

## Coming Up National Synchrotron Light Source Annual Users' Meeting

The 2005 National Synchrotron Light Source Annual Users' Meeting will be held at BNL from Monday to Wednesday, May 23-25.

To avoid a late fee, register by today, Friday, April 29. After today, the last date to register, with a late fee, is Friday, May 6. More information is available at [www.nsls.bnl.gov/users/meeting/](http://www.nsls.bnl.gov/users/meeting/).

## DOE Honors BNL's Joseph Curtiss For Nuclear Security Contributions

Joseph Curtiss, an engineer in BNL's Safety & Health Services Division, was awarded by DOE's National Nuclear Security Administration (NNSA) for his outstanding work for that organization.

Gregory Slovik, Director of DOE's Office of Weapons Material Protection in the NNSA, came to the Lab to present Curtiss with an inscribed plaque that reads: "In recognition of the dedication and outstanding service to the Material Protection Control and Accounting Program (MPC&A) through the Office of Weapons Material Protection. You are commended for all your tireless efforts, travel, and personal sacrifice to further the mission of the MPC&A Cooperation in Russia."



Gregory Slovik (left), Director of DOE's Office of Weapons Material Protection in the National Nuclear Security Administration, presents an outstanding service award to BNL engineer Joseph Curtiss.

Since 2001, Curtiss has been traveling to Zheleznogorsk, Siberia, several times per year to help install safeguards to protect plutonium at the Russian nuclear facility known as K-26. The facility was constructed within a granite mountain during the Cold War, and contains three nuclear reactors. Two of the reactors have been shut down, but the third reactor, which continues to produce plutonium, is currently used to generate heat for the homes of approximately 100,000 people in Zheleznogorsk, located in a remote area where the winter temperature dips to minus 40 degrees.

"K-26 has one of three plutonium-producing reactors remaining in the world," Curtiss said. "The DOE program is helping to safeguard the nuclear material by supporting construction of a \$9-million plutonium storage facility, a \$4-million central alarm station, and other nuclear MPC&A upgrades. This cost-effective support assures the material is not subject to theft or diversion, winding up in the hands of terrorists."

From 1996 to 1999, Curtiss was the project team leader in an MPC&A program to develop and implement safeguard upgrades to Luch, a uranium processing plant in Podolsk, Russia. Six DOE labs were involved in that project, which included upgrading their nuclear material storage facility and renovating an existing building to become their new central alarm station.

Joseph Curtiss earned a B.S. and M.S. in electrical engineering from the Polytechnic Institute of Brooklyn in 1963 and 1970, respectively, and is a registered professional engineer. He joined BNL in 1963 as a development engineer in the Alternating Gradient Synchrotron Department. He left the Lab in 1980 to become an engineering specialist with Burns and Roe, Inc., but returned in 1985 as a project engineer in the then Nuclear Energy Department. In 2000, he became BNL's electrical safety officer, interpreting electrical standards and reviewing and approving electrical equipment and installations for the entire Lab. In 2001, DOE requested that he resume supporting their Russian program. He then joined the team working on upgrades in Zheleznogorsk, while continuing half-time as electrical safety officer.

— Diane Greenberg

## Aronson Named Associate Lab Director For High Energy & Nuclear Physics

Samuel Aronson, Physics Department Chair, has been named the Associate Laboratory Director for High Energy & Nuclear Physics, effective April 1. He succeeds Thomas Kirk, who has become a Special Assistant to the Director.

In his new position, Aronson is responsible for overseeing a \$190-million annual budget and about 750 employees. The directorate encompasses the Collider-Accelerator Department, the Physics Department, the Center for Accelerator Physics, the Instrumentation Division, and the Superconducting Magnet Division.

"The High Energy & Nuclear Physics Directorate has had a long and productive tradition at the Laboratory, with many important discoveries and the attendant recognition of its staff and users in the international scientific community," Aronson said. "It's an honor and a big responsibility to be charged with the stewardship of this important activity."

The operation of the Relativistic Heavy Ion Collider (RHIC) is currently the biggest project in

the directorate. About 1,000 scientists from around the world perform research at the collider in an attempt to recreate the extreme hot, dense conditions thought to have existed just after the beginning of the Universe. Other large projects include the management of the U.S. participation in building the ATLAS detector, one of the two principal experiments at the Large Hadron Collider now under construction at CERN, the European laboratory for particle physics; and participation in the Rare Symmetry Violating Processes experiment, research in which international collaborators investigate some of the most fundamental processes of particle physics.

Aronson faces some difficult challenges in maintaining the high caliber of BNL's physics program. He said, "We're seeing some of the worst budgets and budget forecasts in a very long time. The challenge is to maintain and advance a compelling science program at Brookhaven Lab in the face of these decreased budgets."

(continued on page 2)



Roger Stoutenburgh D0780305

## Quasiparticle Behavior In Bose Quantum Liquids

Discovering the failure point of certain quasiparticles may help to understand unusual behavior of many useful materials

Quasiparticles are the particles that carry energy in condensed matter. In the world of quasiparticle physics, understanding when and how these energy-carriers fail opens doors to another level of understanding, and can lead the way to many new and important discoveries.

Led by Igor Zaliznyak of the Physics Department, scientists from BNL, Oak Ridge National Laboratory (ORNL), and the Johns Hopkins University have discovered the failure point for what is called the quasiparticle construct, the standard model of condensed matter physics.

This could have far-reaching implications, for example, in the study of high-temperature superconductors, materials currently under intense scrutiny as a possible replacement for the conventional superconductors

now used in many facets of everyday life.

Working with Zaliznyak on this investigation are Matthew Stone of ORNL, and Collin Broholm, Daniel Reich, and Tao Hong of Johns Hopkins. The research was funded by the Office of Basic Energy Sciences within DOE's Office of Science, the National Science Foundation, and the Robert A. Welch Foundation.

