

## Ultracold Gas Mimics Ultrahot Plasma

### Physicists Examine Free-Flowing Perfect Liquids Linked by Strings

In a February 15 news release, Duke University highlighted connections that can be made between the behavior of ultra-cold matter and the extremely hot, “perfect” liquid formed at BNL’s Relativistic Heavy Ion Collider. One surprise is that methods of string theory can be used to describe both conditions. The topic was the focus of a physics symposium sponsored by BNL at the annual meeting of the American Association for the Advancement of Science on February 15, 2009, in Chicago. Titled “Quest for the Perfect Liquid: Connections Between Heavy

Ions, String Theory, and Cold Atoms,” the symposium was organized by BNL’s Peter Steinberg with Bill Zajc of Columbia University. The lively symposium, which attracted great interest, was moderated by Steinberg, who reported on the event in the Monday Memo of 2/23/09 and in his blog (see the Sunday, February 22 entry at <http://entropybound.blogspot.com/>). To read the Duke news release in full, see the BNL web newsroom, February 15, [http://www.bnl.gov/bnlweb/pubaff/pr/PR\\_display.asp?prID=914](http://www.bnl.gov/bnlweb/pubaff/pr/PR_display.asp?prID=914). Excerpts from the news release follow.

Several years after Duke University researchers announced spectacular behavior of a low density ultracold gas cloud, researchers at BNL observed strikingly similar properties in a very hot and dense plasma “fluid” created to simulate conditions when the universe was about one millionth of a second old.

The plasma was formed at a colossal 2 million degrees kelvin within BNL’s Relativistic Heavy Ion Collider (RHIC). The Duke gas cloud was cooled to 0.1 millionths of a degree kelvin using a laser light “trap” and magnetic field. But both drastically different systems expanded something like exploding cigars. And their constituent matter also showed signs of flowing almost free of any

**“The cigar-shaped plasma looked very much like the cigar-shaped cloud in our trap.”**

viscosity — a “nearly perfect” fluid, said Duke physics professor John Thomas.

Thomas reported on his lab’s experiments with “fermion” gases and their possible relevance to RHIC’s “quark-gluon plasma” research as well as to string theory during a February 15 symposium organized by BNL during the American Association of Science’s 2009 annual meeting, in Chicago.

In a November 2002 report in the research journal *Science*, Thomas and co-researchers described what happened after they confined a cloud of lithium-6 atoms and cooled them to 100 billionths of a degree above absolute zero. When the ultracooled, cigar-shaped cloud was then released from the trap, it expanded “anisotropically,” meaning “fastest along the direction that was initially narrow,” he recalled.

RHIC is designed to smash gold atoms together near the speed of light. Its goal is to create energies colossal enough to break apart their nuclei into an ultrahot gas of the most fundamental particles, “naked” quarks and gluons. Theoreticians believe such

See *Ultracold Gases* on pg. 2

## Nobel Laureate Paul Nurse To Give Pegram Lectures, 3/18 ‘Controlling the Cell Cycle’ & ‘The Great Ideas of Biology’

Nobel Laureate Paul Nurse, President of Rockefeller University, will give two George B. Pegram Lectures on Wednesday, March 18, at 11 a.m. and 4 p.m. in Berkner Hall. Inaugurated in 1959, the Pegram lectures bring distinguished scholars to BNL to speak on topics of both scientific and general interest. Sponsored by Brookhaven Science Associates, the lectures are free and open to the public. Visitors to the Lab age 16 and over must bring a photo ID.

In the 11 a.m. lecture, titled “Controlling the Cell Cycle,” Nurse will explain that growth and reproduction of all living organisms are dependent on the cell cycle, the process that leads to cell division. Uncontrolled division of cells can lead to disease, especially cancer. Two phases in the cell cycle — the synthesis phase, the stage at which DNA synthesis or replication occurs; and mitosis, a process that results in the production of two daughter cells from a single parent cell — are controlled by enzymes called cyclin-dependent kinases, or CDKs. Checkpoint controls working through the CDKs



Nobel Laureate Paul Nurse, President of Rockefeller University

block cell-cycle progression if cells are too small or DNA is damaged or incompletely replicated. Nurse will discuss his recent lab results on these cell-cycle controls.

In the 4 p.m. lecture, “The Great Ideas of Biology,” Nurse will discuss three important theories that have influenced the course of biology: gene theory, the proposal that the cell is the fundamental unit of all life, and Charles Darwin’s theory of evolution by natural

See *Pegram Lectures* on pg. 2

## Eight Brookhaven Scientists Are Granted Tenure

Brookhaven Science Associates (BSA) granted tenure effective December 1, 2008, to eight Brookhaven scientists. They are Elaine DiMasi, National Synchrotron Light Source; Rita Z. Goldstein, Medical Department; Yangang Liu, Environmental Sciences Department; Hong Ma, Physics Department; Cedimir Petrovic, Condensed Matter Physics and Materials Science Department (CMPMS); Triveni Rao, Instrumentation Division; Tonica Valla, CMPMS; and Paul Vaska, Medical. Tenure appointments are granted by action of the BSA Board after a rigorous selection procedure overseen by the BSA Science & Technology Steering Committee. In making tenure decisions, the BSA Board is advised by members of the Brookhaven Council, an elected body that advises the Director on matters affecting the scientific staff. The Bulletin is featuring the newly tenured scientists in alphabetical order: Elaine DiMasi was profiled in the Bulletin of February 27; below are summarized the contributions of Goldstein and Liu.

### Rita Z. Goldstein

Scientist Rita Z. Goldstein, Medical Department, has been awarded tenure for her outstanding contributions to the field of neuropsychology and the study of drug addiction. Goldstein is internationally recognized for her use of innovative methods to study the brain and behavior when addicted to cocaine.

