

First Brookhaven-Built Superconducting Magnet Sent to CERN for the Large Hadron Collider

The first of 20 superconducting dipole magnets to be manufactured by the BNL Superconducting Magnet Division was shipped last Friday to the border of France and Switzerland, just outside Geneva, where it will be incorporated into the Large Hadron Collider (LHC), a particle accelerator at CERN, the European particle physics laboratory.

The LHC's design incorporates more than 1,200 superconducting magnets, most of which are being built by CERN's industrial partners in Europe. As part of the United States contribution to the construction of the LHC, BNL was asked to manufacture the LHC's interaction-region dipole magnets, which will guide the LHC's two counter-rotating beams of protons into collision. BNL has been working on the project since 1996.

Michael Harrison, Head of BNL's Superconducting Magnet Division, said, "The LHC will explore a new energy region and search for phenomena outside the Standard Model, an overall theory of particle physics. Explorations on this scale would be difficult for any single organization to undertake alone."

"The first BNL magnet took nine months to construct, with more than 100 people contributing to its successful completion," said Peter Wanderer, Head of BNL's Magnet Design, Research, Development and Testing Group.

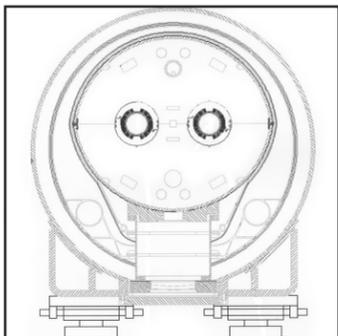
Wanderer continued, "Shipping the first magnet was certainly cause for celebration, but our work for

CERN is far from finished." The Magnet Division continues to build the remaining 19 magnets, most of which weigh more than 25 tons. The last magnet will be completed and shipped to CERN in 2003.

"Choosing BNL to construct the interaction-region dipoles was natural given our previous experience with designing and producing similar magnets for the Relativistic Heavy Ion Collider [RHIC]," said Wanderer. "As a result, Brookhaven has the tools and the know-how to do this job for CERN."

Design Challenges

The LHC will circulate two counter-rotating beams of protons at 300,000 kilometers per second (186,000 miles per second), which is nearly the speed of light, while maintaining the protons precisely at the center of the



Celebrating as the first of 20 BNL-built superconducting magnets made for the Large Hadron Collider (LHC) at CERN is loaded into a shipping container are: (from left) Arup Ghosh, Jesse Schmalzle, Ron Prwivo, Eva Esposito, Rick Jackimowicz, Don Mott, Domenick Milidantri, John Ostaszewski, Nick Weih (back), Doug Gordon, Dan Sullivan, Henry Hocker (back), Gary Whitbeck, Tim Carroll, Paul Ribaldo (back), David McChesney (front), Gene Sorensen (back), Frank Skidmore, Carmine Guarino, Doug Wood (back), John Cozzolino, Dan Oldham (front), John McCaffrey (back), Diana Votruba, Tom VanWinckel, Peter Wanderer (back), Glenn Joche, Ray Ceruti, Ben Azzara, Andy Sauerwald (back), John Escallier, Frank Teich, Sebastian Dimaiuta, Ed Sperry, Bob Hoade (back), Paul Kovach, Joe Muratore, Mike Anerella, Mike Gaffney (back), Animesh Jain, Erich Willen (back), Steve Plate, Keith Power (back), Bob Wong.

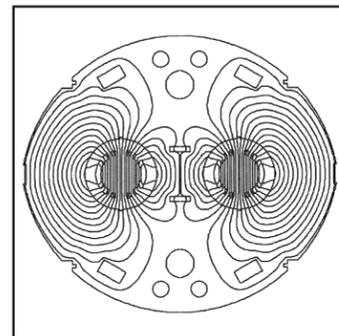
beam pipe containing them.

The LHC will house both beam pipes in one magnet assembly (see diagram at left). Near the interaction regions of the LHC, where the two particle beams are brought into collision, the two beam pipes are within 188 millimeters of each other inside the single magnet assembly.

To design the magnet while accounting for this close proximity, BNL physicists used computer programs to map magnet field lines, thus ensuring that the field would be equal and opposite in the two neighboring beam pipes

(see diagram, below) and that the magnetic field responsible for "steering" the particles in one beam pipe would not adversely affect the field in the other beam pipe.

The strong magnetic field produced by the magnets creates internal forces of up to seven thousand tons per square meter. This force tends to "open" the magnet.



To counteract this force, BNL engineers contained the conductors that carry the electrical current with collars made out of non-magnetic stainless steel material.

A yoke made of iron, a magnetic material, surrounds these non-magnetic collars. The yoke, while adding to the field and providing (continued on page 2)

Cold Spring Harbor Scientists at NSLS Discover How Papillomavirus 'Unzips' DNA

Finding may lead to drugs to prevent sexually transmitted disease and cervical cancer

Human papillomavirus (HPV) causes the most common sexually transmitted disease in the U.S. Though HPV sometimes causes genital warts, in most cases, it infects people without causing visible symptoms. Women with persistent

infections from certain types of HPV are at risk for cervical cancer, as 99 percent of cervical cancers around the world are associated with HPV infection.