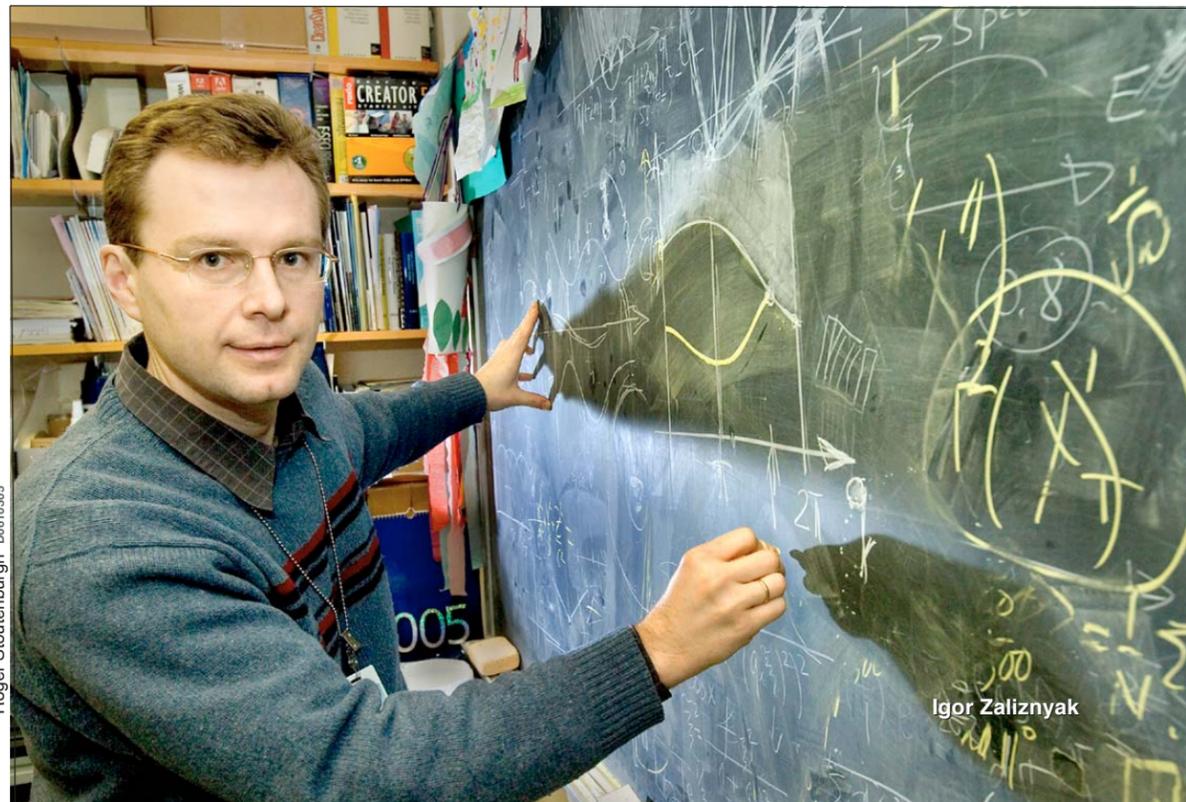
At the March 2005 meeting of the American Physical Society in Los Angeles, Zaliznyak gave a presentation explaining how he and his colleagues identified the "spectrum endpoint" in a Bose quantum spin liquid, i.e., the point at which the quasiparticles are no longer well-defined energy carriers.

"Although the quantum-liquid state has been studied for roughly a century, it continues

to fascinate physicists," Zaliznyak said. "We have demonstrated that at higher energies, the Bose quasiparticle description fails because of quasiparticle decay."

The study of quasiparticles, which govern the properties of quantum liquids, was pioneered by Russian Nobel Prize-winning physicist L.D. Landau. There are two types of quasiparticles, Bose and Fermi, and physicists around the globe are exploring the properties of each type. Zaliznyak and colleagues conducted their experiments using the triple-axis neutron spectrometer at the National Institutes of Standards & Technology, and they confirmed that in a particular Bose quantum spin liquid, quasiparticle decay leads to spectrum termination, as was predicted by Landau.

(continued on page 2)



Igor Zaliznyak

Roger Stoutenburgh D0610305

## 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 Recreation Bldg. and at the laundry, both 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/).

#### Mondays & Wednesdays: Pilates

Mon., Noon-1 p.m. in the Rec. Hall; Wed., 5:30-6:30 p.m. in the Rec. Hall. Christine Carter, Ext. 5090.

#### Mon., Tues., & Thurs.: Kickboxing

\$5 per class. Mon., noon-1 p.m. in the gym; Tues., 5:15-6:15 p.m. in the gym; Thurs., noon-1 p.m. in the gym; Thurs., 5:15-6:15 p.m. in Brookhaven Ctr. North Room. Registration is required. Christine Carter, Ext. 5090.

#### Mon., Wed., & Fri.: Tai Chi

Noon-1 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., Rec. Hall. 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).

#### Tuesdays & Thursdays: Aerobics

5:15-6:30 p.m., \$5 per class or \$40 for ten classes. Rec. Hall. Pat Flood, Ext. 7886.

#### Tuesdays & Thursdays: Aqua Aerobics

5:15-6:15 p.m. Eight-week session. \$20 to attend once a week; \$40 to attend twice a week. Ext. 2873 for more information.

#### Tuesdays & Thursdays: Jazzercise

Noon-1 p.m., Rec. Hall. Preregistration is required. Christine Carter, Ext. 5090.

#### Tues., Thurs., Fri.: Upton Nursery School

8:30-11:30 a.m. Rec. Hall. Two- and three-day program avail. 727-8082 or Ext. 5090, for information.

#### Tues., Wed. & Thurs: Rec Hall Activities

5:30-9:30 p.m. General activities, large-screen TV, ping pong, chess, games, and socializing. Christine Carter, Ext. 5090.

#### Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Hall. An infant/toddler drop-in event. Parents meet while children play. Kati Petreczky, 821-4131.

#### Wednesdays: Weight Watchers

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

#### Wednesdays: Yoga

Noon-1 p.m., Brookhaven Center. Free. Ila Campbell, Ext. 2206, [ila@bnl.gov](mailto:ila@bnl.gov).

#### Wednesdays: Open Chess Night

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

#### Wednesdays: Dance Lessons

5:15-8 p.m. Brookhaven Ctr., North Room. BNL Ballroom Dance Club hosts lessons, beginner to adv. John Millener, Ext. 3853.

#### Thursdays: Reiki Healing Class

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

#### 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 —

#### Friday, 4/29

##### \*Get to Know Your Lab — Plant Trees!

Noon. The Employee Lunchtime Tour will be dedicated to planting trees. Meet at noon in Berkner Hall lobby to go by bus to the planting area, which is inside the ring of the Relativistic Heavy Ion Collider (RHIC). Trees, trowels, gloves will be provided — wear suitable clothes, shoes. The RHIC science program will still be running, acknowledgment waivers will be signed when the group meets at noon. Return to Berkner by 1 p.m. See notice, page 3.

