshop to become such a success involved a lot of hard work by many individuals, who included: At BNL, Marcus Babzien, Kelly Bergesen, Karl Kusche, Elaine Lowenstein, Bob Malone, Igor Pogorelsky, Triveni Srinivasan-Rao, Kathy Tuohy, Pat Tuttle and Vitaly Yakimenko; and at Stony Brook, Paul Grannis, the staff of the office of conferences and special events and the Student Activity Center staff."



At the Accelerator Test Facility (ATF), Vitaly Yakimenko (left), ATF Deputy Director, explains ATF equipment to Amit Kesar of the Massachusetts Institute of Technology, a workshop participant.

## Litvinenko, Wei Elected APS Fellows

Vladimir Litvinenko and Jie Wei, both of the Collider-Accelerator Department (C-A), were elected Fellows of the American Physical Society (APS). With over 43,000 members, APS promotes the advancement and diffusion of the knowledge of physics in the belief that an understanding of the nature of the physical universe will be of benefit to all humanity. Each year, no more than one-half percent of the society's membership are recognized by their peers for election to the status of Fellow. Litvinenko and Wei were among a total of 215 new Fellows elected in 2003.

Vladimir Litvinenko's Fellowship citation reads: "For fundamental and pioneering contributions to the physics of beams in electron storage rings and free electron lasers, including demonstrating the optical klystron and advancing the short wavelength limit of FEL [free electron laser] oscillators." Roger Stoutenburgh D4360504

An FEL is a research tool that combines the focus of lasers and the intensity of synchrotrons, and it is useful in studying a wide variety of materials and chemical interactions. Litvinenko and his team built a number of FELs based on the design of an optical klystron, an advanced version of an FEL. In 1988 and 1999, their team was the first in the world to extend the range of an FEL to the ultraviolet wavelength and to the vacuum ultraviolet, respectively. This work makes possible a wider variety of experiments in numerous scientific fields.

A frequent guest researcher at BNL, Litvinenko joined the Lab as a senior physicist

in 2003. Currently, he is deputy group leader of the electron-cooling project for the Relativistic Heavy Ion Collider (RHIC), BNL's newest accelerator. The goal of this project is to increase RHIC's luminosity, which would result in more productive particle collisions, and, thus, more data collected in a shorter time. "With the increased luminosity, we will collect five to ten years of data from RHIC in one year," Litvinenko said.

Jie Wei's citation reads: "For his outstanding and creative contributions to the design and development of RHIC and SNS [Spallation Neutron Source]."

Wei started working on the design of RHIC in 1986, when he was a graduate student in physics at Stony Brook University. He joined BNL as a research associate in 1989, and continued to work on various topics in accelerator physics related to keeping the beams of gold ions in RHIC stable and on course. At RHIC, physicists are gaining

insight into the nature of matter as it existed just after the Big Bang.

When RHIC's construction started in 1991, Wei was part of a team of physicists and engineers who analyzed each of the 1,740 superconducting magnets in the accelerator to be sure they were built and functioned according to specifications. Wei placed correction magnets in strategic locations in the collider so that RHIC's luminosity could be improved in the future.

Named a physicist in 1995, Wei, who joined BNL in 1989, is now a C-A research and development manager. Since 1998, he has been

(continued on page 2)



Vladimir Litvinenko



Jie Wei

## Environmental Awards Won By Upton Reserve Developers

Three scientists and an administrator working at BNL have been awarded U.S. Environmental Protection Agency (EPA) Region 2 "Environmental Quality" awards for developing and managing the Upton Ecological & Research Reserve, a 530-acre conservation area located within the Lab.

The awardees are Timothy Green, BNL's Natural Resource Manager; Frank Crescenzo, Deputy Manager of DOE's Brookhaven Site Office; and Peter Kelly and Jeremy Feinberg, visiting wildlife biologists with the U.S. Fish & Wildlife Service (USFWS). The awards were presented at the EPA Region 2 headquarters in New York City on April 23.

Green, Crescenzo, Kelly, and Feinberg were nominated for their "outstanding management of the Upton Ecological and Research Reserve" and "were instrumental in transitioning the forethought of the DOE into a significant habitat reserve that is dedicated to protecting the quality of the Central Long Island Pine Barrens ecosystem."



At the Upton Reserve site are Environmental Quality Award winners: (from left) Frank Crescenzo, Deputy Manager of DOE's Brookhaven Site Office, Jeremy Feinberg, U.S. Fish & Wildlife Service biologist, and Tim Green, BNL's Natural Resource Manager. Peter Kelly, U.S. Fish & Wildlife Service biologist, was not available for the photo.

"We are greatly appreciative of this recognition of the Upton Ecological and Research Reserve," said Green. "The partnership between DOE and USFWS, along with the coordination efforts of Brookhaven Lab, have served to foster a renewed effort for ecological research in the Central Pine Barrens of Long Island."

The reserve has funded several data-acquisition projects, such as a vegetation map of Brookhaven Lab, deer population surveys, and exotic plant invasion studies. Reserve funds have also supported Pine Barrens-related research and have been used to create

(continued on page 2)



Calendar  
of Laboratory Events

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

— EACH WEEK —

Weekdays: Free English for Speakers of Other Languages Classes

Beginner, Intermediate, and Advanced classes. Various times. All are welcome. Learn English, make friends. See [www.bnl.gov/esol/schedule.html](http://www.bnl.gov/esol/schedule.html) for schedule. Jen Lynch, Ext. 4894.

Mondays: BNL Gospel Choir

5:15-7 p.m. Berkner Hall. All faiths are welcome. [www.bnl.gov/bera/activities/choir/](http://www.bnl.gov/bera/activities/choir/).