“Goldstein’s research will facilitate the development of novel modalities that will treat drug addiction more effec-



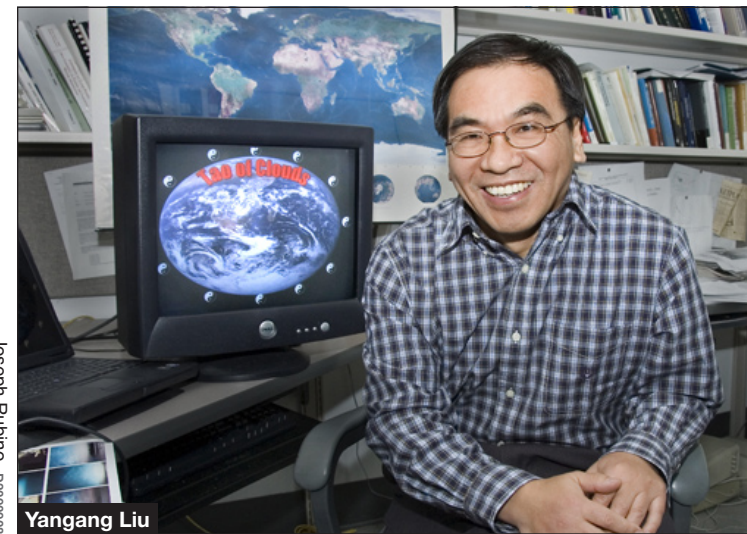
tively,” stated Gene-Jack Wang, a senior scientist and chair of Brookhaven’s Medical Department. “For a young researcher in psychology, where a lot is published and far less is cited, her citation record is remarkable.”

In 2002, Goldstein co-authored a paper published by the *American Journal of Psychiatry* that has been cited nearly 350 times. This paper introduced I-RISA, the Impaired Response Inhibition and Salience Attribution model, which suggests that the brain’s pre-frontal cortex overvalues drug-related stimuli while undervaluing non-drug-related stimuli in those addicted to drugs. This compromise is associated with an inability to control one’s own behavior and may lead to further addiction symptoms like compulsive drug use — even when the drug experience is no longer perceived as pleasurable, or if continued use could

have disastrous consequences.

Currently, Goldstein is collaborating with others in Brookhaven’s Life Sciences Directorate using positron emission tomography and functional magnetic resonance imaging to understand how dopamine and other neurotransmitters affect the pre-frontal cortex’s role in the I-RISA syndrome in drug addiction.

Goldstein earned bachelor degrees in psychology and French from Israel’s Tel Aviv University in 1992. She earned a Ph.D. in Health Clinical Psychology from the University of Miami, Florida, in 1999 and worked as a post-doc at Stony Brook University and BNL, 1999-2002. In 2001, Goldstein received a New York State Clinical Psychology License, becoming an assistant scientist in the Medical Department in 2002. She became an associate scientist in 2004 and was appointed scientist in 2006.



### Yangang Liu

Yangang Liu of the Environmental Sciences Department (ESD) has been granted tenure for his substantial achievements in the field of cloud physics. Liu is internationally recognized as an expert in cloud physics, focusing on understanding the effects of aerosols on clouds as it relates to climate change.

“Liu is known as one of the outstanding younger contributors both nationally and internationally in the area of cloud microphysics and optics,” noted Peter Daum, ESD Acting Chair. “He is highly productive and central to the scientific and programmatic growth of atmospheric science at BNL and beyond.”

Rather than using traditional empirical methods to explain “autoconversion,” a naturally occurring process in which cloud droplets trans-

form into rain droplets, Liu made significant contributions to the development of a more accurate model based on an understanding of the physics of the process. In work focusing on aerosols and their effects on clouds relating to water-droplet size distributions, the Liu-Daum dispersion-effect finding is recognized to be of key importance in reducing the uncertainty of climate forcing over the industrial period and in understanding climate change.

In addition to his research accomplishments, Liu has contributed substantially to BNL’s support of major DOE research initiatives such as the Atmospheric Radiation Measurement (ARM) effort. In this program, a collaboration of scientists works to improve the treatment of cloud and radiation physics in global climate models. As an Associate Chief Scientist, Liu

See *Tenured Scientists* on pg. 2



CALENDAR  
OF LABORATORY EVENTS

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

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

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

**Mondays: BNL Social & Cultural Club**  
Noon–1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, [alforque@bnl.gov](mailto:alforque@bnl.gov)

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

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

**Mon., Thurs., & Fri.: Tai Chi**  
Noon–1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, [rusek@bnl.gov](mailto:rusek@bnl.gov)

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

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

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

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

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

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

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

**Tuesday & Thursday: Aqua Aerobics**  
5:30–6:30 p.m., Pool.

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

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

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

**Wednesdays: Yoga**  
Noon–1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, [ila@bnl.gov](mailto:ila@bnl.gov)

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

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

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

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

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

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

CIGNA Representative

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

*Ultracold Gases from pg. 1*  
a “quark-gluon plasma” has not existed since a split-second after the Big Bang.

As the results of those experiments began to surface in April 2005, RHIC experimenters found that “the cigar-shaped plasma looked very much like the cigar-shaped cloud in our trap,” Thomas said. That cloud also expanded anisotropically in keeping with what theorists in the field had predicted. Researchers also found that this plasma behaved as an almost-perfect fluid. Meanwhile, further work by Thomas's group has documented almost viscosity-free fluid states in its cold fermion gases.

In addition, researchers

involved in string theory also approached Thomas about similarities between his fermion findings and the predicted behavior of what those theorists call “strongly interacting quantum fields,” he said. “It’s not clear, though, that the prediction has any relevance to Fermi atoms colliding in a trap. However, the closeness of the initial cold gas measurements to the predictions is striking.”

Elements of string theory aim at bridging the gap between quantum mechanics and general relativity by proposing that the true fundamental particles are actually ultra-tiny strings vibrating in multiple dimensions.

Two Other BNL Symposia At AAAS

Also at AAAS, BNL sponsored “Basic Research for Global Energy Security: A Call to Action,” a discussion of innovations in producing, converting, transmitting, storing, and using energy. The presentation, moderated by BNL’s James Misewich, described how basic research — particularly in the emerging field of nanoscience — is enabling advances in catalysis, superconductivity, artificial photosynthesis, and other areas. Misewich reported on the event in the Monday Memo of 3/9/2009 at <http://intranet.bnl.gov/memo/mm.asp?IssueId=140&StoryId=3>.

Another symposium linked with BNL, “Casting New Light on Ancient Secrets,” presented insights into the capabilities of the many light source research facilities located around the world to use non-destructive x-ray techniques to uncover new information about historical artifacts. This symposium, moderated by Murray Gibson, Argonne National Laboratory, was described by one of the speakers, BNL’s Peter Sidons, in the Monday Memo of 2/23/09, <http://intranet.bnl.gov/memo/mm.asp?IssueId=139&StoryId=3>.