#### Saturday, 4/30

Brooklyn Botanical Garden Bus Trip BERA/APAA Heritage event. Sold out.

# Spotlight Awards

For extending extraordinary efforts in response to the needs of the Lab, or their departments or divisions, the BNL employees listed below were honored during fiscal year 2004 by Spotlight Awards. Each winner is awarded a certificate and a check ranging from \$100 to \$1,000 before taxes. Those who were able to attend the Employee Recognition Award Ceremony held in Berkner Hall on January 26, 2005, are pictured below.



Roger Stoulenburgh 04sen05

**Biology Department:** Linda DeMasi, William Nolan, Judith Romeo, Phyllis Tinsley-Smith. • **Business Systems Division:** Matt McCall, Marie Van Buren. • **Central Fabrication Services Division:** Cheryl Kuhn. • **Collider Accelerator Department:** Richard Anderson, Michael Bannon, John Barry, Cyrus Biscardi, Thomas Brown, John Butler, Martin Candito, Lou Cannizzo, Matthew Ceglie, Peter Cirigliaro, John Cupolo, Anthony Curcio, Nils Danielson, Gary Danowski, Chris Degen, Harold Dorr, Robert Edwards, Jorge Galarraga, Stephen Gill, Douglas Gordon, Donald Gosline, Michael Hamilton, Stephen Jao, Robert Karl, Brian Karpin, R. Dan Lehn, David Loughlin, Alfred Mack, Richard Meier, Terrence Mroczkowski, Humberto Palacios, Salvatore Polizzo, Dysart Ravenhall, Craig Rhein, Scott Rottner, Joseph Saetta, Scott Seberg, Dannie Steski, Joseph Sullivan, Charles Trabocchi, Victor Usack, Donald Von Lintig, Edward Weigand, Alan Weston, Doug Zigrosser. • **Community Involvement, Government & Public Affairs:** Marsha Belford, Jane Koropsak, Melvyn Morris, Dawn Mosoff, Jeanne Petschauer, Susan Sears. • **Energy, Environment & National Security Directorate:** Bonnie Sherwood. • **Deputy Director for Operations:** Lois Marascia. • **Facilities & Operations Directorate:** Cynthia Klemm, Donna Pfeiffer. • **Environmental Sciences Department:** Barbara Roland, Sharon Zuhoski. • **Environmental & Waste Management Services Division:** John Burke, Ed Gavin, Allen Jones, Gary Olsen, Holly Olsen. • **Emergency Services Division:** William Leigh-Manuell, James Vaz. • **Environmental Restoration Division:** Janice DePass, Kathy Ratto, Kathy Schoenig. • **Fiscal Services Division:** Ken Galan April Gray, Marie-Luise Hobson, Donna Rubino. • **Human Resources & Occupational Medicine Division:** Linda DiPierro, Elizabeth Gilbert,

Felicia Hartsough, Diana Hubert, MaryAnne McGrath, Starr Munson, Patricia Snyder, Michael Thorn. • **Information Services Division:** Patricia Flood, Patricia Gorden-Ozgul, Tiffany Minter, Betsy Schwartz, Corene Wood. • **Information Technology Division:** Tameka Carter, Joseph DePace, James Fung, Chris Masullo, Paul Poleski, Christopher Weaver. • **Instrumentation Division:** Donald Pinelli, John Triolo. • **Medical Department:** John Rowan, Henry Schnakenberg. • **National Synchrotron Light Source Department:** Robert Best, Dennis Carlson, Michael Caruso, Shu Cheung, Walter De Boer, Richard Greene, Anthony Lenhard, Laura Miller, Gary Nintzel, Mihai Radulescu, Anthony Santiago, Robert Scheuerer. • **Energy Sciences & Technology Department:** Cheryl Conrad, Maryann Julian, Susan Monteleone. • **Nonproliferation & National Security Department:** Susan Carlsen, Linda Hanlon. • **Physics Department:** Tina Byrd, Joseph Cracco, Henry Diaz, Cornelius Donahue, Jason Farrell, August Hoffmann, Robert Liegel, Sabrina Parrish, Bill Schoenig, Kenneth Sexton, William Smith, Irina Sourikova, John Tradeski, Kathleen Tuohy. • **Plant Engineering Division:** Richard Kuczmariski, Chuck Schuster, Craig Siro, Michael Viscusi. • **Radiological Control Division:** Joseph Cracco, Nate Foster, Peter Heotis, Patrick Sullivan. • **Safeguards & Security Division:** Sheryl Gerstman. David Peter. • **Safety & Health Services Division:** Tracy Blydenburgh, Ken Erickson, Jean Ramirez, Amalia Singledecker, Justin Wojciechowski. • **Staff Services Division:** Jennifer Lynch. • **Superconducting Magnet Division:** John Cintorino, Joseph D'Ambra, Tomas Dilgen, Sebastian Dimaiuta, Gary Herbst, Bill McKeon, Paul Ribaudo, Andrew Sauerwald, Daniel Sullivan, Frank Teic. • **Training Office:** William Fortunato.

## Aronson Named ALD

(cont'd.)

Samuel Aronson earned an A.B. in physics from Columbia University in 1964, and a Ph.D. in physics from Princeton University in 1968. From 1968 to 1972, he worked at the University of Chicago's Enrico Fermi Institute for Nuclear Studies as a research associate. He then moved to the University of Wisconsin, where he was a faculty member until 1977.

Aronson joined BNL's Accelerator Department in 1978 as an associate physicist, and was named physicist in 1979. He joined the Physics Department in 1982, was appointed associate chair of the department in 1987 and deputy chair in 1988. In 1991, Aronson relinquished this position and, as a senior physicist, served as the head of the PHENIX detector project during the construction of RHIC, a challenge he successfully completed before he became Physics Department Chair in 2001. Aronson is a Fellow of the American Physical Society.

— Diane Greenberg

## Quasiparticle Behavior

(cont'd.)

"Landau proposed that at some energy, the quasiparticle description breaks down, and in a generic form this has been known," Zaliznyak said. "But the extent of the phenomenon and how it reveals itself in real materials hasn't been clear. We have shown that at roughly twice the minimum excitation energy, known as the spin gap, Bose quasiparticles cease to be defined at all and disappear."

The experiments studied a quantum liquid found in systems composed of quantum spins in magnetic crystals, specifically an organometallic material known as PHCC. The scientists' neutron scattering measurements demonstrate the occurrence of spectrum termination in the two-dimensional quantum spin liquid found in PHCC.