Preventing HPV from multiplying is one way of stopping the infection.

Toward that goal, scientists from Cold Spring Harbor Laboratory (CSHL), working at beam line X26C of the National Synchrotron Light Source (NSLS) at BNL, have gained new insight into how HPV starts to multiply, causing infection. Their results appear in *The EMBO Journal*, March 15, 2002. The findings could be used to design drugs to stop HPV infection.

Currently, no cure or vaccine is available, although vaccine development is underway.

The work is funded by the National Institutes of Health; the American Cancer Society; the National Cancer Institute; the Louis Morin Charitable Trust; and the Division of Materials Sciences and Division of Chemical Sciences in DOE's Office of Basic Energy Sciences.

"Very little is known about how HPV replicates," says biologist Leemor Joshua-Tor, CSHL team leader. "So we decided to look at the molecular details of

how the replication mechanism is initiated."

Joshua-Tor explains that, like all viruses, HPV is an infectious agent that uses the cells it infects to reproduce itself. This process can make the cells cancerous.

The infection process starts when the HPV first inserts its DNA — a double-stranded helix containing the virus's genetic information — into the host cell. The virus hijacks proteins in the host cell to produce a viral protein called E1.

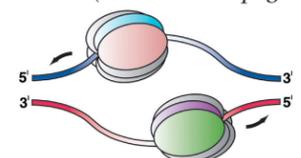
By attaching to the inserted HPV's DNA, E1 proteins can replicate it, so that more viruses are formed.

"The HPV's DNA can be replicated only if it is 'unzipped,' or separated, which allows proteins called DNA polymerases to make copies of each strand," Joshua-Tor explains. "The E1 protein is known to initiate the unzipping process, but how this happens is not well understood."

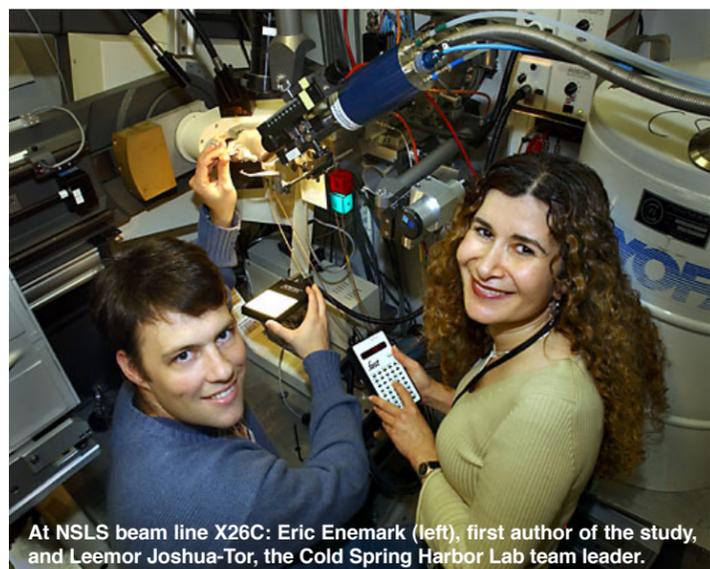
The researchers needed to know how E1 proteins attach to HPV's DNA. So, using x-rays produced at the NSLS, Joshua-Tor and her postdoctoral associate, Eric Enemark, in collaboration with Arne Stenlund, a papillomavirus expert at CSHL, determined the molecular structure of a complex of E1 attached to HPV's DNA.

To their surprise, the researchers observed that E1 uses two separate modules to bind the HPV's DNA, each one binding to a different strand (see figure).

(continued on page 2)



Schematic representation of the HPV's DNA 'unzipping' process. The hexamers (bundles of six E1 proteins) act like little propellers moving in opposite directions, thus unzipping each DNA strand from its partner along the way.



At NSLS beam line X26C: Eric Enemark (left), first author of the study, and Leemor Joshua-Tor, the Cold Spring Harbor Lab team leader.

Calendar of Laboratory Events

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

— EACH WEEK —

Weekdays: Free English for Speakers of Other Languages Classes

Beginner, Intermediate, and Advanced classes. Various times. See 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/.

Mon., Tues., & Thurs.: Kickboxing

\$5 per class. Mon. & Thurs. noon-1 p.m. in the gym; Tues., 5:15-6:15 p.m. in the gym; Thurs., 5:15-6:15 p.m. in Brookhaven Ctr. Registration is required. Mary Wood, Ext. 5923, or wood2@bnl.gov.

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

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

Mondays: BNL Dance Club Ballroom, Latin & Swing Practice

5:30-7 p.m. North Ballroom, Brookhaven Center, except Lab holidays. Jean Logan, jlogan@bnl.gov or Ext. 4391.

Tuesdays: Welcome Coffee

10-11:30 a.m. Rec. Bldg. Hospitality event. Come and meet friends. The first Tuesday of every month is special for Lab newcomers and leaving guests. Hospitality Chair Monique de la Beij, 399-7656.

Tuesdays: BNL Music Club

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

Tuesdays: BNL Dance Club Individual & Couples instruction

5-11 p.m. North Ballroom, Brookhaven Center. Ron Ondrovic, ondrovic@bnl.gov or Ext. 4553.