*Pegram Lectures from pg. 1*  
selection, which in 2009 is 150 years old. Nurse notes that these ideas merge because the way cells reproduce provides the conditions by which natural selection takes place, thus allowing living organisms to evolve. Another theory that Nurse will discuss is the organization of chemistry within the cell, which provides explanations for life’s phenomena. Also, he will explain a new idea that describes the nature of biological self-organization by which living cells and organisms process information and acquire specific forms.

Nurse earned his Ph.D. in biology at the University of East Anglia. After holding fellowships at the University of Edinburgh and the University of Sussex, Nurse headed the Cell Cycle Control Laboratory at the Imperial Cancer Research Fund (ICRF) in London, from 1984 to 1987. He became Iveagh Professor of Microbiology at the University of Oxford from 1987 to

1991, and Napier Research Professor of the Royal Society, from 1991 to 1993. He returned to ICRF in 1993, where he became director-general in 1996. In 2003, he was named President of Rockefeller University.

Paul Nurse shared the 2001 Nobel Prize in Physiology or Medicine, along with two other scientists, for identifying CDK as the key regulator molecule controlling the process by which cells make copies of themselves. This discovery is important for understanding the development and growth of cancer. In addition to the Nobel Prize, Nurse has won the Albert Lasker Award for Basic Medical Research, as well as numerous other awards and medals. He is a fellow of the Royal Society and a foreign associate of the National Academy of Sciences in the U.S. In 1999, he was honored with knighthood in Great Britain for services to cancer research and cell biology.

— Diane Greenberg

‘Investment Strategy in Current Economy’ TIAA-CREF Seminar, 3/25

On Wednesday, March 25, from noon to 1 p.m. in the Hamilton Seminar Room, Bldg. 555, a TIAA-CREF representative will conduct a seminar on “Developing an Investment Strategy” followed by a Q&A session. Topics to be covered will include the current state of the economy, what can be done with investments, defining goals and time horizons, evaluating risks, selecting the appropriate investments, diversifying holdings, and maintaining a portfolio.

Brookhaven Retired Employees Association Talk, 4/8 ‘Retirees Staying on Track in Volatile Market’

Brookhaven Retired Employees Association (BREA) is sponsoring a talk on “Retirees Staying on Track in a Volatile Market,” at noon on Wednesday, April 8, in the Hamilton Seminar Room, Bldg. 555. Thomas Kelly, ChFC, of TIAA-CREF will give the talk, which will focus on the importance of asset allocation through retirement and the impact of the current economic outlook. All are welcome.

In Memoriam: Robert Metz, Senior

Robert Metz, a rigger for the Site Service Division (SSD), died on February 7, 2009. He was 60.

Metz’s supervisor, Alex Korol of SSD, said, “Bob was a beloved coworker, dedicated to his family and known, here on site, as ‘The Flower Man.’ Each of the four seasons would bring a visit from Bob and his grey step van, always filled to the brim with a variety of flowers, from mums and marigolds to poinsettias and pansies. He will truly be missed, not only by his friends at BNL, but by the whole community.”

Metz first joined BNL in the Plant Engineering Division on August 28, 1985, as a temporary custodian, and he was named as a regular custodian on November 12, 1985. During the years that followed, he served the Lab in many ways, helping out as a laborer, a building and grounds utility worker, and a lamp cleaner. On February 24, 1992, he became a driver. Two years later, in 1994, he changed jobs to become a temporary riggers’ assistant. In 1997, he became a regular riggers’ assistant, and was promoted to his position as a rigger on March 1, 1999.

Metz had many friends at the Lab: one, Joseph DeVoe of the Maintenance & Fabrication Services Division, wrote a poem, “Flowers and Peace” in his memory. Part of the poem reads:

*“ . . . Most great things are shortlived  
Even today is only a moment  
Like many moments in time  
Everyday friends will come and go  
As their souls move about us,  
Leaving a moment of peace, but moving on, looking forward  
And now watching over us all . . .  
. . . As flowers and peace overwhelm us  
There is a respect to be shown,  
For we come from the earth, and the earth takes us back  
As someone new is born, and a new flower blooms,  
We can be at peace.”*

The poem may be read in full in the Obituary page at [www.bnl.gov/bnlweb/pubaf/bulletin/obit/](http://www.bnl.gov/bnlweb/pubaf/bulletin/obit/).

A resident of Mastic Beach, Robert Metz is survived by his wife Frances; his daughter Lisa Metz, Site Services Division; his son Robert Metz Jr., Environmental Protection Division, and, remembered as “Pop Pop,” by his grandchildren Little Bobby and David. — Liz Seubert

*Tenured Scientists from pg. 1*  
functions as the interface between ARM’s Chief Scientist and the Aerosol Working Group.

Liu attended Nanjing University of Information Science and Technology in China where he studied atmospheric sciences and earned a bachelor of science degree in 1983 and a master’s degree in 1989. He earned a

Ph.D. in atmospheric sciences from the Desert Research Institute of the University of Nevada-Reno in 1998.

That same year, Liu joined Brookhaven as a research associate. He was named an assistant scientist in 2001 and an associate scientist in 2003. In 2006, he was promoted to scientist.

— Joe Gettler

Reporting Abnormal Events/Conditions Fast Is Vital to Complying With Two-Hour Limit

Certain abnormal events or conditions that may happen on the BNL site must be reported to DOE within two hours of their discovery. BNL staff members or guests should therefore know that they are required to report to their supervisor any abnormal events or conditions that they perceive may:

- Endanger the health and safety of staff or the public
- Have an adverse effect on the environment
- Seriously impact the operations and intended purpose of BNL facilities
- Result in loss or damage of property
- Adversely affect national security or the security interest of DOE or BNL.

If an employee or Lab visitor or guest discovers one of these events or conditions, it is vital that he or she immediately notify their supervisor, who then notifies a BNL Event Categorizer, at Ext. 1234 or 631-433-0443. The Categorizer has the responsibility of deciding whether an event or condition should be reported to DOE and of reporting it within two hours.

If a supervisor is not available, the staff member or guest should make the call to the Event Categorizer. The Lab maintains a staff of qualified Event Categorizers on a rotating schedule 24 hours a day, 7 days a week. However, in the last 48 declared occurrences, 16 were not reported to the Categorizer in time.