"When you attempt to create an excitation that is more than twice the gap energy, it's possible that your excitation decays," Zaliznyak said. "In Bose quantum liquids, when decay processes like this become allowed, you can't have quasiparticles."

— Kay Cordtz

## Cafeteria Closed, 5/7

To accommodate BNL's Annual Elementary School Science Fair, the Berkner Hall Cafeteria will be closed on Saturday, May 7. However, the Center Club in the Brookhaven Center, Building 30, will be open from 7:30 a.m. to 2 p.m. serving a continental breakfast in the morning and cold sandwiches at lunchtime.

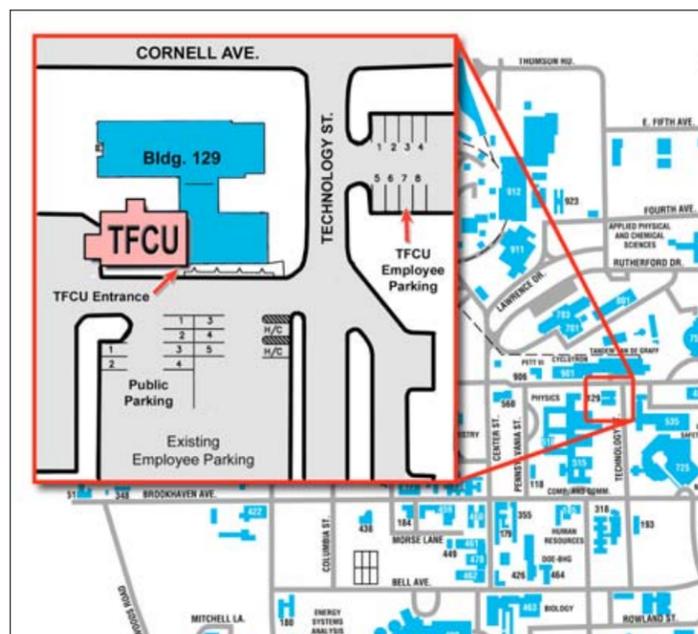
## Talk on Cancer Awareness, 5/3

The Health Promotion Program of the Human Resources & Occupational Medicine Division is sponsoring the following talk on cancer. Register with Michael Thorn, Bldg. 490 or [mthorn@bnl.gov](mailto:mthorn@bnl.gov).

Doris Weisman, NP, MS, Clinical Instructor in Stony Brook University's School of Medicine & Clinical Assistant Professor in the School of Nursing, will give a talk on "Breast Health and Cancer Awareness: Early Detection Plan," on Tuesday, May 3, noon-1 p.m. in Berkner Hall, Room B. Time will be reserved for questions and answers. All are welcome, but space is limited. Register early.

## On 5/2, TFCU Moves to Bldg. 129

On May 2, the BNL branch of Teachers Federal Credit Union will be relocating to Building 129, on the corner of Technology Street and Cornell Avenue, east of the Physics building and opposite the Tandem Van de Graaff. The staff and the hours of opening will remain unchanged.



## APAA Announces Dr. Mow Shiah Lin Scholarship

The BERA Asian Pacific American Association (APAA) announces the start of the new Dr. Mow Shiah Lin Scholarship. To honor the research, achievements, and inventions of the late Mow Lin of BNL's Energy Sciences & Technology Department, a one-time award of \$1,000 will be granted each year to an Asian immigrant with a student visa who is matriculating toward a graduate degree in Environmental Science, Biology, or Chemistry at an accredited institution of higher education in Nassau and Suffolk counties.

The first Dr. Lin Scholarship will be presented in September 2005. The winner will be chosen by a selection committee consisting of scientists at BNL and members of the APAA. Criteria for selection include academic records, references, career goals, and other factors deemed appropriate by the Committee. The scholarship will be granted independent of financial need and without regard to other forms of aid to the student.

Now through May 31, the APAA is accepting applications for the scholarship, which will be administered by the BNL Diversity Office. School transcripts from the previous two semesters, two professional letters of reference, and a one-page essay summarizing the objectives of the applicant's education program and long-range research goals must be attached to the application.

For more information or for copies of the application form, contact the BNL Diversity Office, 344-6253 or srosario@bnl.gov, or visit the APAA web site at [www.bnl.gov/bera/activities/apaa/](http://www.bnl.gov/bera/activities/apaa/).

## BNL Advocacy Council Members Needed

Three representatives of the Lab's diverse workforce are needed to become members of the Brookhaven Advocacy Council (BAC).

If you are a good listener who can maintain confidentiality, remain impartial, base your judgment on fact rather than emotion, are interested in establishing an atmosphere of trust between BNL management and its employees, and are willing to devote time and energy to ensure that everyone enjoys equally the quality of life that BNL offers, consider becoming a BAC member.

BAC is a key component of BNL'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 BAC's attention. BAC is charged with the authority to receive and respond to employee/guest/user 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. Membership responsibility consists of regular participation in the monthly Council meetings for three years. BAC functions independently of the Human Resources & Occupational Medicine Division, reporting directly to the Lab Director.

If you are interested in being a candidate, contact Susan Foster, Employee Relations Manager, [foster@bnl.gov](mailto:foster@bnl.gov) or Ext. 2888, by June 1. Foster will need: your name, extension, e-mail address, department/division, and position. Candidates will be interviewed by the Nominating Committee, composed of Foster, Michael Goldman, Shirley Kendall, Pamela Mansfield, and Jeffrey Rothman. The committee will recommend candidates to the Lab Director, who makes the final decision and appoints the members.

## Skin Cancer Screening, 6/2

Lawrence Lieblich, a Board-certified dermatologist will perform full-body examinations to screen BNLers for skin cancer on Thursday, June 2, 9 a.m.-noon in the Occupational Medicine Clinic. To obtain one of the 40 available appointments contact Michael Thorn, Health Promotion Coordinator, Ext. 8612, or [mthorn@bnl.gov](mailto:mthorn@bnl.gov).

## Register Your Child for Swim Lessons by 6/6

BERA/Recreation will sponsor swimming lessons for children and grandchildren of BNL employees and retirees, to be held at the BNL pool Thursday, June 30-Friday, August 26. Children must be a minimum of 42 inches tall to participate. Space is limited and all applications must be received by Monday, June 6. For information and applications, go to the BERA web site at [www.bnl.gov/bera/](http://www.bnl.gov/bera/) or stop in at the Recreation Office in Building 179B.