Mon., Tues., & Thurs.: Kickboxing

\$5 per class. Mon. & Thurs. noon-1 p.m. in the gym; Tues., 5:15-6:15 p.m. in the gym; Thurs., 5:15-6:15 p.m. in Brookhaven Ctr. Registration is required. Christine Carter, Ext. 2873.

Mon., Thurs., & Fri.: Tai Chi

Noon-12:45 p.m., Brookhaven Center North Room. Adam Rusek, Ext. 5830 or [rusek@bnl.gov](mailto:rusek@bnl.gov).

Tuesdays: Welcome Coffee

10-11:30 a.m., Apartment area gazebo/playground. First Tuesday of every month is special for Lab newcomers and leaving guests. Cindy Ottemann, 849-2646

Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Jiu Jitsu Club

6:30-7:30 p.m. in the gym. All levels, ages 6 and above. \$10 per class. Tom, Ext. 4556.

Tuesdays: Toastmasters

1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, room 160. Guests, visitors always welcome. [www.bnl.gov/bera/activities/toastmasters/default.htm](http://www.bnl.gov/bera/activities/toastmasters/default.htm).

Tues. & Thurs: Upton Nursery School

The school is on summer break. Contact Alison Tulp, Ext. 4465, or [tulp@bnl.gov](mailto:tulp@bnl.gov), for information on Sept. enrollment.

Wednesdays: On-Site Play Group

10 a.m.-noon. Apartment area gazebo/playground. An infant/toddler drop-in event. Parents meet while children play. Kati Petreczky, 821-4131.

Wednesdays: Farmer's Market

11:30 a.m.-1:30 p.m., Berkner Hall parking lot.

Wednesdays: Weight Watchers

Noon-1 p.m. Michael Thorn, Ext. 8612.

Wednesdays: Yoga Practice

Noon-1 p.m., Brookhaven Center. Free. Ila Campbell, Ext. 2206.

Wednesdays: Open Chess Night

5-8 p.m., Rec. Hall. Christine Carter, Ext. 5090.

Thursdays: Reiki Healing Class

Noon-1 p.m., Bldg. 211. Nicole Bernholz, Ext. 2027.

Thursdays: FreshDirect Delivery

3:30-5:30 p.m., Berkner Hall parking lot.

Fridays: Family Swim Night

5-8 p.m. at the BNL Pool. \$5 per family.

Fridays: BNL Social & Cultural Club

6-9 p.m. North Ballroom, Brookhaven Ctr., dance lessons, 9-11:30 p.m. general dancing. Rudy Alforque, Ext. 4733, [rudy@bnl.gov](mailto:rudy@bnl.gov).

— THIS WEEKEND —

Sunday, 7/18

Summer Sunday Tour of BNL

10 a.m.-3 p.m. Free Summer Sunday tours are open to all the Lab community and the general public. Attractions include the Whiz-Bang Science Show, a hands-on Light and Color Exhibit, and more. This week features BNL's research in the Life Sciences, including how scientists study the brain to understand addiction.

— WEEK OF 7/19

Tuesday, 7/20

Residence Inn Demo

11 a.m.-1:30 p.m., Berkner Hall lobby. Representatives from Residence Inn will present BNLers with special rates on hotel accommodations and services. Donna Chider, 475-9500, Ext. 4906. (Not the on-site Ext. 4906.)

\*Talk on Eating Disorders

Noon-1 p.m., Berkner Hall, Room C. Join Mather Hospital's Kathleen Jochen for a talk and videotape presentation on "Real Talk About Real People With Eating Disorders." Participants will learn about anorexia, bulimia, binge eating disorders, and Mather Hospital's Eating Disorders Program. Preregistration is required for this free talk. Check your mailbox for registration forms. For more information, contact Linda DiPierro, Ext. 2733.



The Brookhaven Women in Science Executive Board members meet monthly to discuss the business of the not-for-profit group and plan BWIS events, including the 25th anniversary celebration. The board members are: (from left): Aimee Sumereau, Vinita Ghosh, Christine Herbst, Sue Perino, Kathy Hauser, Pat Williams, Jennifer Lynch, Stephanie Lamontagne McKeon, Loralie Smart, Diane Greenberg, and Pam Mansfield. Board members who were not available for the photo include: Gail Donoghue, Eileen Papa and Lisa Tranquada.

On Wednesday, July 28, the board of Brookhaven Women in Science (BWIS) cordially invites the BNL community to join in the celebration of its 25th anniversary. To be held in the courtyard of the Physics Department, Bldg. 510, 5:15 p.m.-7 p.m., the BWIS 25th-anniversary celebration will give BNL employees, retirees, facility-users, and summer visitors and students an opportunity to socialize with BWIS members; refreshments will be served. Rain will move the event indoors to the Physics lounge.

BWIS was first conceived in January 1979 as the brainchild of Victoria McLane, Energy Sciences & Technology Department, and Harriet Martin, who retired from the Information Services Division in 1995. Their initial goal: to send female BNL employees into local schools and libraries to serve as role models for students. First named BNL Scientific and Professional Women, the group made its debut on Valentine's Day of 1979 at the Bay Shore-Brightwaters Public Library. On September 26, 1979, the group changed its name to BWIS and enlarged its scope to benefit all BNL employees.

Today, the primary mission of this not-for-profit interdisciplinary organization is to increase the Lab's awareness of the accomplishments of women in science and to aid in women's advancement in scientific and technical careers. Faithful to its founding goal, BWIS still encourages young women to consider careers in science, mathematics, engineering, and technology.