Even if you or your supervisor is unsure of whether an abnormal event or condition is reportable, please call the Event Categorizer as soon as is practical after stabilizing the situation — and within two hours of discovery. Calling the Categorizer does not automatically mean that the event/condition will be reportable to DOE: only 10 percent of calls to the categorizers result in Occurrence Reporting and Processing System reports. But a timely call will allow the Categorizer to fulfill BNL’s responsibility to report occurrences to DOE on time.

For more information, see [https://sbms.bnl.gov/sbmsearch/subjarea/74/74\\_SA.cfm](https://sbms.bnl.gov/sbmsearch/subjarea/74/74_SA.cfm).





Roger Stoutenburgh D0090309

# Say Hello to Kevin Dusling, Say Goodbye to His Hair

Today, BNL’s Kevin Dusling has a full head of hair. After the upcoming weekend however, this Physics Department research associate will have none — but he won’t look to cover his head with a toupee any time soon.

Tomorrow, Saturday, March 14, Dusling will join fellow Long Island volunteers at Tommy’s Place bar and restaurant in Rocky Point as they shave their heads in unity to raise awareness and funds to cure kids’ cancer through St. Baldrick’s Foundation. A nonprofit organization, St. Baldrick’s is one of the world’s largest volunteer-driven fundraisers and has raised more than \$50 million dollars to help support childhood cancer research.

This is the second year that Dusling will shave his head for St. Baldrick’s. “Last year was a lot of fun — good food, drinks, a really good Irish band — and we raised nearly \$30,000,” he explained.

**BWIS 30th Anniversary Events, 3/17 & 25**

In celebration of its 30th anniversary, Brookhaven Women in Science (BWIS) is sponsoring events during Women’s History Month:

- Tuesday, March 17, 11:45 a.m.-1:15 p.m., Berkner Hall, lower lobby: BWIS membership drive. Dues are \$10 per year for BNL employees and \$5 per year for associate members. New members will receive a fresh flower while supplies last.
- Wednesday, March 25, noon- 1 p.m., Berkner Hall, Room A: Join BWIS founders and board members for a brown bag networking lunch. Coffee and cake will be served.

The primary goal of BWIS is to increase the Lab’s awareness of the accomplishments of women in science and to aid in women’s advancement in scientific and related technical careers. Faithful to its founding goal, the group encourages students to consider careers in science, mathematics, engineering and technology.

BWIS is supported primarily through yearly members’ dues and contributions from Brookhaven Science Associates. The entire BNL community — women and men, scientists and nonscientists — are invited to join BWIS.

For more information, see the BWIS website: <http://www.bnl.gov/BWIS/default.asp>.

**LIANS Dinner Meeting, 3/18**

**ANS President To Talk on US Nuclear Renaissance**

All are welcome to attend a talk by William E. Burchill, President, American Nuclear Society, at the dinner meeting of the Long Island Chapter of the American Nuclear Society (LIANS) on Wednesday, March 18. Burchill’s topic will be “The U.S. Nuclear Renaissance and the Challenges It Presents.”

The dinner meeting will be held at the South Shore Restaurant, 388 Medford Ave., Patchogue, just north of Sunrise Highway, at \$25 per person. Complimentary appetizers/cash bar will start at 6 p.m., and dinner with salad, choice of entrée and dessert, and beverages will start at 7 p.m. Burchill’s talk will begin at 8 p.m. Reserve by Monday, March 16, leaving a message with Arnie Aronson, Ext. 2606.

“This year should be just as good, and we hope to raise \$50,000.”

Dusling first learned of St. Baldrick’s through his father- and uncles-in-law, who help organize these events each year in several locations on Long Island. Other St. Baldrick’s head-shaving events will also take place on March 14 at Napper Tandy’s Pub locations in Northport and Smithtown.

“St. Baldrick’s Foundation really gets money out there for cancer research,” Dusling added. “Not only is it a fun event — the money raised helps to fund research, researchers, and clinical trials in the fight against childhood cancer.”

If you would like to volunteer for an upcoming St. Baldrick’s event, as a “shavee” or “shaver,” go to <http://www.stbaldricks.org>. Anyone who would like to sponsor Dusling can contact him at [kdusling@bnl.gov](mailto:kdusling@bnl.gov). — Joe Gettler

# New Program: Making Homes More Affordable

If you are having difficulty making your mortgage payment even if you are not late or in foreclosure, you may be eligible for a mortgage loan “modification.” This program is being made available to responsible homeowners who find themselves financially strapped due to the downturn in the economy. President Obama has called this program “Making Home Affordable Modification” and you can find out if you qualify to have your interest rate reduced by visiting either [www.financialstability.gov](http://www.financialstability.gov) or your mortgage lender’s website. This program was created within the last several weeks and is aimed at middle-income homeowners in order to prevent a situation that would lead to foreclosure. For more information, call Nancy Losinno, Employee Assistance Program Manager, Ext. 4567.

# Earth Day Art Contest — Open to BNL Employees’ Children

The “Your Environment” art contest challenges children in grades 3-5 to create a poster that relates to environmental sustainability. Suggested topics include: recycling, clean water, clean air, protection of wildlife, compliance with environmental laws, or any other topic your child may feel is important to the earth’s environmental health. Prizes will be awarded at the annual Earth Day Award Ceremony on April 23, at 4 p.m. in Berkner Hall.

For details, go to <http://intranet.bnl.gov/ewms/internal/Miscellaneous/ArtContest/ArtContest.pdf> or contact Karen Ratel, Ext. 3711 or [ratel@bnl.gov](mailto:ratel@bnl.gov).

**‘Take Children to Work’ Plans: Volunteers Needed**

Volunteers are needed to participate in a planning committee for “Take Our Children to Work Day,” which will be held on Thursday, April 23. Contact Ernie Tucker, Ext. 5735, [tucker@bnl.gov](mailto:tucker@bnl.gov), or Liz Gilbert, Ext. 2315, [gilbert@bnl.gov](mailto:gilbert@bnl.gov) for more information.

**TIAA-CREF One-on-One Retirement Counseling**

A TIAA-CREF consultant will visit BNL on Wednesday, March 18, and Tuesday, March 24, to answer employees’ questions about their financial matters. For an appointment, call 1-800-732-8353.

# 5th Annual Dr. Mow Shiah Lin Scholarship Call for applications

BERA’s Asian Pacific American Association (APAA) is accepting applications for the 5th annual Dr. Mow Shiah Lin Scholarship, honoring the late Lin, a distinguished scientist in BNL’s Energy Sciences & Technology Department.