## One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, May 3; Tuesday, May 10; Wednesday, May 11; Friday, May 13; and Tuesday, May 24, to answer employees' questions about your financial matters, such as understanding the importance of protecting assets against inflation, finding the right allocation mix for you, learning about TIAA-CREF retirement income flexibility, and comparing lifetime income vs. cash withdrawal options. For an appointment, call Kathy Murphy, (866) 842-2053, Ext. 4625. (Not the on-site Ext. 4625.)

## In Memoriam

The Bulletin recently learned of the deaths in 2003 of the following retirees. Such news is sent by family and friends on an ad hoc basis to the Bulletin and to the Human Resources & Occupational Medicine Division; it is reported as soon as possible.

**Eugene Halik**, who joined BNL as an associate mechanical engineer with a continuing appointment on February 23, 1963, died on July 23, 2003, at age 90. He retired as a mechanical engineer on July 31, 1973.

**Veronica Miko**, who came to join BNL's Plant Maintenance Division as a Matron on May 19, 1958, and retired from Staff Services as a custodial group leader on February 9, 1977, died on November 24, 2003. She was 88.

**Walter Bigelow**, who joined the Central Shops Division as a machinist on March 31, 1958, and retired as a tool and instrument maker on November 30, 1978, died on December 25, 2003. He was 89.

## BSA Distinguished Lecture Celebrates Feynman Book Readings, Bongo Drumming, 5/11

On Wednesday, May 11, BSA will sponsor readings by film and television actor Norman Parker from Nobel-Prize winning physicist Richard Feynman's best-selling books, and a drumming performance and reminiscences of what it was like to drum with Feynman by Ralph Leighton and Tom Rutishauser.

The event, called "A Celebration of Richard Feynman," will be held at 4 p.m. in Berkner Hall. The event is free and open to the public. All visitors to BNL age 16 and over must bring a photo ID.

## Upton Post Office To Sell Feynman Stamp, 5/5

The U.S. Postal Service has commemorated Richard Feynman with his photo on a stamp that will be issued on May 4 as part of the "American Scientists" stamp series. BNL's Upton Post Office will have the stamps available for purchase by May 5.

## Get to Know Your Lab

### Lunchtime Tour — Plant Trees Today, 4/29

As part of the reforestation of the BNL site and to provide a proactive welcome to spring this year, the Employee Lunchtime tour on Friday, April 29, will be dedicated to planting trees. The group will meet at noon in the upper lobby of Berkner Hall to be taken by bus to the planting area, which is inside the ring of the Relativistic Heavy Ion Collider (RHIC). Tim Green of the Environmental & Waste Management Division will stand ready with the trees, trowels, and gloves. Ticks welcome the spring also, so wear anti-tick clothing and shoes. As the RHIC science program will still be running, acknowledgment waivers will be signed when the group meets at noon. As usual, at the end of the tour, the group will be returned to Berkner Hall by 1 p.m.

## Arrivals & Departures

### Arrivals

Larry Fulkerson ..... Physics  
Tadashi Maeno ..... Physics

### Departures

Charles Amarito ..... Magnet  
Patrick Harris ..... Magnet  
Richard Jackimowicz ..... Magnet  
James Massimo ..... Magnet  
John Mc Caffrey ..... Magnet  
James Stolfi ..... Magnet  
Alonzo Werner ..... Magnet  
Gary Whitbeck ..... Magnet

## Retirees' BBQ, 6/8

BNL retirees — save Wednesday, June 8, to gather with friends for an old-fashioned barbecue organized by the Brookhaven Retired Employees Association (BREA), at the Brookhaven Center, noon-4 p.m. You will feast on hamburgers, chicken, spare ribs, and all the trimmings, dessert, and coffee (cash bar); and tap your feet to music chosen by DJ Ed Taylor. County Executive Steve Levy will be the special guest speaker. To attend, send a check made out to BREA for \$25 per person, to: Brookhaven Retired Employees Association, Bldg. 475A, BNL, Upton, NY 11973-5000.

## Visit Toastmasters for 14th Anniversary, 5/3

All are welcome to come and practice public speaking — or observe — and have fun at the Toastmasters anniversary meeting, 5:30-7 p.m., Bldg. 463 Conference Room. Light refreshments will be available. Contact Aimée Sumereau, Ext. 4401, [aimee@bnl.gov](mailto:aimee@bnl.gov).

## Proud as Peacocks!



This fun photo of a lineup of turkeys "strutting their stuff" was snapped near Bldg. 555 about two weeks ago by Zhen Song of the Chemistry Department. The Bulletin enjoys receiving poems, short stories, photos, etc., that readers would like to share, to be printed as space permits.



Photo by Tom Harvey

## Calendar

(continued)

— WEEK OF 5/2 —

Tuesday, 5/3

### \*Talk on Breast Cancer Awareness

Noon-1 p.m., Berkner Hall, Room B. Doris Weisman, Stony Brook University School of Medicine, will talk on "Breast Health and Cancer Awareness, Early Detection Plan." All are welcome. Register with Michael Thorn, Bldg. 490 or [mthorn@bnl.gov](mailto:mthorn@bnl.gov).

### \*Toastmasters 14th Anniv. Meeting

5:30-7 p.m., Bldg. 463 Conference Room. Come and practice public speaking while having fun. Light refreshments will be available. All are welcome. For more information, contact Aimée Sumereau, Ext. 4401, [aimee@bnl.gov](mailto:aimee@bnl.gov).

Thursday, 5/5

### Cycletrons Motorcycle Club Meeting

5 p.m., Brookhaven Center. The BNL Motorcycle Club meets on the first Thursday of every month. All are welcome. For more information, contact Frank Dusek, Ext. 2022, or [dusek@bnl.gov](mailto:dusek@bnl.gov).

Saturday, 5/7

### \*APAA Heritage Event, Martial Arts

6:30-9 p.m. Berkner Hall. Tickets are at the BERA Store, Berkner Hall, \$10/adults, \$5/children. See notice, page 4.

— WEEK OF 5/9 —

Tuesday, 5/10

### Sam's Club Demo

10:30 a.m.-2 p.m., Berkner Hall. Representatives from Sam's Wholesale Club will present BNLers with discounted membership rates and additional benefits. There will also be a raffle and other giveaways. For more information, call Kim, 447-0253.

Wednesday, 5/11

### Rifle & Pistol Club Meeting

Noon, Bldg. 535 Conference Room. All are welcome to join a discussion of the latest Club activities and issues. Jim Durnan, Ext. 8236, or [www.bnl.gov/bera/activities/rpc/](http://www.bnl.gov/bera/activities/rpc/).