Open to both women and men, the group currently has 50 members and is supported through yearly members' dues, as well as by contributions from BSA. When BWIS first met in 1979, the group could not have foreseen that, over 25 years, their network would have accomplished so much at and for BNL. In a quarter of a century, BWIS accomplishments have benefited the entire Lab community, as well as the surrounding community of future women scientists, as follows:

- Thousands of Long Island high school and college students, both female and male, have been encouraged to consider scientific or technical careers by BWIS members, as a result of BWIS participation since its inception in BNL's speakers' bureau.
- Approximately 50 prominent women in science, engineering, or medicine have been invited by BWIS since 1980 to present technical semi-

nars or popular lectures open to all at the Lab.

- Started in 1981, BWIS career days are currently held twice per year, encouraging female high school students, who come to the Lab with their teachers, to consider careers in science, engineering, and related fields.
- In 1982, a branch of a federal credit union was established at BNL, as a result of a BWIS proposal to ensure equal credit opportunity for all Lab employees and facility-users.
- Since 1986, the Renate Chasman Scholarship has been offered annually to a Long Island woman who is returning to school following an interruption in her studies to pursue her education in the sciences, engineering or mathematics. The scholarship honors the memory of the accelerator physicist whose work underlies today's synchrotron light sources worldwide.
- Because of BWIS's efforts to extend the ability to take maternity leave to male employees, BNL's policy on parental leave was instituted in 1988, permitting both women and men employees to take up to three months of leave following the birth or adoption of a child.
- As a result of the initiative of BWIS to ensure that the child-care needs of all Lab employees and facility-users who are parents of young children are met, the first facility in the nation dedicated to child care built by DOE was established at BNL in 1990.
- Since 1995, BWIS has offered an annual \$1,000 Gertrude Scharff-Goldhaber Award to an outstanding female physics graduate student who is performing her thesis research at BNL or enrolled at Stony Brook University, in memory of the world-renowned nuclear physicist who was the first female Ph.D. to join the Laboratory's scientific staff and a founding member of BWIS.
- BWIS and Battelle, the nonprofit science and technology company that manages BNL with Stony Brook University as BSA, established five \$1,000 scholarships in 1999, which are awarded annually to five female high school students who excel in science or mathematics and are enrolled in five school districts surrounding the Lab.

For more information on BWIS and its 25th anniversary celebration, contact Kathy Hauser, BWIS Coordinator, Ext. 2223.

— Marsha Belford & Diane Greenberg

A Staged Reading of  
the Science Comedy  
'Pierre & Marie:  
Love &  
Chemistry'

Free, open to the  
public,  
7/21, 7 p.m.

Pick up free tickets  
From OEP, Bldg. 438

All are welcome to a free staged reading of "Pierre and Marie: Love and Chemistry," to be held in Berkner Hall on July 21, at 7 p.m.

Adapted by Ron Clark from the original French play by Jean-Noel Fenwick, this play is equal parts science, history, and romantic comedy, set in a small laboratory in Paris in the 1890s, where Pierre and Marie Curie discover uranium, radium, and love.

Sponsored by BNL's Office of Educational Programs and the High Energy & Nuclear Physics Directorate, this event is aimed at demonstrating to students, teachers, faculty, and anyone interested in science that scientific ideas and information can be communicated in different ways to suit different audiences.

Says Kenneth White, OEP Manager, "Many people who would not attend a science talk or lesson can enjoy learning about science through the arts. Bringing this program to BNL furthers OEP's goal of helping students, teachers, and scientists 'break the science barrier' to promote more enthusiasm for science among a wider section of the public."

The show is presented by Break A Leg Productions, a member of the Alliance of Resident Theatres/New York and Theatre Resources Unlimited. This reading is part of the Science and the Arts series developed by the Graduate Center of the City University of New York.

The show is free, but because BNL's summer students will be in attendance, tickets are being issued to avoid turning audience members away at the door. So, to be sure of attending, pick up a free ticket at OEP, Bldg. 438, weekdays, 8:30 a.m.-5 p.m.

In Memoriam

Irene Ozols, who had joined the Physics Department as a research services assistant on October 2, 1967, and retired as a scanner on June 30, 1983, died at age 78 on October 13, 2003.

Benjamin Ackert, who, on January 5, 1948, had joined the Central Shops Division as a machinist B, and, after 34 years, retired on October 17, 1982, as a tool and instrument maker group leader, died on May 28, 2004. He was 85.

Henry Petrule, who had joined the then Alternating Gradient Synchrotron Department as an intermediate technician on October 29, 1962, died on May 28, 2004, at age 84. He had retired on May 31, 1981, as a technical specialist.

APS Fellows

(cont'd.)

working on the SNS, a \$1.4 billion accelerator-based neutron source being built at Oak Ridge National Laboratory. Wei was responsible for the accelerator physics integration and coordination of the SNS project, which is assigned to six DOE national labs. He is currently the senior team leader responsible for the design and construction of the SNS accumulator ring and transport lines. When the SNS is complete in 2006, it will provide the world's most intense pulsed neutron beams for scientific research and industrial development. — Diane Greenberg

For more details, go to: [www.bnl.gov/bnlweb/pubaf/pr/2004/bnlpr062804a.htm](http://www.bnl.gov/bnlweb/pubaf/pr/2004/bnlpr062804a.htm).

Environmental Quality Awards

(cont'd.)

educational programs for local high schools, colleges and universities. The research and studies conducted at Upton Reserve have been featured prominently in the *Newsday* series "Our Natural World."