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.

Tuesdays & Thursdays: Aerobics

5:15-6:30 p.m., \$4 per class. Rec. Bldg. Pat Flood, Ext. 7886.

Tuesdays & Thursdays: Aqua Aerobics

5:15-6:15 p.m., \$2 pool fee per class or use pool pass. Mary Wood, Ext. 5923.

Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Bldg. A infant/toddler drop-in event. Parents meet while children play. Svetlana Agafonova, 205-5065.

Wednesdays: Farmer's Market

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

Wednesdays: Weight Watchers

Noon-1 p.m., Brookhaven Center South Room. Mary Wood, Ext. 5923, wood2@bnl.gov.

Wednesdays: Yoga Practice

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

Wednesdays: Open Chess Night

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

Wednesdays: Exercise 101

5:15-6 p.m., Rec. Bldg. \$4 per class or \$35 for 10 classes. Stretching, low-impact aerobics, and other exercises. Pat Flood, Ext. 7886.

Wednesdays: Dance Club Group Lessons

5-9 p.m. North Ballroom, Brookhaven Center. Marsha Belford, belford@bnl.gov or Ext. 5053.

Thursdays: Science Discussion Group

12:30-1:30 p.m., Berkner Hall, Room A or D. Patrice Pages, Ext. 3270, pages@bnl.gov.

Thursdays: Aqua Aerobics

5:15-6:15 p.m. at the BNL pool. \$2 pool fee or use season ticket. Register with Mary Wood, Ext. 5923.

Fridays: Family Swim Night

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

Fridays: BNL Social & Cultural Club

8-11:30 p.m., Brookhaven Ctr., social. Rudy Alforque, Ext. 4733, rudy@bnl.gov.

Saturdays: BNL Dance Club Monthly Ballroom Dance Social

8-11:30 p.m. Ballroom, Latin & swing dancing. North Ballroom, Brookhaven Center. Tuesday 12/31, 1/25, 2/15, 3/15, 4/12, 5/17. Marsha Belford, belford@bnl.gov or Ext. 5053.

— THIS WEEKEND —

Saturday, 11/23

Defensive Driving

9 a.m.-3:30 p.m., Berkner Hall, Room B. For those already registered.

*Thanksgiving Potluck

5:30 p.m., Rec. Hall. The Hospitality Committee invites the Lab community to a Thanksgiving potluck dinner where traditional turkey will be served. Attendees are asked to bring a dish to share for six people. Monique de la Beij, 399-7656.

High Energy Requires Strong Magnetic Fields

The LHC will accelerate two beams of counter-rotating protons in 27-kilometer circular rings similar to, but larger in circumference than, RHIC.

To understand why a force is required to keep the protons traveling on the correct path, visualize a ball attached to a string as it is swung in a circle above your head. A force is required on the ball to keep it in its circular orbit. As the ball is swung faster, more effort is required to hold on to the string. The faster the ball is traveling, the larger the force.

As protons travel in the LHC, they will be kept on course by magnetic fields produced by superconducting magnets. At the LHC's 7-trillion-electron-volt operating energy, superconducting magnets "hold on" to the protons with a 8.36-Tesla magnetic field, almost 100,000 times the earth's magnetic field. The magnetic field will serve the same function as the string in the example above.



Pictured with the first of 20 BNL-built superconducting magnets for CERN's Large Hadron Collider are: (from left) Robert Medina, Roy Johnson, John Cozzolino, Frank Strelecki, Steve Plate, Dominic Milidantri, and Paul Kovach.

First BNL-Built Magnet Shipped to LHC (cont'd.)

structural support to the magnet, also eliminates "parasitic" magnetic fields from occurring in the beam-pipe region.

Testing and Delivery

After completion, each of the BNL-built dipole magnets is tested at the Lab's magnet measurement facility to ensure that design parameters are met. Extensive measurements are made on properties such as magnetic field, conductor temperature, superconducting coil-stress behavior, and overall magnet performance.

Once it is determined that the magnet can perform to the

design specifications under the LHC's operating conditions, each 30-foot-long magnet is loaded into shipping containers, (see picture, above), to be sent to CERN.

Magnet Division staff will travel to CERN to help take delivery of the first BNL-made magnet, confirming that it arrived in good shape and continues to meet design parameters.

"Together with colleagues from around the world, we are working hard to make great things possible at CERN's LHC — and we are very proud of our contribution," concludes Harrison. — John Galvin

November is National Diabetes Month

John Bennett, ITD, Writes Book on Living With Diabetes

"I've ridden horses, driven tractors, been snowmobiling over 80 miles per hour, taken interstate bicycle rides, kayaked on class-4 rivers, descended Mt. Monadnock in New Hampshire with full backpack, even ascended the Washington Monument on crutches." — John Bennett, *Insulin Dependent Diabetes: My First Fifty Years*

John Bennett, Information Technology Division, in his self-described first and only book, goes on to say that he was diagnosed with diabetes at age 6, appendicitis at age 17, diabetic retinopathy at 28, and kidney stones at 52 and 53. Further, at age 51, he survived double-bypass, open-heart surgery. With wry humor, he adds, "I just can't wait to see what happens next."