In honor of Lin’s research, remarkable achievements, and inventions, a one-time award of \$1,000 is granted each year to an Asian immigrant with a student visa who is matriculating toward a doctorate at an accredited institution of higher education on Long Island (including Queens and Brooklyn) in environmental & energy technology, biology, or chemistry.

The criteria for selection include academic records, references, career goals, and other factors deemed appropriate by the committee. The winner is chosen by a selection committee consisting of scientists at BNL and members of the APAA. The scholarship will be granted independent of financial need and without regard to other forms of aid to the student.

With this scholarship, the Lin family hopes to make a difference for students who come to the United States, like Dr. Lin, to pursue higher education and achieve their research goals with the purpose of making significant contributions to the environment and improving the lives of all humankind.

Administered by the BNL Diversity Office, the APAA is now accepting applications for the Dr. Mow Shiah Lin Scholarship through May 31, 2009. School transcripts from the previous two semesters, two professional letters of reference, and an essay, which summarizes the objectives of the applicant’s education program and long-range research goals, must be attached to the application. The essay should be concise, limited to one page, and double-spaced.

For more information or to obtain copies of the application form, contact the BNL Diversity Office at 631-344-6253 or [sge@bnl.gov](mailto:sge@bnl.gov), or visit the APAA web site at [www.bnl.gov/bera/activities/apaa/](http://www.bnl.gov/bera/activities/apaa/).

# BSA Noon Recital, 3/25 Featuring Music from ‘Frankenstein’

The Covington String Quartet will play music composed to accompany the silent movie “Frankenstein” on Wednesday, March 25, at noon in Berkner Hall. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concert is free and open to the public. All visitors to the Laboratory age 16 and over must bring a photo I.D.

Charming and challenging audiences and critics with performances of classical and contemporary works, the Covington Quartet retains a focus on great quartet masters of the 18th and 19th centuries, but also explores new horizons.

The Quartet recently premiered original background music by Yukiko Nishimura to accompany Edison’s 1910 silent film, “Frankenstein.” This music will be performed during a projection of the short movie in its original 1910 form. String quartets by Haydn and Goldmark make up the balance of the recital. For more information on the performers go to: <http://www.covington-stringquartet.com>. — Jane Koropsak

## CALENDAR

### — WEEK OF 3/16 —

#### Tuesday, 3/17

**\*BWIS Membership Drive**  
11:45 a.m.-1:15 p.m. Berkner Hall lobby. Both men and women are welcome to join Brookhaven Women in Science (BWIS), \$10 /year. See notice, left.

#### Wednesday, 3/18

**\*Two George B. Pegram Lectures**  
11 a.m. Berkner Hall. Nobel Laureate Paul Nurse, President of Rockefeller University, will speak on “Controlling the Cell Cycle.”  
4 p.m. Berkner Hall. Paul Nurse will talk on “The Great Ideas of Biology.” All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and over must carry a photo ID. See pg. 1.

### — WEEK OF 3/23 —

#### Monday, 3/23

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

#### Tuesday, 3/24

**Homebuyer Education Seminar**  
Noon-1 p.m. Berkner Hall. A representative of Long Island Housing Partnership will talk on mortgages: choice, understanding applications, determining affordability, obtaining free preapprovals, budget & credit counseling, credit history, grant eligibility. All are welcome.

#### Wednesday, 3/25

**\*BSA Noon Recital, ‘Frankenstein’**  
Noon. Berkner Hall. The Covington String Quartet will play music composed to accompany the silent movie “Frankenstein.” All are welcome to this free concert, sponsored by Brookhaven Science Associates and open to the public. Visitors to the Lab of 16 and over must carry a photo ID. See notice, left.

**\*BWIS Brown Bag Lunch**  
Noon-1 p.m. Berkner Hall, Room A. Join Brookhaven Women in Science founders, board members, to network. Bring your lunch; coffee and cake will be served.

**\*Seminar: Investment Strategy**  
Noon-1 p.m. Hamilton Seminar Room, Bldg. 555. A TIAA-CREF representative will focus on “Developing an Investment Strategy in the Current Economy,” with Q&A session included. See notice, pg. 2.

#### Friday, 3/27

**Employee Lunchtime Tour**  
Noon-1 p.m. Berkner Hall lobby. Meet a group to be taken to visit the Science Learning Center. All are welcome. No reservations necessary.

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.

## Arrivals & Departures

— Arrivals —

Michael Costanzo..... C-AD

— Departures —

Lori-Anne Neiger .....Pol. & Strat. Planning Office

*Correction:*  
On Friday, March 6, The Bulletin regrets having inadvertently misspelled the name of Changcheng Xu, who joined the Biology Department last week.



## 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 benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. 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. Access current job openings on the World Wide Web at [www.bnl.gov/HR/jobs/](http://www.bnl.gov/HR/jobs/).

To apply for a position, go to [www.bnl.gov](http://www.bnl.gov). Select "Job Opportunities," then "Search Job List."

### LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

**LABORER (LG-3)** - Performs wide variety of manual labor tasks on roads, grounds or building maintenance. May perform unskilled tasks assisting mechanics. Operates such equipment as power lawn mowers and pneumatic tools. Please submit an Employee Transfer Form to Diana Hubert in Human Resources, Bldg. 400B.

**OPEN RECRUITMENT** - Opportunities for Lab employees and outside candidates.

**ASSISTANT MEDICAL SCIENTIST** (Radionuclide Research and Production) - (reposting) - Requires a Ph.D. in nuclear or radiochemistry and the desire to participate in a DOE sponsored program on radioisotope research and production with accelerator beams. Must have experience with inorganic radiochemical separations of accelerator irradiated targets and with gamma ray spectroscopy. Experience with target design, nuclear reaction cross section measurements, and computational codes ALICE and MCNPX is highly desirable. In the Radionuclide Research and Production Group of the Medical Department. Main program focus is to produce and distribute radioisotopes for nuclear medicine research and clinical practice, and to develop radioisotopes for new applications in medicine and science. Under the direction of L. Mausner, Medical Department. Apply to Job ID #14761.