### \*A Celebration of Richard Feynman

4 p.m. Berkner Hall. Bookreadings, bongo drum-playing. See above, left.

Friday 5/13

### \*Hampton & Kingpins in Concert

8 p.m. Berkner Hall. Sponsored by the BNL Music Club, Joe Hampton and the Kingpins, will appear in concert with singer-songwriter Caitlyn Amandato open the show. All are welcome. Visitors to the Lab of 16 and over must carry a photo ID. Tickets are \$8 in advance at the BERA Sales Office, \$10 at the door. See notice on page 4.

— WEEK OF 5/16 —

Wednesday, 5/18

### BSA Noon Recital

Noon, Berkner Hall. Ishan Johnson, bass-baritone, who sings with the Boston Pops and the Georgia Mass Choir, will perform.

### 404th Brookhaven Lecture

4 p.m. Berkner Hall. Stanislaus Wong, Materials Science Department, will talk on "Nanovision: Nanotubes, Nanowires and Nanoparticles." All are welcome. Visitors to the Lab of age 16 and over must carry a photo ID.

— WEEK OF 5/23 —

Mon.-Wed., 5/23-25

### \*NSLS Annual Users' Meeting

Register by 4/29, today, or with late fee until 5/6. More information is available at [www.nsls.bnl.gov/users/meeting/](http://www.nsls.bnl.gov/users/meeting/).

WEEK OF 6/6

Wednesday, 6/8

### BREA Summer BBQ

Noon-4 p.m. Brookhaven Center. See notice above, left.

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.

## Joe Hampton and the Kingpins In Concert, 5/13 Singer-Songwriter Caitlyn Amanda To Open the Show

Joe Hampton and the Kingpins, a local band that plays a mix of classic rock, blues, and original songs, will appear in concert on Friday, May 13, at 8 p.m. in Berkner Hall. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Laboratory age 16 and over must bring a photo ID.



The Kingpins. Joe Hampton, center, standing

Lead singer Joe Hampton has been on the New York music scene since 1979 when he played Max's Kansas City, the Mudd Club, and C.B.G.B.'s in Manhattan. Also, Hampton hosted one of the first music-video shows in New Jersey, called "Cable Rock." He has released two solo CDs, "Angry Joe and the Relatives/Revenge for Tomorrow," and "Joe Hampton and the Mindless Members/Not Afraid of Anything."

The Kingpins have performed in numerous Long Island venues, including the Riverhead Blues Festival, Patchogue Street Fair's "Live at Five," the Suffolk County Fair, Stephen Talkhouse in Amagansett, the Hansom House in Southampton, Bay and Main in Greenport, and several other restaurants and clubs.

Singer-songwriter Caitlyn Amanda, a 16-year-old talent who plays acoustic guitar, has years of musical theater performance to her credit. Amanda has performed across Long Island and has recently been featured on radio stations WUSB 90.1 FM and WLIU 88.3 FM, doing both live radio interviews and on-the-air performances. She has made two recordings, "Pure White" and "Wonderland," and she recently made her New York City debut in the Cutting Room.

Tickets for the concert cost \$8 each in advance and \$10 each at the door on the day of the show. They may be purchased at the BERA Sales Office on weekdays, from 9 a.m. to 3 p.m., or through ticketweb.com.



Caitlyn Amanda

## Classified Advertisements

### Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882; call the JOBLINE, Ext. 7744 (344-7744), for a list of all job openings; use a TDD system to access job information by calling (631) 344-6018; or access current job openings on the World Wide Web at [www.bnl.gov/HR/jobs/default.htm](http://www.bnl.gov/HR/jobs/default.htm).

The following position has been exempted from the freeze by the Deputy Director:

**OPEN RECRUITMENT** - Opportunities for Laboratory employees and outside candidates. MK3564. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in experimental high-energy physics. Research will involve work at the ATLAS experiment at the LHC and the D0 experiment at Fermilab. Under the direction of D. Lissauer, Physics Department.

### Motor Vehicles & Supplies

- 00 VW BEETLE - a/t, cd, metallic lt. green, gar'd, perf. cond. 26K mi. \$9,000. 588-7989.
- 99 KAWASAKI NINJA ZX9R - gm., Muzzy Pipe, Jetkit, new tires, seat cvr., hlmt. Mint, v. fast! 8000 mi. \$6,000/neg. 516-901-3208.
- 98 TOYOTA TACOMA - v. well maint., new cond., a/t, white, vinyl top, wide tire. 58K mi. \$8,500/neg. John, 878-0491.
- 96 CHRYSLER CIRRUS LXI - 4cyl, a/t, a/c, abs, c/c, p/w, leather, gd. cond., recent insp., carfax info. 75K mi. \$3,000. Mark, Ext. 2247.
- 92 GMC S10 - Runs v. well, 6-cyl., 4x4. \$1,600/neg. John, 878-6417.
- 92 INFINITI G20 - 4cyl, 4dr., 5spd. (s/t new trans.), abs, p/s, p/l, p/w, a/c, am/fm/cass, v. g. cond., 133K mi. \$1,650/neg. 744-2955.
- 91 ACURA INTEGRA - 2dr., 5spd., a/c, p/s, p/b, moonroof, excel. running cond., price neg. 180K mi. Ramu, Ext. 5787 or 949-2166.
- 91 CHEVY CAVALIER - 4-cyl., 2dr. a/c, a/t, am/fm/cass, incl. Kenwood KDC-C715 10 CD changer. 126K mi. \$500. Betsy, Ext. 2758.
- 90 NISSAN 350 ZX - p/w, p/s, cd/am/fm, a/c. 90K mi. \$6,800. Tom, 516-456-1321.
- 89 TOYOTA COROLLA, WAGON - a little rusty, but runs well. 133K mi. \$600/neg. Charlie, Ext. 2723.
- 87 DODGE ARIES - 4 dr., gd. int., mech. sound, rec. brakes, no rust, paint bad on roof, reliable. 97K mi. \$650/neg. 929-5876/eves.
- 87 FORD TAURUS - 4dr, a/t, V6, a/c, c/c, p/l, p/s, p/w, am/fm/cd, gd running cond. 108K mi. \$750/neg. Zheng, Ext. 7604 or 682-7956.
- 84 FORD F-250 - 2WD, 299 cu. in. eng., high-flow intake, Holly carb, headers, dual exh., Tonneau. 60K mi. \$5,000/neg. 516-901-3208.
- 83 MERCURY COLONY PARK - wagon, all pwr., leather, orig. owner, garaged, excel. in & out. 78K mi. \$4,800/neg. 751-7023.
- HUB CAPS - From 1957 Plymouth. Original. Best offer. Ext. 3436.