DOE established Upton Reserve in 2001 and has provided much of the funding for its management, research, and educational activities. The reserve is located in the eastern portion of Brookhaven's 5,265-acre campus and is located within the core preservation area of the Long Island Central Pine Barrens. Under the leadership of the four award-winners and with the help of DOE and the Central Pine Barrens Joint Planning and Partnership Commission, Brookhaven Lab has formed partnerships with The Nature Conservancy, The Long Island Groundwater Research Institute, and Dowling College for the management and promotion of the Upton Reserve. These four organizations will co-manage the Foundation for Environmental Research in the Northeast, an organization established in 2003 to manage the reserve and support research of Long Island's environment. — Laura Mgrdichian



Coming Up  
Sambamurti Lecture, 7/28

All are invited to the Sambamurti Lecture to be given by Michael Lisa of Ohio State University, who is a member of the STAR collaboration at the Relativistic Heavy Ion Collider. Titled “Size Matters: The Space-Time Geometry of Subatomic Collisions,” the talk will be given at 3 p.m. on July 28 in the Large Seminar Room of the Physics Department, Bldg. 510.

BERA’s IAA, APAA Joint Project

Wanted: approximate count of people interested in hearing a talk on Vedanta Hindu Philosophy  
BERA’s Indo-American Association and Asian-American Pacific Association hope to obtain an approximate count of people who would be interested in attending a one-hour free lecture on “Vedanta” — Hindu Philosophy — based on “the universal truths.” The lecture would be held noon-1 p.m. on Monday, October 11. The speaker, A. Parthasarthy, from India, is an acclaimed exponent of Vedanta who graduated from London University and dedicated his life to the study, research and propagation of Vedanta. His best-seller book, *Vedanta Treatise*, presents scriptural insights in contemporary thought. For more details, visit <http://geocities.com/TheTropics/Harbor/1595/iaaEvents.html>. If you are interested in attending this lecture, contact Ila Campbell at [ila@bnl.gov](mailto:ila@bnl.gov).

Salsa Picnic, 7/24

All BNLers are invited to the BERA Hispanic Heritage Club’s 2nd annual “Salsa Picnic featuring DJ Alex” on Saturday, July 24, 11 a.m.-6 p.m. at the gazebo by the picnic grounds. Admission is free. Attendees are asked to bring their own beverages, a picnic basket of food for their family, and an extra dish to share with four people. Accommodations for barbecuing will be available. Bring chairs and an umbrella. DJ Alex will provide Latin and popular music, and there will be sports activities, including softball, volleyball, and horseshoes, so bring your sports equipment. Children will enjoy musical chairs, face painting, and a water sprinkler to cool off. For more information, contact Carmen Narvaez, Ext. 3254, [narvaez@bnl.gov](mailto:narvaez@bnl.gov); or Anna Petway, [petway@bnl.gov](mailto:petway@bnl.gov).

Wanted: Artists, Crafters

To Display Work on BNL Family Fun Day, Sunday, 7/25


The BNL Summer Sunday Tours program of July 25 features “Family Fun Day.” As part of the event, the BNL Art Society will be outside Berkner Hall to encourage children — and adults — to draw on the sidewalk, blow bubbles, and have their faces painted. In addition, artists, photographers, and crafters are invited to bring their work for display or for sale. Bring your own table and set up at 9:30 a.m., and stay as long as you can: the main gates close to new visitors at 3 p.m.  
BNL employees, guests, visitors, retirees, and family members are all welcome to display their work, and so are outside artists or crafters who are recommended by employees. To register, contact Robert Chrien, [chrien@bnl.gov](mailto:chrien@bnl.gov) or Ext. 3903, or Liz Seubert, [lseubert@bnl.gov](mailto:lseubert@bnl.gov) or Ext. 2346, by Wednesday, July 21.

Science Museum Open House, Noon, Fridays

The extended BNL community, especially families living on site, is invited to come and experience the hands-on exhibits in the BNL Science Museum on Fridays, July 9-August 13, 11:30 a.m.-1:30 p.m. All children under 14 must be accompanied by an adult. Visitors may interact with the Mars exhibit, experience the shadow-wall display, and learn about wonders of science using materials from the Science Museum school programs. A limited supply of science toys will be available for sale at the Museum science store.

### Cycletrons ‘Ride to Work’ Gathering

National ‘Ride to Work Day’ is Wednesday, July 21. Bring your bike and join BNL’s motorcycle club, the Cyclotrons, from noon to 1 p.m. at the gazebo by the softball fields for a lunchtime gathering. Tickets are free for Cycletron Club members and cost \$2 for guests. Heroes, salads, and soda will be provided.  
To purchase tickets, contact Frank Dusek, Ext. 2022; or Charles Gardner, Ext. 5214.



Why Look Up the Number?  
Just Dial 8181 and Say the Name!  
Use ITD’s Telephone Interactive Voice Response System

If you want to phone a person or group at BNL, a convenient, fast solution is at your ear — BNL’s Telephone Interactive Voice Response System.

Not everyone is aware of this system, which the Information Technology Division (ITD) set up some months back: Just dial Ext. 8181 or Ext. 8000, wait for the message asking who you want to contact, then reply, for example, “John Doe,” or “Plant Engineering” — and you will be connected to the appropriate number.

As of July 19, however, ITD plans to provide an even better system.

At present, you must listen to the entire message before you can give the name of the person or department you are trying to contact. On July 19, you will be able to speak as soon as the voice response system answers. Your voice will automati-



cally take precedence over the recorded message, and you will be transferred to your party without delay.

Also, if you only know John Doe as Jack Doe, or Dr. Doe, the system is set up to get you the right connection, if ITD has been provided with the different forms of the name that may be used. If there are two John Does on site, the caller will be asked if the person wanted is the John Doe in Physics or the one in Biology. ITD welcomes information that helps insure that all the likely forms of your name are in the databank so that your calls go through promptly. Have a friend call you to see if you are in the system and whether your nickname is also recognized. If not, ITD will be pleased to receive the additional information and enter it in the system.