An autobiographical, self-help paperback, *Insulin Dependent Diabetes: My First Fifty Years* was published by 1st Books Library™ just in time for National Diabetes Month, November 2002. The book is available on the Web and at the BERA Sales Office, Berkner Hall.

About 17 million Americans have diabetes. The disease interferes with the body's ability to process sugars normally and can lead to complications, such as heart disease, nerve damage, and blindness.

There are two types of diabe-

Unzipping DNA

"This is very unusual," Joshua-Tor says. "We expected that both modules would bind the two strands simultaneously."

"Our results seem to indicate that a hexamer, which is a bundle of six E1 proteins, encircles either strand and acts like a little propeller that rotates around the strand, thus 'unzipping' it from its partner DNA strand along the way," Joshua-Tor continues.



John Bennett

tes. Type I, also known as juvenile diabetes, is an autoimmune disorder that destroys insulin-producing cells in the pancreas. People affected by this disease must monitor their blood sugar, take insulin daily, and carefully regulate their diet and exercise.

Type II, also called adult-onset diabetes, is a metabolic disorder that is linked to genetics, excess weight, and lack of exercise. Type II comprises more than 95 percent of diabetes cases in the nation.

Bennett was diagnosed with Type I diabetes in 1954. He acknowledges that he is still two

years short of 50 years of living with diabetes, as his book title states, but he thought the book would take him about two years longer to write.

"Since I was first diagnosed with the disease, I wanted to know how other people with diabetes feel. There are lots of books about diabetes, but they deal solely with the medical facts about the disease. I tell about my personal experiences with diabetes in this book," Bennett said.

Bennett joined BNL in 1968 as a computer operator, and he is currently an advanced com-

Why Superconducting?

If the LHC were to use conventional electromagnets, a large amount of energy — in the form of electricity — would be required to produce the required bending force. This energy would be dissipated in the resistance of the magnet's wire coil in which the electricity is flowing. The cost of all the energy needed for the LHC's operation would be prohibitive.

Enter superconductivity and the BNL Superconducting Magnet Division.

Scientists have learned that certain materials, such as a compound of niobium and titanium, when cooled to extremely low temperatures (approaching -273 degrees C, or absolute zero), lose their resistance to electricity and allow strong magnetic fields to be produced. No energy is lost in the magnet's coil. Energy is still required to keep the magnets cold, but this is a much smaller and, therefore, more affordable amount.

puter analyst. In addition, he is an active camper, bicyclist, and kayaker, a husband, father, and grandfather. He also describes himself as a spiritual man, and he annotates his book liberally with quotes from the Bible.

With remarkable detail, Bennett describes in the first person what he felt like as a young child coping with diabetes. He also writes extensively about his years as a child and young adolescent at Joslin Diabetic Camp in Charlton, Massachusetts. He continues to be a volunteer at the camp, and, in 2004, he plans to travel the entire route to the camp via bicycle and kayak to receive his "Half-Century Award" for combating diabetes for 50 years.

Bennett also describes some of his biggest challenges, including bicycling some 25 miles to pick up his fiancée's engagement and wedding rings, and forgetting to take his insulin shot in the process — a mistake that landed him in the hospital.

Perhaps most challenging was when Bennett's daughter, Noel, was diagnosed as a Type I diabetic when she was 16 years old. The book also includes descriptions of treatment for diabetes over the last half-century and the search for a cure.

— Diane Greenberg

Wanted by 12/10

Winter Holiday Photos or Memories

Bulletin readers! You are invited to send in a photo or very short memory (up to 150 words) on a special winter holiday occasion or family tradition, for possible inclusion in the Bulletin's annual end-of-year Winter Holiday issue on December 20. Topics might be: playing in the snow, lighting a winter holiday candle, stirring holiday pudding in the family kitchen — or anything that shares the beauty and fun of the winter holiday season. Send your photo or memory to Liz Seubert, Bulletin Editor, Bldg. 134, or lseubert@bnl.gov, by Tuesday, December 10.

BNL's United Way Drive Aims at \$115,000 Goal

BNL's 2003 fund drive for the United Way kicked off on November 8 and will run until December 20.

"Our goal is to collect \$115,000 in donations," said Linda Sinatra of Reactor Operations, who is this year's BNL Fund Drive Coordinator. "So many good causes depend on the generosity of people who give to the United Way. Last year, we collected \$119,000, which was \$4,000 more than the goal, so I am sure we can reach the goal again. The theme for the campaign says it all: 'Sharing From the Heart.'"

Sinatra listed some extra ways that BNLers can help the Lab's United Way effort:

Holiday Auction, 12/11 & 12: On December 11 and 12, baskets of new items will be auctioned in Berkner Hall. Anyone who has new items to donate for this holiday auction should call Dawn Schick, Ext. 2463.

Yard Sale, 12/11 & 12: Also on December 11 and 12, Chris Johnson of the Plant Engineering Division will organize an indoor yard sale. Contact Johnson, Ext. 7636, to donate items.

Items for Haven House: Haven House, a shelter for women and children, needs new, personal items such as toiletries and sleepwear, as well as paper goods, disposable diapers, etc. For details, call Mary Sullivan, Ext. 3756.