**ASSISTANT/ASSOCIATE MATERIALS SCIENTIST** - Requires a Ph.D. in physics, chemistry or materials science, and several years of postdoctoral research experience. Expertise in synchrotron x-ray scattering methods (e.g., SAXS, WAXS, GISAXS, diffuse scattering, reflectivity) and related equipment and data analysis, and significant accomplishments in the study of soft matter or biophysical phenomena using those methods is also required. Candidate should also have good communication and interpersonal skills, and an interest in working with external users of the CFN. The Center for Functional Nanomaterials (CFN) is seeking candidates for a scientific staff position in the Soft Matter and Bionanomaterials Group at the Assistant or Associate Level. The CFN is a user-oriented research center whose scientific program is focused on the understanding and exploitation of energy-related materials, including polymers and organic-inorganic hybrid nanomaterials. The successful candidate will carry out independent research primarily at a new x-ray beam line at BNL's National Synchrotron Light Source, will work with external users of the beam line, and will develop state-of-the-art methods to study soft/bio nanomaterials using synchrotron radiation. The candidate's research program will be aligned with the CFN scientific thrusts and, especially, with the goals of the Soft Matter and Bionanomaterials group. The level of the position will be based on the background and experience of the selected candidate. Under the direction of O. Gang, Center for Nanomaterials. Apply to Job ID #14776.

**SR. CONTROLS ARCHITECT (I-10, reposting)** - Requires a PhD in engineering, computer science, or physics, or equivalent experience; and a minimum of 15 years' experience in control system design and applications, distributed control system architecture and distributed instrumentation. Experience must include the following areas: millisecond response times, timing/event systems that operate at the nanosecond accuracy and sub nanosecond jitter, high precision MHz signal digitization, global machine protection with response times under 100 msec, and ten (10) years experience in programming in some combination of VHDL, C, C++, and Java in a real time environment. Will support the develop-

ment of the NSLS II control system architecture and have primary responsibility over hardware development for timing, fast orbit feedback, machine protection, and the integration of embedded device controllers. Responsibilities include: collecting system and subsystem requirements, and developing interface control documents, preliminary and final design documents, control system architecture options for cost/performance evaluation, lead prototype, and development stages of development, implementation, deployment, integration, and commission control system for given subsystems. Will work as a contributing and productive member of a team of application engineers and perform other tasks as they are identified. In addition, the successful candidate will develop code under LINUX and will have a proven track record of working within a team and have demonstrated communication skills. Reports to the Controls Group Leader, National Synchrotron Light Source-II. Apply to Job ID# 14474.

**MECHANICAL ENGINEER I (P-9)** - Responsibilities include specification, design, analysis, fabrication, procurement, installation, and commissioning of X-ray beamline optical and mechanical subsystems for the NSLS-II Project. The candidate will provide technical guidance and supervision to project designers and technicians while producing detailed activity reports. Requires a BS degree (MS or PhD preferred) in mechanical engineering or equivalent and at least 10 years of relevant experience. Substantial knowledge of opto-mechanical system design and analysis, materials and advanced manufacturing processes, and precision high stability opto-mechanical systems with controls is required. Must have considerable experience in using 3D CAD (Inventor or Pro-E), drawing standards and engineering codes. Experience with Finite Element Analysis codes for structural, thermal and vibrational predictive modeling of mechanical systems is also required. Vacuum systems, x-ray detectors or beamline hardware experience is desirable. Strong communication and interpersonal skills for interaction with a diverse group of scientists and technical staff will be required to show evidence of successfully working within a multi-disciplinary project team developing state-of-the-art mechanical systems. Reports report to the NSLS-II Beamlines Manager. National Synchrotron Light Source II. Apply to Job ID# 14777.

**ELECTRO-MECHANICAL TECHNICAL SPECIALIST (T-2)** - Requires an AAS degree or equivalent plus four years of equivalent relevant experience in the assembly and testing of electro-mechanical equipment with an emphasis on the manufacture and assembly of precision prototype components. Must have the ability to use hand tools, as well as a working knowledge of manufacturing/machine shop processes, material properties, and mechanical drawings. The ability to work from electrical schematics, the use of standard test and measurement equipment (function generators, oscilloscopes, multi-meters) is highly desirable. Work experience with vacuum system components, high voltage/high current systems, RF systems and cryogenics is a plus. Under general technical direction and with engineering support responsibilities will be to assemble, test, install, and maintain components used in particle accelerators such as magnets, power supplies, RF systems, and electronic diagnostics. Will report to the Beam Components/Instrumentation Group Leader, C-AD. Collider-Accelerator Department. Apply to Job ID# 14774.

**HEAVY EQUIPMENT MECHANIC-OPERATOR (LG-10)** - Under minimum supervision maintains, operates, and repairs all material handling, earth moving, grounds and similar equipment, including complete repair and maintenance of gasoline and diesel engines and the use of required machine tools. Site Services. Apply to Job ID# 14769.

### Motor Vehicles & Supplies

**08 SHENKE SCOOTER 150 CC** - up to 70 mpg, ABS front brake, anti theft alarm, remote starter, 4 stroke, 4 mo. old, blue. 500 mi. \$1,000/neg. Michael, 902-2433.

**05 HONDA SHADOW SPIRIT** - 750, excel cond, windshield, saddle bags, chrome upgrades, just svcd, pics avail. \$3,500/neg. Anna, Ext. 7132 or 793-4551.

**05 MAZDA 6** - 4-cyl,std,ac,abs,homelink, side air bags, new tires, excellent. 41K mi. \$9,400. 928-2021.

**01 FORD FOCUS** - 4cyl., gold, 4 dr, a/c, 6 disc CD changer, a/t, remote start, gd. cond. 96K mi. \$2,875/neg. 516-449-1623.

**00 SUZUKI GRAND VITARA** - 4wd, p/l, p/w, c/c, cd, a/c, 6cyl. 89K mi. \$3,500/neg. Daniel, 655-5262.

**99 AUDI A-4** - euro sprt ed, 30 mpg, slvr, lthr ht seats, BOSE sd sys w/6 cd chngr, new trs, tmng blt, cltch. \$5,800. 786-5008.

**99 HYUNDAI ELANTRA** - 4cyl, 4dr, 2L, a/t, 33 mpg, a/c, am/fm radio/cass., v/clean/reliable, runs excel. 110K mi. \$2,500/neg. Eugenio, 375-6341.

**99 KAWASAKI VULCAN CLASSIC 1500** - Two-tone white/gray, runs well, must sell. \$3,500/neg. Billy, 834-6637.

**96 DODGE GRAND CARAVAN** - Runs well, looks great. Everything in good working order. 155K mi. \$2,200/neg. Richard, Ext. 7160 or 929-8294.