For questions or comments, call Bruce Weatherell, Ext. 5229.

Eating Disorders Talk, 7/20

Join Mather Hospital’s Kathleen Jochen on Tuesday, July 20, from noon to 1 p.m. in Berkner Hall, Room C, where she will give the talk and videotape presentation “Real Talk About Real People With Eating Disorders.” Participants will learn about anorexia, bulimia, binge eating disorders, and Mather Hospital’s Eating Disorders Program.

Check your mailbox for registration forms. For more information, contact Linda DiPierro, Ext. 2733.

Hospitality Picnic

The Hospitality Committee invites the Lab community to a summer fun picnic on Saturday, July 24, at 5:30 p.m. Enjoy music, games, and fellowship at the gazebo in the apartment area, near the playground. Bring a dish to share with about six people. Drinks and snacks will be provided. A special feature will be face painting by the Upton Nursery School at \$5 for a whole face, \$2 for one cheek, to benefit their program.

All are welcome. For more information, contact Cindy Ottemann, 849-2646 or [cjottabb@optonline.net](mailto:cjottabb@optonline.net).

Mets vs. Phillies Today

Some seats remain for the Mets vs. Phillies game with fireworks to follow that is scheduled today, Friday, July 16. Tickets cost \$30 each, with free luxury bus included. The bus will depart from the Brookhaven Center at 4 p.m. and return after the fireworks show. Buy tickets at the BERA Store in Berkner Hall, Ext. 3397, open 9 a.m.-3 p.m.

Get Marine Components At On-Site Service Station

Marine electrical components are now supplied at Upton Industries, Inc., the on-site service station. These include hard-to-find units such as Volvo Penta, Mando, Mitsubishi, and Honda/Coleman. Marine generators for RV use are also available. Call Ext. 4304 for more information.

Arrivals & Departures

Arrivals

Yury Adamov ..... Physics  
Sheri Alexander .... Director’s Office  
Julian Baumert ..... Physics  
Mary Bishsai ..... Physics  
Michelle Miller ..... NNS  
Rachid Nouicer ..... Chemistry  
Felix Zantow ..... Physics

Departures

Richard Baker ..... Physics  
Richard Belkin ..... C-A  
Frank Clark ..... C-A  
Barry Cornell ..... Plant Eng.  
Patricia Farrington ..... C-A  
Vincent Harris ..... C-A  
Aron Korostyshevsky ..... C-A  
Xianbo Li ..... Medical  
William Marin ..... P&GA  
Chaofeng Mi ..... C-A  
Alexander Morgan ..... Medical  
Christian Neuberger .... Plant Eng.  
Indracanti Prema Kumar .... Biology  
Lynn Ribaud ..... NSLS  
Robert Schnoor ..... Plant Eng.  
Anthony Tanza ..... C-A  
Derek Teaney ..... Physics

Calendar  
(continued)

Wednesday, 7/21

\*‘Ride to Work’ Day Gathering

Noon-1 p.m. at the gazebo by the softball fields. Bring your bike and join BNL’s motorcycle club, the Cyclotrons, for a lunchtime gathering. Tickets are free for Cycletron Club members and cost \$2 for guests. Heroes, salads, and soda will be provided. To purchase tickets, contact Frank Dusek, Ext. 2022; or Charles Gardner, Ext. 5214.

8Science Comedy ‘Pierre & Marie’

7 p.m. Berkner Hall. All are welcome to a free staged reading of “Pierre and Marie: Love and Chemistry,” by Break A Leg Productions. Free tickets will be issued at the Office of Educational Programs, Bldg. 438. See article, page 2.

Saturday, 7/24

\*2nd Annual Salsa Picnic

11 a.m.-6 p.m. at the gazebo in the picnic area. All BNLers are invited to the BERA Hispanic Heritage Club’s 2nd annual “Salsa Picnic featuring DJ Alex” Bring own beverages, food, and a dish to share with four people. Carmen Narvaez, Ext. 3254, [narvaez@bnl.gov](mailto:narvaez@bnl.gov); or Anna Petway, [petway@bnl.gov](mailto:petway@bnl.gov).

\*Hospitality “Summer Fun” Picnic

5:30 p.m. at the gazebo in the apartment area. Music, games, and fellowship at the gazebo in the apartment area, near the playground. Bring a dish to share with about six people. Drinks and snacks will be provided. Cindy Ottemann, 849-2646 or [cjottabb@optonline.net](mailto:cjottabb@optonline.net).

— WEEK OF 7/26 —

Monday, 7/26

IBEW Meeting

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

Wednesday, 7/28

\*Sambamurti Lecture

3 p.m., Large Seminar Room, Physics Department, Bldg. 510. Michael Lisa of Ohio State University will give the Sambamurti Lecture on “Size Matters: The Space-Time Geometry of Subatomic Collisions.” All are invited to attend this free talk.

BWIS Anniversary Celebration

5:15 p.m., Courtyard of Physics Department, Bldg. 510. Brookhaven Women in Science celebrates 25 years with refreshments. All are welcome. See story on page 2.

Thursday, 7/29

Radisson Hotels Demo

9:30 a.m.-1:30 p.m., Berkner Hall lobby. Representatives from Radisson Hotels will present BNLers with special rates on hotel accommodations and services. Nick Wilson, 961-8292.

WEEK OF 8/2

Tuesday, 8/3

Pegram Lecture Rescheduled: 10/19

The Pegram Lectures to be given by Richard Smalley, announced in the Bulletin of June 16, 2004, have been rescheduled. The First Pegram Lecture, “Our Energy Challenge,” will be given by Smalley at 4 p.m. on Tuesday, October 19. The Second Pegram Lecture, “The Brave New World of Buckytubes,” which was to have been on Tuesday, October 5, will now be given at 11 a.m. on Wednesday, October 20.