Volunteer efforts: BNLers who volunteer their services to United Way agencies can, at the same time, help swell the BNL fund. Through December 31, BSA will donate \$20 to the Long Island United Way for every employee hour volunteered, up to \$10,000. With supervisory approval, employees may take one regular work hour off to volunteer at an agency, with a minimum of two hours of work. For more information, contact Volunteer Coordinator Beth Blevins, Ext. 5630 or blevins1@bnl.gov, or Joanne Rula, Ext. 5768, jrula@bnl.gov.

United Way of LI Honors BNL

On October 24, at the United Way of Long Island's annual meeting in Deer Park, BNL was honored with three "People's Hope" awards presented for the 2001-02 campaign. Susan Monteleone, the 2001-02 BNL United Way Fund Drive coordinator (center, right), was presented with the "Employee Campaign Motivator" Hope award. BNL won the award for the "Highest Percentage of Leadership Givers," and the Lab also won the first annual "Guardian" award for companies "whose efforts exceed all expectations." BNL was acknowledged for having donated very generously — including \$50,000 from BSA — to the September 11th World Trade Center disaster fund and then topping that gift with its United Way donation of \$119,000, for a total of more than \$238,000 in charitable donations.



Pre-Retirement, Estate Planning Seminar, 12/9

On Monday, December 9, 5:30-7:30 p.m. in Berkner Hall, Room B, learn about calculating the cost of retirement, identifying sources of retirement income, estate planning principles, tax advantages, wills, and more, at "Pre-Retirement and Estate Planning," a seminar by American Express Financial Advisors Inc., as part of the Money Talks: Financial & Retirement Planning Seminar Series organized by the Human Resources Division. To attend, complete and return the form sent to all employees, to Joyce Wund, Bldg. 185, by Wednesday, November 27.

Observe Controlled Area Postings During RHIC Operations Through 5/03

The Collider-Accelerator Department will soon be restarting the Relativistic Heavy Ion Collider (RHIC), which is expected to operate until the end of May 2003. During this operating period, the entire RHIC site, including the inner road, will be posted as a controlled area, with the exception of the Collider Center, Bldg. 1005, the adjacent parking lot, and the approach road to Bldg. 1005. The postings will be in place on Thursday, November 27. In addition, the northern portion of Thompson Road will be posted as a controlled area and closed to routine traffic.

Requirements to Enter Posted Controlled Areas

It is necessary to fulfill certain requirements before entering these posted controlled areas (see below). Failure to comply could lead to a Reportable Occurrence and a Price Anderson Amendment Act (PAAA) violation. As always, all personnel are expected to adhere to the posted requirement.

- Unescorted Access** requires up-to-date General Employee Radiation Training (GERT) and facility specific training. For assistance:
 - Experimenters: contact the RHIC & AGS Users' Center, Ext. 5975
 - BNL Employees: contact Ann-Marie Luhrs, Ext. 7007
- Escorted Access** may be granted by contacting Luhrs, Ext. 7007. Escorts must complete a Training Waiver Form, and the escorted entry must be approved by the Collider-Accelerator Department. Call at least one day before the escorted access.

Lecture by Ralph James, 12/4 'Nuclear Detection and Homeland Security'

On Wednesday, December 4, at 4 p.m., in Berkner Hall, the Nuclear and Plasma Sciences Society of the Long Island Chapter of the Institute of Electrical & Electronic Engineers (IEEE) will sponsor a lecture on "Nuclear Detection and Homeland Security" by BNL's Ralph James, Associate Laboratory Director for Energy, Environment & National Security and an IEEE Fellow.

As leader of BNL's Homeland Security Initiative, James chairs the Lab's counterterrorism working group developing technologies to fight terrorism. James won *Discover* magazine's 1997 Innovator of the Year award for developing radiation-detection devices and is a three-time winner of *R&D Magazine's* R&D 100 Award for developing a new method to grow semiconductor crystals and various compact sensors to detect and image radiation.

All are welcome to attend the lecture. Refreshments will be served at 3:30 p.m.



Ralph James

Arrivals & Departures

Arrivals

Kaveh Adib Chemistry
 Oleg Gang Physics
 Jason Gardner Physics
 Masashi Kaneta Physics
 James Misewich BES
 Maxim Potekhin Physics
 Paul Stein C-A
 Won-Sub Yoon Mat. Sciences

Departures

Robert Brady Plant Eng.
 Charles Edwards S&S
 Steven Halderman Ctrl. Shops
 Daniel Haughey Plant Eng.
 Peter Koello C-A
 Frank Millner Plant Eng.
 Abdallah Naidja ES&T
 Frank Strelecki Plant Eng.
 Anthony Strucken Plant Eng.
 Kenneth Wenger Plant Eng.

Calling All Carollers

On Monday, December 2, all members of the Lab community who like singing are invited to meet in Berkner Hall auditorium at noon sharp to rehearse for the annual Christmas/holiday concert in the cafeteria. It is not necessary to be able to read music. For more information, contact Liz Seubert, Ext. 2346, lseubert@bnl.gov.

Recital Metropolitan Brass Quintet, 12/4



Metropolitan Brass Quintet (MBQ) will present the next BSA noon recital on Wednesday, December 4, in Berkner Hall.