### Boats & Marine Supplies

- 30' WICKS BROS. 1930 CABIN CRUISER - wht. cedar on oak fr., copper rivets, Chrysler Ace 6 cyl., \$10,500. Ext. 4084 or 878-8847.
- 27' CHAPPARAL SIGNATURE - 1990 I/O, aft. cab. w/full camper back, sleeps 6, a/c, lo hrs., well maint. \$17,000/neg. Ext. 5528.
- 19' GRADY WHITE TOURNAMENT - 130 HP Yamaha, magic tilt trailer, full encl., vhf, dph fdr., swim pltfm. \$11,000/neg. 878-8302.
- BOAT SLIP - Jamesport, NY, Peconic Bay, deep water, floatg. dock, no utes., d/side prkg., up to 25'. Bill, Ext. 2906 or 929-6189.

Catherine Vetter, a black belt student with the Ryu Shu Kan Studio, demonstrates the art of using a weapon called the sai.



Tickets cost \$10 each for adults and \$5 each for children age 12 and under. They may be purchased in advance at the BERA store in Berkner Hall, from 9 a.m. to 3 p.m. on weekdays, or at the door on the evening of the event.

OUTBOARD MOTOR - 3hp Sears Gamefisherman, air cooled. \$300. Ext. 4846.

### Furnishings & Appliances

- ANTIQUA GAS COOKING STOVE - 1950 Glenwood stove, excel. cond.. Picture available. \$1,500/obo. Donna, Ext. 2826.
- BEDROOM SET - Q-size platform waterbed, mirrored hdbd., end tables, lamps, armoire, triple dresser w/mirror. \$500 neg. 205-0373.
- DINING ROOM SET - formal, oak, 8 chairs, server, china cab., table w/beveled glass inserts, pd. \$6,500, ask \$1,000. Ext. 7666.
- DRESSER - wood, 4-drawer. \$25. 803-0506.
- FURNITURE - Q-size sleeper sofa, chair w/ottoman, coffee table, side table, 2 sets "This End Up" cushions. \$1,000 obo. Ext. 4120.
- MATTRESS, BOX SPRING - full size, 2 yrs. old, good cond., very clean. \$99. 335-9007.
- WALL UNIT - bleached oak 2-pc. w/glass lighted shlvs. 70wx80hx20d, pd. \$2,300, ask \$450. <http://ianbal.home.att.net/>. Ext. 7589.
- WASHER - portable, top-load, on wheels, white, 22lx22wx33.5h, mounts to any normal faucets, excel. cond. Ext. 8406 or 849-2646.

### Audio, Video & Computer

- COMPUTER - Gateway, AMD 850MHZ, 64MB RAM, 15GB HD, modem, e'net, sound. No monitor. Clean Windows 98 install. \$100. Gary, Ext. 2550 or 312-3205.
- GAME BOY ADVANCE - never opened, in orig. pkg., cost \$80, ask \$60. Steve, Ext. 4305.

### Sports, Hobbies & Pets

- BICYCLE - Ross, 27", 10 spd, gd. cond., \$40. Walter, 567-9025.
- EXERCISE EQUIPMENT - universal four-station exercise machine w/extra weights, best offer. 208-0408.
- JOGGER STROLLER - Baby Trend Exped., vg cond. Pickup, Bellport, \$45. 803-0506.
- METS TICKETS - Tues. & Fri. games, available, Loge reserve Section 5, Row G, 2 seats. Rodney, 751-7023.
- WESTERN SADDLE - 18-in. reining saddle, gd. cond. \$200. Scott, 765-4944.

### Tools, House & Garden

- FIR TREES - Spruce & Douglas, b&b, 5 to 8 ft., \$45-55 ea., dep. on selection, excel. qual. for yard, privacy. Tom, Ext. 4507 or 878-1060.
- LAWN TRACTOR - Agway 11 hp 38-inch cut, needs new batt. \$325. John, Ext. 4028.
- LAWN MOWER - 21" Snapper, gd. cond., parts washer on 15 gal. tank, \$35; bulk oil pump w/15 gal tank, \$25. Walter, 567-9025.
- RADIAL ARM SAW, TABLE SAW - Craftsman, \$150 each, obo; 1911 treadle sewing machine, price neg. George, 286-7950.
- TOOLS - Sears 30-gal, 3-hp, 220-volt compressor, \$150; Sears router w/attachments, \$75; car ramps, \$15. 205-0373.
- WINTER POOL COVER - and solar pool cover, both 18' round, used one season. \$25 ea. Artie, Ext. 5937.

### Miscellaneous

- CAST IRON RADIATORS - Professionally repainted 14W x 38H, \$50. Unfinished 34W x 24H, 25. You pick up. Donna, Ext. 2826.
- CEMENT CINDER BLOCKS - 28, 8x8x16, \$7/all. Meyer, 286-8350.
- INGROUND POOL BAR - Stainless steel; 2 seats; 24" attached table & umbrella, never used, paid \$600, ask \$275. 751-7023.
- LIFE GUARD FOR HIRE - Cert. HS student avail. for your child/family party. Responsible, reasonable rates. Ext. 5090 or 821-2558.
- MIRRORS - Pub-style framed beer co. mirrors. 14x16 in. Heineken \$2, 16x20 in. Carlsberg \$3, 25x36 in. Job \$5. Peter, Ext. 2913.
- MOVING SALE - contents of apt: tables, conv/sofa, loveseat, lamps, display case, stereo, speakers, bdrm. set, all neg. 205-0373.
- RAZOR ELECTRIC CHOPPER - purch. 12/04, used 2ce, 15 mph, blue, 12 & up, max wt. 220 lbs, ask \$125. Ext. 3693 or 584-6131.

### Happenings

WOMEN'S CONFERENCE - May 13-15, St. Paul Community Church, ages 13/up, \$20/pp, Sat. bkfst/lunch, reg. by May 8. 727-8041.

### Free

- KITTENS - Avail. in 6 wks. If interested, please call. Rosemary, 736-2618.
- OAK FLOORING - Used. Walnut color. approx. 200 sq. ft. You pick up. 765-4944.
- ZIP DRIVE - Iomega 100 MB parallel port zip drive, including hardware, software and documentation. John, Ext. 2667.