Wednesday, 8/4

ASAP/BSA Barbecue

5:15 p.m. The Beach Hut, Smith’s Point. The Association for Students and Postdocs — ASAP — and BSA are sponsoring a barbecue. \$10 includes full BBQ, soft drinks, entertainment. Buy tickets at the QOL/BERA/Recreation Office, Bldg. 179B, or at the BERA Store in Berkner Hall, before Monday, 8/2.

*Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week’s Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to [bulletin@bnl.gov](mailto:bulletin@bnl.gov). Write “Bulletin Calendar” in the subject line.*



# Summer Sundays

## Sunday's Tour Features Our Living World



Roger Stoutenburgh D198073

On Sunday, July 18, BNL's Summer Sunday Tours continue with an exploration of the marvels of medicine and the brilliance of biology. See how BNL works on tomorrow's cures for today's common illnesses. Why do our bodies crave chocolate, nicotine, and cocaine? Discover how the Lab studies the brain to understand addiction and its effects.

Tours are free and no reservations are needed. Visitors may arrive any time between 10 a.m. to 3 p.m. All visitors of age 16 and over must bring a photo ID.

Additional attractions are: a new hands-on "Light & Color" exhibit, produced by the Oregon Museum of Science & Industry; an exhibit on the 2003 Nobel Prize in Chemistry, researched in part at BNL; a demo by high-school students of a robot they built; and the ever popular "Whiz Bang Science Show," with new special effects, to be given at 10:30 a.m., noon, and 3 p.m.

## Classified Advertisements

### LABORATORY RECRUITMENT — Opportunities for Laboratory employees

TB8331. SR. ADMINISTRATIVE SERVICES ASSISTANT (A-3) — Requires a minimum of eight years related experience of which at least three must be at an Administrative Services Assistant level, knowledge of Microsoft Office, including Word, Access, Excel and PowerPoint, and the ability to work under pressure, balance priorities and perform multiple tasks at the same time. Must complete all the requisite training in Classified Matter Protection and Classified Computer Security and perform all related work assignments with a high level of attention to detail and accuracy. In addition, must work independently within established procedures and will be required to handle non-routine office matters daily. Travel and overtime is required as is the ability to obtain and maintain a DOE security clearance. Will perform a wide variety of complex administrative and technical support for the Classified Information System Protection Program and the Information Security Program. Specific duties include, but are not limited to assisting staff with security plan reviews, and modifications, report preparation and document generation, classified document processing, participate in formal audits and inspections, data entry, record maintenance, filing and computer application software installation, etc. Safeguards and Security Division.

OPEN RECRUITMENT — Opportunities for Laboratory employees and outside candidates. MK3478. MEDICAL FELLOW — Requires an MD degree, completed residency in internal medicine, neurology, or psychiatry, and possession of a New York State medical license. Experience in preclinical studies related to neurodegenerative diseases, drug addition and sedation states are desirable. Will participate in NIH and/or DOE sponsored research focusing on the application of neuroimaging studies. Employment is contingent upon the successful completion of a DEA background check. Under the direction of H. Benveniste, Medical Department.

MK2481. POSTDOCTORAL RESEARCH ASSOCIATE — Requires a Ph.D. in applied mathematics, materials science, physics or a related discipline, demonstrated research ability in computational fluid dynamics, and the design and operation of large simulation codes for fluid dynamics. In addition, requires knowledge of modeling of fluid flow in the multiphase regime with phase transitions. Position is with the Center for Data Intensive Computing that engages in advanced scientific computing in fluid dynamics, nanoscience and the use of massively parallel machines. For more information, visit [www.bnl.gov/cdic](http://www.bnl.gov/cdic). Under the direction of J. Glimm, Center for Data Intensive Computing.

MK3475. POSTDOCTORAL RESEARCH ASSOCIATE — Requires a Ph.D. or MD in neurology and experience with brain anatomy, brain-imaging techniques with PET and MRI imaging. Will develop coregistration of brain images, quantitative image analysis of brain structural (MRI) data and quantitative image analysis of brain radiotracers (PET, autoradiography). Will join a large neuroscience group interested in effects of drugs of abuse and diseases on brain function. Employment is contingent upon the successful completion of a DEA background check. Under the direction of A. Biegón, Medical Department.

MK2781. POSTDOCTORAL RESEARCH ASSOCIATE — Requires a Ph.D., experi-

ence with synthesis of inorganic compounds and electrochemical characterization of electrode materials. Knowledge of experimental and data analysis aspects of x-ray absorption spectroscopy is desirable. Research will involve synthesis of electrode materials and electrochemical and structural characterization of the electrode materials. Structural characterization will include in situ x-ray diffraction and x-ray absorption spectroscopy at the National Synchrotron Light Source. Under the direction of W.-S. Yoon, Materials Science Department.

NS3186. SR. TECHNOLOGY ENGINEER (I-8) — Requires an advanced degree in physics, information technology or closely related field and at least eight years related experience in the computing aspects of high energy or nuclear physics experimental projects. Experience must include work with large geographically distributed collaborations and computing resources, petabyte-scale data sets, and hands-on experience with Globus based computing Grid technology. Excellent communication skills and evidence of management and leadership skills are also required. Familiarity and experience with LHC computing and ongoing DOE and NSF Grid projects would be of great value. Will participate in the overall management of the ATLAS & RHIC computing facilities at BNL with primary focus on Grid projects and support for the ATLAS experiment. Physics Department

TB4190. BIOLOGY ASSOCIATE III (P-3, term appointment) - Requires a bachelor's degree in a physical science (physics, chemistry, or engineering), and significant relevant experience. An advanced degree is desirable. Also requires excellent communication skills and a demonstrated ability to learn to operate complex apparatus and computer software. Experience in the operation of UNIX computer operating systems, and electromechanical debugging and troubleshooting is desirable. Under general supervision will assist users of the NSLS in execution of x-ray diffraction experiments and will work independently to perform such measurements. Additional responsibilities will include the maintenance and repair of apparatus, as well as the performance of routine computer operations. Biology Department.