MBQ performs a wide variety of styles in classical, contemporary, and pops. Its program for BNL is seasonally inspired and ranges from Bach to Bernstein.

Noon recitals are free and open to the public. Bring your lunch and come and go as you please.

Benefit Sign-Up Deadlines

Wednesday, 11/27, is the deadline for making changes to medical and/or dental coverage for 2003, and also to sign up for the health-care or dependent day-care reimbursement accounts for 2003. For more information, contact the Benefits Office, Bldg. 185, Ext. 2877, Ext. 5126, or (800) 353-5321.

Part VI Meditation Workshop, 11/26

On Tuesday, November 26, clinical psychologist Cheryl Kurash will present the Employee Assistance Program workshop, "Learning to Meditate, Part VI," from noon to 1 p.m., in Berkner Hall. All are welcome. Come dressed comfortably since this will be an experiential event.

Clinical psychologist Kurash is coordinating a meditation program at Stony Brook University, where she has led workshops since 1985. For more information, call Ext. 2699.

Potluck Dinner, 11/23

Tomorrow, Saturday, November 23, all are invited to a Thanksgiving potluck dinner, to be held by the Hospitality Committee at 5:30 p.m. at the Recreation Hall in the apartment area. Bring a dish for six people to share. For more information, call Monique de la Beij, 399-7656.

Bus Trip to NYC, 12/8

The BNL Hospitality Committee invites all BNLers to join a bus trip to New York City on Sunday, December 8, at \$10 per adult and \$5 per child age 2-12.

While in the city, you might: visit Rockefeller Center to see the Christmas tree and skating rink; shop at F.A.O. Schwartz, the city's biggest toy store; visit the Empire State Building; or eat at your favorite restaurant.

The bus will leave from the Recreation Hall in the apartment area at 9 a.m. and will return to the Lab at about 6 p.m. To reserve seats, contact Miriam Rondon, 331-3545 or miaro01@hotmail.com. Buy tickets tonight at the Brookhaven Center, 5-6 p.m.; at Berkner Hall on Tuesday, November 26, 11 a.m.-1 p.m.; or in the Recreation Hall on Tuesdays, 10:30 a.m.-noon.

Calendar

(continued)

— WEEK OF 11/25 —

Monday, 11/25

Employee Art & Crafts Show
 Mon.-Wed., 11/25-27, daily 11:30 a.m.-1 p.m., opening reception tonight, 11/25, 5-7 p.m. Berkner Hall, Room B.

IBEW Meeting
 6 p.m., Knights of Columbus Hall, Railroad Ave., Patchogue. 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, 11/26

***Meditation Workshop**
 Noon-1 p.m., Berkner Hall. Psychologist Cheryl Kurash presents "Learning to Meditate Part VI." See notice, page 3. Diane Polowczyk, Ext. 2699.

Thurs. & Fri., 11/28&29

Happy Thanksgiving Day!
 BNL will be closed Thursday & Friday, 11/28 & 29. No Bulletin will appear 11/29. See further closings below.

Thanksgiving Holiday Closings
 The cafeteria will close on 11/28, open 11/29-12/1, 7:30 a.m.-2 p.m.; the Brookhaven Center will close 11/28-30 and open 12/1, 5-9 p.m. The Research Library, pool and gym will close 11/28-12/1. The on-site U.S. Post Office will close 11/28, open 11/29, 8 a.m.-noon. The on-site Teachers Federal Credit Union will close 11/28 and open 11/29.

Sunday, 12/1

Radio City Holiday Show
 \$99 per person includes orchestra seats and bus transportation. Bus leaves BNL at 9:30 a.m. and returns at 5:30 p.m. Buy tickets at BERA Sales Office, Andrea Dehler, Ext. 3347, dehler@bnl.gov.

— WEEK OF 12/2 —

Tuesday, 12/3

Aerotech Inc. Demo
 9 a.m.-4 p.m., Berkner Hall Lobby. Representatives from Aerotech Inc., a leading manufacturer of high-precision motion control equipment, will conduct live demonstrations and distribute product information to BNLers. Vic Parangelo, 864-5995, www.aerotech.com.

Wednesday, 12/4

***BSA Noon Recital**
 Noon, Berkner Hall. Metropolitan Brass Quintet will perform music from classical to pops, Bach to Bernstein. Noon recitals are free and open to the public.

***IEEE Lecture**
 4 p.m., Berkner Hall. Ralph James, BNL Associate Laboratory Director for Energy, Environment & National Security, will present "Nuclear Detection and Homeland Security." All are welcome.

Thursday, 12/5

BERA Bridge Club
 7 p.m., Brookhaven Ctr., South Rm. Morris Strongson, Ext. 4192, mms@bnl.gov.

Friday, 12/6

***BNL/BERA Holiday Party**
 6-10 p.m., East Wind Caterers in Wading River. All inclusive: cocktail hour, dinner buffet, DJ, full open bar. Last day today for tickets at \$48, 11/25-27, cost is \$60. BERA Sales Office.

Sunday, 12/8

Bus Trip to New York City
 \$10 per adult and \$5 per child age 2-12. See notice, left. Miriam Rondon, 331-3545 or miaro01@hotmail.com.