**96 HONDA ACCORD EX** - grey, 4dr., 4cyl., 147h.p., a/t, abs, c/c, p/b, p/l, p/s, p/w, hwy. mi, moonroof, orig. owner. 172K mi. \$1,800/neg. Xiangdong, Ext. 8012.

**95 CHEV PICKUP** - 4x4, 8' bed, 8cyl, 5spd, a/c, bedliner needs cat conv, rest excel. 143K mi. \$2,000. Steve, Ext. 4211 or 286-3681.

**94 GMC 3500** - Crew cab, 4wd, 7.4 ltr, runs great, no dents, used only for towing, seats 5 easily, 5th whl setup. 86K mi. \$6,000/neg. Ron, 631-369-1992.

**69 VW BEETLE** - Classic, melon green, manual trans, 1600 cc eng., excel cond., cass. player plus tapes. 140K mi. \$7,300. Ext. 4289 or 516-779-3111.

**MOTORCYCLE/LANDSCAPE TRAILER** - '08, 7'x10', side dr, back ramp, can hold 3 bikes, blk/silver, never used, \$3,500/firm. Billy, 834-6637.

### Furnishings & Appliances

**ADJUSTABLE BED** - king size, independent pwr. ctrls for ea. side, firm mattresses, E. Setauket. Razvan, Ext. 5806.

**COFFEE TABLE** - solid wood, light oak, 47"x24"x15", \$50 Ext. 3319.

**COMPACT REFRIGERATOR** - Avanti 248YB 2.5 cf., black, approx. 25hx18.75w x 17.75L. like new, \$80. Phil, Ext. 5669.

**FIREPLACE TOOLS** - set w/stand and wood rack \$15. Ext. 7699.

**LIVING ROOM SET** - lthr, custom contemp sofa, lvst, ottoman, saddle brown, excel. cond., pics avail. upon request, ask/\$500 u-pic-up. Bill, Ext. 5186.

**OAK DRESSER** - antique, 4 drawer, 42w x 19d x 35h, \$150. 878-9020.

### Audio, Video & Computers

**CAMERAS** - film, perfect cond, accessories, \$30/ea/obo. Ext. 7699.

**MP3 PLAYER** - 4GB Zen Plus with portable speakers, unit protector, screen protector, charger and ear buds \$60. Lloyd, Ext. 5225.

**PALMCORDER** - camcorder, never used, in box, takes small cassettes, is also a vcr, \$75. rosliedridge.aps.org. 591-4267.

### Sports, Hobbies & Pets

**DRUM SET** - for child, gd cond, 3 drums, 1 symbol, ask/\$50. 516-779-3111.

**LEGO BUILDING SET** - Neptune Discovery Lab, orig/\$89, ask/\$25, Super Van City \$5. Lynda, Ext. 7235 or 949-4292.

**TREK 1200 LADIES' TOUR BIKE** - 2006 18-Speed, 54cm, Black w/red accent, \$959 new, never used, blue helmet & Kryp Lock incl. \$400. 631-902-2783.

### Miscellaneous

**'GUNS' MAGAZINES** - Guns/American Rifleman, 1950's, great cond., approx. 3 dz., single or lot, b/o. Cheryll, Ext. 2852.

**JUICER & MEAT GRINDER** - with manuals and recipes. Used twice, like new, excel. working cond. \$25/each. rosliedridge.aps.org. 591-4267.

**LOST #** - for person who called regarding car detailing, pls call again, cell phone malfunctioned, thank you. 960-6243.

**STALLER CENTER TICKETS** - *Not Just For Kids*, Aga Boom, May 3rd, 3pm, \$12/ ticket, 5 avail. gd. seats, row B. John, Ext. 4028 or 821-5334.

### Happenings

**"LABOR DAY"** AT NFCT - A.R. Gurney's comedy at North Fork Community Theatre, Mattituck, Mar. 12th-15th, \$15/seat, www.nfct.com. Laura, Ext. 2520.

**SUPERNOVAE TALK** - Sat. 3/14, Talk "Nature's Beacons: Type Ia Supernovae" by A. Calder, SBU. 7:30 pm, Custer Institute & Observatory, 1115 Main Bayview Road, Southold. \$13. INFO: 765-2626, Custer-Donna@yahoo.com. (Coming: Sat. 3/28: "The History of the Telescope," by Edward Furey, historian.

### Free

**2 LABS FOR ADOPTION** - 3 yr old male & female, housebroken, trained and neut, love kids, family desperate to find loving home. Rick, Ext. 3005.

**CLASSICAL LPS** - vinyl, various composers, performers, conductors, u-pic-up in Shoreham. Kimberley, Ext. 4151.

**CORDLESS DRILL** - Craftsman 18V cordless drill, charger, flashlight, & case. Needs batteries. Bill, Ext. 2377.

**SONY TV** - 32" Trinitron, needs work on power supply or gd for parts. Ext. 3621.

**TIME SHARE** - Interval International exchange week worldwide. Expires April 16. Mike, Ext. 2947.

### Wanted

**ADOPT-A-PLATOON** - Monetary donations gratefully accepted towards purchase of items to support our platoon. Thank you. Joanne, Ext. 8481.

**COMPUTER** - LCD monitor. Zhening, Ext. 2787 or 875-8985.

**DRESSER** - sm., for studio apt. Patricia, Ext. 3766.

## Concert, 4/11 Duo To Perform Guitar, Harmonica Same-Day Workshops Also Offered

Acoustic duo Paul Rishell and Annie Raines will give a concert on Friday, April 10, at 8 p.m. at the Brookhaven Center. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab 16 and older must bring a photo ID.

Rishell and Raines met in a pub in Boston in 1992 and have racked up thousands of miles on musical tours in the United States and Europe ever since. Country blues guitarist Rishell and harmonica ace Raines have released several CDs including "Moving to the Country," the winner of the 2000 W.C. Handy Award for best acoustic blues album of the year. In addition to performances on TV, radio, and at festivals and concert halls internationally, the two also sponsor musical workshops and seminars.

Tickets cost \$15 in advance or \$20 at the door. Tickets can be purchased at the BERA Store, or through [www.ticketweb.com](http://www.ticketweb.com) or at Jeff Denny's Music Station in Shirley, 631 399-2713. Advance ticket purchase is strongly recommended.