### Wanted

INFANT CARRIER - Snap-n-Go car seat stroller needed for baby due in May. Offering \$20. Will pickup on site. Karen, 868-0786.

P/T YOUTH GROUP LEADER - WR Congregational Church seeks person to work w/HS program. See [www.wrongchurch.org/job.htm](http://www.wrongchurch.org/job.htm) for info. Peter, 929-8849.

USED EQUIPMENT, TOOLS - need lg. dog crate, leaf blwr., pwr. washer, sewing mach., nail gun, hand tools, bricks, slate. 255-9620.

### Lost & Found

FOUND: LADIES GLOVES - black, suede-like, found on 4/15 on corner of Center St. and B'aven Ave. Jane at Travel, Bldg. 179.

### For Rent

- BELLPORT VILLAGE - 1-bdrm. grd.-flr. apt. in 2-fam. home; hwdw floors, use of yard, sep dr/way, enjoy village amenities, util incl. \$1,200/mo. Jim, 744-2095.
- MEDFORD - new 2-bdrm., 10x10, 10x12 bsm't apt., lg. kit., lg. dr/lr, side yard, off street parking, all utils incl., no smkg/pets, avail. 4/15. \$1,200/mo. Steve, 374-3967.
- RIDGE - lg. 1-bdrm. bsm't apt, l/r, eik, w/d, a/c, utils. incl., no smkg./pets, lg. bath, pvt. dr/way & ent., 5 min to Lab. \$1,175/mo. James, Ext. 8633 or 510-506-2090.
- S. SETAUKET - 2-bdrm. apt, kit, bath, cac, Internet, cbl. tv, w/d, 9 mi to Lab, pic. at [http://ms.cc.sunysb.edu/~nlin/home/new\\_aveil](http://ms.cc.sunysb.edu/~nlin/home/new_aveil). 5/15. \$1,000/mo. Lin, Ext. 4508 or 698-2891.
- SHIRLEY - 1-bdrm. bsm't apt., lg. kit. combo., full bath., priv. ent., 10 min to BNL, close to beach. \$950/mo. Cecilia, 645-3751.
- SHIRLEY - 2 bdrm., 1 bath apt., nr. BNL. Heat, electric., water, a/c, TV, incl., grd. flr. (not basement.). Quiet area. No smoking/pets. \$1,200/mo./neg. Tomasz, Ext. 7448.
- SHOREHAM - very clean grd.-flr studio apt., single pref., no smkg/pets. Includes all, 2 mo. sec. req'd. \$850/mo. 220-6887.
- MYRTLE BEACH, SC - 2-bdrm. (4 beds), 2.5-bath Townhouse on golf course in Little River, SC, community pool. \$491-\$813/week or \$700-\$1,200/mo. Chris, 472-4994.

### For Sale

- MEDFORD - Diamond 4-bdrm., 2-bath Cape. New kit., baths, windows, 27' agp w/pvt. b'yard, igs, landscp. Move right in. Pat-Med schools. \$349,990 Ext. 5218 or 758-1444.
- MOUNT SINAI - Unique, contemp., w/panoramic vws. 4 bdrm., 3 bath, + legal 1-bdrm. apt., decks, lap pool, priv. l'caped setting, extras. \$819,000. Ext. 7787 or 804-4662.

### In Appreciation

To all my friends and coworkers throughout 134 and PE - Thank you for your kind words and thoughtfulness that you expressed on the loss of my father, Ben Mastrocola, Sr. He will be missed by many.  
- Ben Mastrocola and family.

### BERA Golf Association

The BERA Golf Association is now accepting applications for the 2005 golf league. This year there will be both individual and team divisions. To obtain an application, visit the club website at [www.bnl.gov/bera/activities/golf/](http://www.bnl.gov/bera/activities/golf/) or contact Jeff Williams, Ext. 5587 or [jwilliams@bnl.gov](mailto:jwilliams@bnl.gov).

### 'Cricket, Anyone?'

"We will start playing cricket at the cricket ground south of the gazebo in the ball fields area in two weeks," says Piyush Joshi, a member of BERA's Cricket Club. "Cricket fans interested in playing or knowing more about this wonderful game, which is fast catching up in America, are welcome to join us." Contact Joshi at Ext. 3847 or [joshi@bnl.gov](mailto:joshi@bnl.gov).

### Trip to U.S. Open, 9/6

The BERA Tennis Committee has scheduled a repeat of its popular bus trip to the U.S. Open Tennis championships at the National Tennis Center, to be held this year to be on Tuesday, September 6. The bus will leave from the Lab tennis courts parking lot at 8:30 a.m. and make one stop at exit 63 at the Park and Ride on the Long Island Expressway. Departure from the National Tennis Center will be at 7:30 p.m.

The cost of the trip is \$65 per person, which includes a ticket for the day session (now \$45) and the roundtrip bus fare and tip for the driver.

Paid reservations are being accepted in the BERA Sale Office. Join us for this day of tennis, but sign up early as there are only 57 seats available on the bus.

### Tip of the Month

The new mandatory New York State motor vehicle inspection (OBD II) that was implemented recently is performed by computer. If you have a 1996 or newer vehicle and would like to know more about this procedure, then stop by the on-site service station and pick up descriptive literature or go to the Office of Transportation and Air Quality website at [www.epa.gov/otaq/obd.htm](http://www.epa.gov/otaq/obd.htm). 1995 or older vehicles will continue to be inspected on the dynamometer.

## Martial Arts Expo at BNL, 5/7

All are welcome to a Martial Arts Expo to be held on Saturday, May 7, from 6:30 to 9 p.m. in Berkner Hall.

Sponsored by the Lab's Asian Pacific American Association in honor of Asian Pacific American Heritage Month, the event is open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

At the expo, teachers and students from Long Island studios and from recreational groups at Brookhaven Lab will give live demonstrations of numerous styles of martial arts, such as kung fu, tai-chi, jiu jitsu, karate, kendo, and more.

Originated in China, Korea, and Japan, the martial arts include various forms of self-defense based on ancient techniques that include both mental and physical discipline.

The groups that will give presentations are: the BERA Jiu Jitsu

Club; the BERA Tai-Chi Club; Island Jiu Jitsu, Inc., Ken Zen Institute of Long Island, Ryu Shu Kan: Long Island's Family Karate Center, Shaolin Kung Fu Studios, Inc., Wing Chun Original of Long Island; and the Yuan-Ji Society.