TB2642. SR. CONTRACTS SPECIALIST (A-7, reposting) — Requires a bachelor's degree in business administration or equivalent experience plus ten years directly related experience, knowledge of Federal Acquisition Regulations for fixed price contracts, experience with procurement of high tech electronic equipment and familiarity with Microsoft Word and Excel. An MBA and/or professional certification is desirable. Must be well versed in all aspects of procurement in a government environment including drafting RFP's, proposal evaluation, cost and price analysis, negotiation, drafting of contracts and modifications. Must also have the ability to interface between scientists and commercial vendors while obtaining customized equipment, in addition to protecting the governments' rights in a competitive contracting environment. Experience in teaming with technical requestors and quality assurance personnel in a scientific or high tech environment is also desired. Will be responsible obtaining desired equipment and services through contractual agreements with minimal supervision. In addition, will be responsible for contract administration functions including monitoring of progress, receipt of deliverables and invoice approval, and contract closeout in coordination with contract administration representatives, technical representatives and contractors. Procurement and Property Management Division.

### Motor Vehicle & Supplies

02 HONDA SHADOW - blk. & chrome, like new, 950 mi., \$4,500. Sal, 288-4376.

02 MAZDA MPV LX - a/t, a/c, p/s, p/b, p/w, 45K mi., \$13,500. YunLiang, 764-5813.

02 VOLKSWAGON GOLF GLS - a/t, a/c, p/s, p/b, p/w, 4dr., sunroof, cd/cass., 38K mi., \$12,800. Lawrence, 874-2789.

00 GMC YUKON DENALI - a/t, a/c, p/b, p/w, 4WD, 22" chrome wheels, more, 86K mi., \$21,500. Vinny, 879-1545.

99 VOLKSWAGEN BEETLE - 5spd., a/c, p/s, p/w, blk., 29K mi., \$8,500. Masashi, Ext. 5984 or kaneta@bnl.gov.

98 CADILLAC DEVILLE D'ELEGANCE - a/t, a/c, p/s, p/b, p/w, excel. cond., 93K mi., \$7,900. Gary, Ext. 8580 or 821-7952.

98 MERCURY MYSTIQUE GS - a/t, 4cyl, all pwr., green, v. gd. cond., 102K mi., ask \$2,000. Carl, 345-5776.

97 KAWASAKI NINJA ZX-6 - wine/red, dual slip exhaust, 520 chain, more, 10K mi., \$4,500. Judy, Ext. 5263 or 209-0709.

96 CHEVY CAVALIER - 4cyl., very clean, 99K mi., \$2,650. Sal, 288-4376.

96 TOYOTACAMRY - a/c, all pwr., new windshield, radiator, struts & more, 188K mi., \$3,200. Marty, Ext. 6395 or 874-3478.

95 SATURN SLI - 5spd., a/c, pwr. sunroof, dark blue, all serv. rec., runs well, 158K mi., \$1,000. David, 258-6087.

94 CHEVY SUBURBAN - a/t, a/c, p/s, p/b, p/w, 135K mi., new alternator, radiator, more, \$7,000. Bob, Ext. 4926 or 467-4222.

93 GEO PRIZM LSi - 5spd, a/c, p/s, p/b, orig. owner, runs well, 100K mi., \$1,200. Bo, Ext. 5184.

92 CHEVY BLAZER - a/t, a/c, p/s, p/b, p/w, 4x4, gd. for beach, 115K mi., \$2,800. Larry, 286-5155.

92 TOYOTA TERCEL DX SEDAN - 5spd, a/c, p/s, 4dr., am/fm/cass. excel. cond., 96K mi., \$1,900. Bira, Ext. 8194.

91 ISUZU RODEO - new tires & exhaust, runs well, looks great, needs windshield, orig. owner, \$1,100. Rich, Ext. 5319 or 472-4377.

90 FORD FESTIVAL - a/t, a/c, snow tires, runs well, 114K mi., \$1,200. Peter, 720-933-4100.

93 MERCURY COLONY PARK WAGON - a/t, a/c, p/s, p/b, p/w, gar., leather/int., orig. owner, 75K mi., \$3,100. Rodney, 751-7023.

86 FORD LTD - 4dr., 6cyl., runs okay, 74K mi., \$400/obo. Joe, Ext. 7316 or 929-0668.

83 MERCEDES BENZ 240D - p/s, p/b, p/w, classic MB diesel, manual, driven daily, 144K mi., \$2,900. Brian, 803-2633.

60 CADILLAC - a/t, a/c, p/s, am/fm radio, blk./white int., excel cond., \$2,000/neg. Cynthia, Ext. 3085 or 924-4475.

AM/FM CASSETTE PLAYER - Pioneer, new removable face plate, 35w, \$50/obo. Sue, Ext. 3492 or 734-2593/eves.

RADIATOR - new, hoses & thermostat in orig. carton, for '92 Ford Explorer, V6, 4WD, \$150. Joe, 751-2117.

TIRES - 4 Bridgestone Turanza, model #EL42, 215/55/17, standard touring, all season, 8K mi., \$200/firm. Mike, 281-8306.