— WEEK OF 12/9 —

Monday, 12/9

***Retirement, Estate-Planning Seminar**
 5:30-7:30 p.m., Berkner Hall, Room B. "See notice at left. Register with Joyce Wund, Bldg. 185, by Wednesday, November 27.

Thursday, 12/12

GLOBE Meeting
 The Gay, Lesbian, and Bisexual Employee Club at BNL will hold its monthly meeting today. For the meeting's location and time, contact Debbie Bauer, Ext. 5664, or Mike Loftus, Ext. 2050. For more information, go to www.bnl.gov/bera/activities/globe.

Wed. & Thurs. 12/11&12

United Way Holiday Auction
 11 a.m.-2 p.m., Berkner Hall. Sue Cataldo, Ext. 4461.

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, call 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.

LABORATORY RECRUITMENT – Opportunities for Laboratory employees.

TB8543. ADMINISTRATIVE SECRETARY (A-2) - Requires a minimum of 6 years' administrative experience, proficiency in MS Office applications such as Word, Excel, Access, Outlook, and PowerPoint, excellent written and oral communication skills, and the ability to perform administrative tasks under minimum supervision. A thorough knowledge of Laboratory policies and procedures and BNL systems such as IPAP and Peoplesoft is required. Must have the ability to work under pressure, balance priorities, and perform multiple tasks and be able to obtain and maintain a security clearance. Responsibilities will include the appropriate handling of access-controlled documents, preparing reports and correspondence, travel arrangements, arranging and participating in weekly teleconferences, and performing routine and non-routine administrative tasks for the MCP&A Technical Survey Team Project Office in the Nonproliferation & National Security Department. Will act as liaison between internal and external contacts, contractors, and high-level staff at DOE/HQ regarding project review scheduling, report tracking, and extensive travel coordination with team members. Nonproliferation & National Security Department.

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates.
MK3064. POSTDOCTORAL RESEARCH ASSOCIATES (3 Positions) – Requires a Ph.D. in nuclear or high-energy physics. Positions are with the Nuclear Theory Group, which has active programs in the theory of heavy ion collisions at ultrarelativistic energies and in the structure of nuclear physics. Interested candidates should send a Curriculum Vitae, a list of publications and arrange to have three letters of recommendation sent as soon as possible to Dr. Larry McLerran, Group Leader, Physics Department, Bldg. 510, PO Box 5000, Upton, New York 11973-5000. Positions will begin September 1, 2003. Physics Department.

MK2761. POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in chemistry or materials science and experience in electrochemistry and the use of scanning tunneling microscopy technique. Research will involve structural studies of metal monolayer modified single crystal surfaces and new methods of their preparation. Also, catalytic activity of modified surfaces will be investigated for H₂/CO oxidation and O₂ reduction. Work will require the use of electrochemical and in situ Fourier transform infrared spectroscopy techniques, electrochemistry, electrocatalysis, and *in situ* spectroscopic studies. Under the direction of R. Adzic, Materials Science Department.

TB3032. OFFICE SERVICES ASSISTANT (CW-2, reposting) – Requires a minimum of two years' related work experience. Will input and extend time and attendance records; ensure compliance with applicable Laboratory policies; check reports for accuracy; process checks and leave and overtime adjustments; calculate retroactive pay and prepare various correspondences. A working knowledge of personal computers and exposure to computerized business systems is also required, as is knowledge of Excel, Word and payroll processing and systems. Fiscal Services Division.
NS2793. RESEARCH SERVICES ASSISTANT (CW-1, term appointment) – Under direct supervision, performs various manual laboratory and service tasks. Assists in standard, repetitive duties such as assisting in neuropsychological test administration, test scoring, data entry, computerized data management, presentation preparation, etc. Medical Department.

Motor Vehicles & Supplies

01 TOYOTA ECHO - blue, all power, 22K mi., CD player, tinted windows, 32/38 mpg, \$8,900. Matt, 345-0528.
 00 DAKOTA - 5-sp., a/c, V6, cass., 9K mi., \$11,500. Bob, Ext. 5314.

99 PONTIAC GRAND PRIX GTP - silver, all power, 4-dr., heads-up display, new tires, remote start, 57K mi., \$13,500. Darlene, Ext. 4685 or 587-2385.

98 FORD EXPLORER - sport, 2-dr., 4wd, V6, auto., ABS, leather, moonroof, all power, tow pkg., excel., \$13,500. Brian, 474-7892.

96 FORD AEROSTAR XL - green, front/rear heat, a/c, all power, excel. cond., 92K mi. A.J., 281-5827.

96 GEO PRIZM - a/t, a/c, good mech. cond., 76K mi., \$3,100. Jim, Ext. 7895 or 689-6309.
 96 MERCURY VILLAGER LS MINIVAN - all power, 88K mi., excel. cond. Mary, Ext. 4325/1075.

96 VOLKSWAGON GOLF - all power, 92K mi., am/fm cass., alarm, \$5,500. Richard, Ext. 7013 or 698-5294.

95 DODGE STEALTH - all power, 67K mi., orig. own., mint cond., 2 sets of wheels, chrome rims, 6 CD player, remote start, many extras, \$10,000. Donna, Ext. 4599.