In addition to the concert, Rishell will offer an intermediate and advanced guitar workshop and Raines will offer a harmonica workshop on Saturday, April 11, at the Brookhaven Center. Both two-hour workshops will begin at 2 p.m. and each is limited to 10 places. The cost is \$40 per workshop.



**EUROS** - want to buy in exchange for dollars. Ext. 2524.

**SAILBOAT** - Shallow draft for Moriches Bay (19-22'). John, 631-878-0491.

### For Rent

**BELLPORT VILLAGE** - 1 bdrm upstairs apartment - living room/kitchen combo, full bath, priv. entrance & driveway, all Village amenities, includes utilities. \$1,050/mo. Jim, 275-0745.

**BROOKHAVEN HAMLET** - FOR BNL Employees/Guests Only: room for rent in quiet Brookhaven Hamlet, charming house, cable/patioed yd, TV, w/d,kit. incl. \$485/mo. Sidney, 286-4028.

**EAST PATCHOGUE** - 1 bdrm., l/r, kit. combo, priv. ent., waterview, no smkg/pets, price incl. all. \$950/mo. Janet, Ext. 3120.

**JAMESPORT** - 3-level condo. private walk on beach, 3 Baths 2 Kitch 2-car gar Club-house tennis 3-zone heat & AC, deck & patio, centr. vac, Jacuzzi, many upgrades \$2,500/mo. Ext. 5101 or 631-369-0781.

**MASTIC** - 1 bdrm apt, bsmt, excel cond, v/clean, incl. all, quiet professional, 1 mo sec. call for appt. \$750/mo. 335-9050.

**MASTIC** - 1 bdrm, full bath, kit., den, own drway/ent, no smkg/pets, all incl, 10 min to Lab. \$850/mo. Giuseppe, Ext. 3499 or 219-7241.

**MASTIC BEACH** - 1 bdrm apt, full bath, l/r, kit., priv. ent. & drway, no smkg/pets, all incl. except cable, sec/refs req'd. \$950/mo. 281-4559.

**NAPLES, FL** - 2br/2ba completely furn. condo in gated golf comm., avail. 04/-12/09. \$1,200/mo. Denice, 523-7870.

**NORTH SHIRLEY** - 4Br, 2.5 bath, Lr, Dr, Fr, EIK, W.D. full basement. \$2200. mo + Sec + Ref \$2,200/mo. Shah, 631-286-3204.

**NORTH SHORE** - newly cottage/1 bdrm apt, kit.,bath, 3 closets, terrace, heat/ac, elect, cable, int., gas, water, incl., suitable/1, no/smkg. \$950/mo. 682-8684.

**PATCHOGUE** - cottage-loft, full bath, off st. prkg, no smkg/pets, quiet professional, patio, avail. 4/1, + elec., 1 mo. sec. \$1,000/mo. Ext. 7658 or 495-2596.

**ROCKY POINT** - charming 2 brm. apt. priv.ent/drway heat incl. \$1,200/mo. 849-2908.

**WADING RIVER** - large studio apt, priv., comm., huge bath, wood flrs, walk-in closet, plenty of storage, gar. avail., cable/util. incl. \$900/mo. 793-4598.

**WADING RIVER** - 3 bdrm, 2 bath, on .5 acre. Lg mstr bdrm w/cath ceiling, living area w/study. 1.5 car gar, unfin bsmt. SWRSD, approx .5 mi to Sound. \$1,900/mo./neg. Ext. 4391.

**YAPHANK** - basement 2 bedroom 1 bath, lg eat-in kitchen, living rm, own entrance and yard, pay own elec, 8 min to Lab. \$1,100/mo. Mike, 631)816-0707.

### For Sale

**JAMESPORT** - 3-level condo. private walk on beach, 3 Baths 2 Kitch 2-car gar Club-house tennis 3-zone heat & AC, deck & patio, centr. vac, Jacuzzi, many upgrades \$825,000. Ext. 5101 or 631-369-0781.

**LOS ALAMOS, NM** - 3 BR, L-shaped ranch, 2700 sq ft., 3.5 BA, Kit., great rm., den w/fireplace, climate-ctrl system, 2-car gar., fin. basement. excellent. \$350,000/neg. Joseph, Ext. 2567 or 873-7547.

**RIDGE** - 4 bdrm, 3 full bath, 2 car gar., approx. 0.5 acre, nice garden, 8 min to lab. \$349,900/neg. Joe, 929-1033.

**SHOREHAM** - Ranch, newly renov, 3 bdrm, bath, l/r, den, kit, granite counters, ss appli., gar, lg yd, family neighborhood, \$350,000/neg. 258-4607.

**SHOREHAM** - 4 bdrm., 2.5 bath Col., fml l/r and d/r, den w/fp, fin. bsmt, 12 x 20 deck, igs, new granite counters, SWRSD, much more, 7 mi to lab \$499,900 Don, Ext. 2253 or 821-3320.

**SOUND BEACH/ MILLER PLACE, OPEN HOUSE** - March 22, Legal Mother/Daughter 3 bdrm, 2 bath Ranch, Diamond Rated, 3 Adams Ave. Sound Beach. Corner N. Country & Adams. \$395,000/neg. Charles, 631-872-9268.

**WADING RIVER** - Large 3 bdrm, 2 bath, on .5 acre. Lg mstr bdrm w/cath ceiling, living area wi study. 1.5 car gar, unfin bsmt. SWRSD, appx .5 mi from Sound. \$410,000/neg. Jean, Ext. 4391.

**WADING RIVER** - 9 rm Col., SWRSD, lge kitch & dinette, livg rm, ding rm, fam. rm w/ brick fp, 5 bdrms, 2.5 baths, full basemt, 2-car gar, pool, fenced rear yard, sprinkler sys. \$499,000. 929-6771, cell (631)905-6615.

### On-Site Services

**ENTERPRISE CAR RENTAL** - Bldg. 400 lobby. Cars, pick-ups, vans available for short or long rental. Discounted rates for BNLers. Ext. 4888.

**UPTON SERVICE STATION** - Check your battery, or have your vehicle inspected or oil changed. A full range of repairs is available, all while you are at work. Ext. 4034.

### Att'n. All Service Ad Users: Spring Clean Ahead!

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

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

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

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

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

No advertisement for services offered in association with regular businesses or commercial enterprises are accepted. Use no more than 20 words for your ad.