### Boats & Marine Supplies

21' PROLINE - '97 walk-around, cuddy cabin, windless anchor, Merc. I/O, low hrs., new Bimini top, \$17,000. Carrie, 889-5302.

18' SOL CAT - 2 set sails, 1 new, need some work, ask \$695. Mary, Ext. 2815 or 472-4087.

7' KAWASAKI X-2 JETSKI - '88 w/trailer, 650cc, 60hp, excel. cond., many accessories, Thomas, Ext. 8335 or 804-2959.

### Furnishings & Appliances

AIR CONDITIONERS - 2, window units, 5,200 Btu, 1 w/remote, 1 yr. old, \$55/ea. Ian, Ext. 7770 or 929-6230.

BED FRAME - queen, custom gray chrome finish w/ brass colored accents, ask \$100. Joseph, Ext. 2795.

BEDROOM SET - king-size bed, headboard/bookshelf, 5' dresser w/full mirror, armoire, 2 nightstands, \$150. 751-6734.

DINING ROOM SET - walnut table w/leaves & pads, china closet & 6 chairs, gd. cond., \$200. Lou, 277-2671.

DISHWASHER - Whirlpool Gold Quiet Partner IV, ask \$200; Caloric elec. dbl. oven stove, \$150. Carol, 472-3332.

DRYER - Westinghouse, almost new, \$150. Eli, 720-933-4100.

HOPE CHEST - antiq., Lane cedar, \$50; rocker, \$25; Wicker wine racks, \$5. Corrine, 654-3697.

LOVESEAT - Jamestown Sterling, excel. quality & cond., rose/blue plaid, \$50. Karen, Ext. 4362.

REFRIGERATOR - Magic Chef, spotless, side-by-side, bone color, \$300. Janet, 744-8087.

VACUUM CLEANER - Miele Solaris Turbo, lw/warr., paid \$619, ask \$569. Peter, 720-933-4100.

WASHER/DRYER - Kenmore washer & LP gas dryer, v. gd. cond., \$175. Henry, 727-7227.

WOOD BURNING STOVE - Atlantic free-standing, airtight, \$500; GE True Temp wall oven, b/o. Barbara, Ext. 2585.

### Tools, House & Garden

CHAR-BROIL GRILL - Patio Caddie Elec. , used 3x's, new \$150, ask \$75; men's 12-spd. bicycle, v. gd. cond., \$75. Karen, 286-6133.

LAWN CHIEF - 11hp riding mower, 36" cut/side discharge, \$225. Larry, 286-5155.

LAWN MOWER - misc. types of push mowers, \$50-\$85. Joe, Ext. 7316.

LAWN MOWER - Snapper, 21", self propelled, gd. cond., \$80. Walter, 567-9025.

WET SAW - Pwr. Mstr., 4.5" diamond blade, makes precision cuts in ceramic tile, & other materials, ask \$60. Joseph, Ext. 2795.

### Sports, Hobbies & Pets

EXERCISER - Gazelle Freestyle, w/ videos, brand new, as seen on TV, \$200. Melinda, Ext. 2280.

BICYCLE - boy's Ross compact, 10spd, about 19" frame, \$25. Sue, Ext. 3492.

BIKES - men's, & women's Trek 7300, multi track, Alpha custom alum., helmets, excel. cond., lock incl., \$345/ea. John, 874-4049.

FISH TANK - 45 gal. fresh wtr., w/ all pumps & filters plus a 2dr., pine cabinet that holds tank, \$225. Paul, Ext. 3308.

SHOT GUN - 12g Beretta Urika, like new, 500 rounds, 13 3/4" length of pull, extra Briley chokes, \$700/firm. Susan, Ext. 2646.

SOLOFLEX MACHINE - like new, all attachmts., from legs to lats, over 250lbs. of resistance, \$165/obo. Gary, 864-8119.

### Audio, Video & Computers

DELL - 1Ghz, 256Mb ram, 20Gb hd, 17" mon., \$300; \$250 w/o mon.; scanner, \$40; printer, \$25. Don. Ext. 7237 or 929-6571.

TAPE RECORDER - REVOKA77, 10.5" tape reels, 4 tracks, \$80; Sony, 5" or smaller reels, runs on batt., \$50. Gar, Ext. 4387.

### Miscellaneous

CAT LITTER BOX - covered, \$5; ladies 10-spd bike, \$25; plastic lap-desk w/ 3 compartments, \$5. Corinne, 654-3697.

DESK - wood, 48" w x 26.5" d x 29.5" h, \$35; 4 Parsons chairs, need cleaning/recovering, \$10/ea.; cd tower, \$15. Joyce, 289-5770.

HELMET - full face w/case, new, blk./blue men's sm., great for kids riding motorized quip., ask \$80/obo. Brandon, 399-3098.

LITTLE TYKES FAMILY KITCHEN - gd. cond., \$15; 40 children's videos, \$1/ea. John, Ext. 4028.

PIANO - Winter spinnet in gd. cond.; 4-drawer steel hanging file cabinet, like new, make offer. Gary, Ext 7045.

## Get to Know Your Lab! Visit PHOBOS, 7/23

At noon on Friday, July 23, the Lab community is invited to join an employee lunch tour of the PHOBOS experiment, which is located in the tunnel of the Relativistic Heavy Ion Collider (RHIC). At RHIC, physicists are gaining insight into the nature of matter as it existed just after the Big Bang. To join the tour, meet Elaine Lowenstein of BNL's Community Relations at noon in the upper lobby of Berkner Hall and be taken by Lab bus to the RHIC tunnel. The group will return to Berkner by 1 p.m.



Roger Stoutenburgh C15-178471