94 ISUZU TROOPER LS - auto., a/c, p/w, p/s, p/b, moonroof, hitch, very clean, orig. own., 105K mi., \$6,200. Diana, Ext. 3681.

94 PLYMOUTH GRAND VOYAGER - a/t, a/c, p/s, p/b, 140K mi., orig. own., v.g. cond., \$2,900. Mark, Ext. 3837 or 281-5060.

93 FORD BRONCO - a/t, a/c, p/s, p/b, 58K mi., full size Bronco, orig. miles, excel. cond., \$5,700 neg., Charlie, Ext. 3260 or 728-0074.

93 MERCURY SABLE STATION WAGON LS - dual airbags, ABS, 3rd seat, 126K mi., keyless entry, leather, runs well, \$1,900. Ed, Ext. 7251 or 765-4147.

91 CHEVY CORSICA - a/t, a/c, p/b, 178K mi., \$750. James, Ext. 5993.

91 FORD ESCORT - a/t, a/c, p/s, p/b, 11K mi., \$1,100. Tom, Ext. 2214.

91 MAZDA 626 DX - white, a/t, a/c, p/s, 120K mi., cruise control, runs well, \$1,300 neg. Ext. 3813 or 345-9046.

90 CHRYSLER NEW YORKER - all power, 110K mi., loaded, excel. cond., \$3,250. Tim, 208-0408.

90 FORD TAURUS WAGON - blue, 3.0L, all power, 97K mi., new a/c & radiator, third seat, \$2,300; 89 Mercury Tracer, 170K mi., \$400. 821-4602.

89 DODGE DATONA - all power, reliable, 79K mi., \$700. Ed, Ext. 7160 or 878-3245.

89 HONDA CIVIC - blue, 2-dr., auto., 67K mi., good cond., \$1,800. Ext. 3828.

89 JEEP CHEROKEE - red, 4-dr., a/t, a/c, 175K mi., good cond., \$2,000. Vera, Ext. 5843.

89 NISSAN MAXIMA - a/t, a/c, 194K mi., sunroof, \$1,500. Jeff, Ext. 7580 or 948-2389.

87 MAZDA 626 - 5-sp., p/s, p/b, well maint., reliable, excel. cond., new clutch & brakes, one owner, \$1,200. Trevor, Ext. 4374 or 331-5642.

87 MERCURY GRAND MARQUIS SW - third seat, runs well, 180K mi., many new parts & extras, \$800. Ext. 2110 or 697-5733.

85 CHEVROLET IMPALA - all power, excel. cond., 55K mi., \$1,200. Carol, 744-8632.

83 MERCEDES BENZ 240D - 4-sp., runs well, good cond., orig. own., \$2,100. Bob, Ext. 2144.

73 TRIUMPH TR-6 - needs body work, could use for parts or restore, make an offer. Lori, Ext. 8370 or 727-3319.

DISTRIBUTOR CAP & ROTOR KIT - new wells, GM vehicles, w/2.8L eng., 82-86, \$15. Susan, Ext. 7647.

TIRES - new Michelin 195-60HR14 & Honda/Acura steel rims, \$40. Fred, Ext. 5741.

Boat & Marine Supplies

22' WESTERLY SAILBOAT - twin keel, fiberglass, clean, newly painted, many extras, needs some work, \$2,000. 744-3569.

18' MANATEE CUDDY CABIN - trailer incl., 150 h.p. Johnson '85 outboard, rebuilt '00, safety equip., radios, more, red. price before winterizing, \$3,200. Lori, Ext. 8370 or 727-3319.

Furnishings & Appliances

BED - foldable; infant bed; bookshelf, \$5; fax, \$10; 2 TV stands; bicycle, 7-sp., \$45; lamps, all items good cond., must sell by 11/28. Chintasu, Ext. 1091, chintasu_maeda@hotmail.com.

BED - single, metal frame w/wheels, mattress, box spring, \$30. Jim, Ext. 2432 or 821-9178.

BEDROOM SET - juvenile, dark pine, contemporary, all wood, veneer tops, five pieces, \$325. Tony, 744-1706.

BEDS - twin, colonial style, cherry wood finish, Arlene, 473-1658 after 5 p.m.

CABINET - kitchen, 9 1/2 ft. counter top w/sink, 2 dbl.-top cabinets & 1 over the stove, 3 bot-tom cabinets, v.g. cond. Carl, Ext. 2543.

DAYBED - twin, wood & iron frame, \$150; bookshelf, \$50; Tromso twin loft bed, IKEA w/mattress, 2 IKEA chairs, IKEA computer table w/folding keyboard, bookshelf, light fixture, folding hamper, more. Vera, Ext. 5843.

Last Day for Discount BERA Party Tickets

Today, Friday, November 22, is the last day to buy tickets for the BERA Holiday Party at the discounted price of \$48 per person. Tickets purchased after today will cost \$60 per person.

The party will be on Friday, December 6, 6-10 p.m., at the East Wind Caterers in Wading River. A ticket covers full open bar, hors d'oeuvres, buffet dinner, and dessert. Buy tickets now through the last day of ticket sales, Wednesday, November 27, at the BERA Sales Office in Berkner Hall, open weekdays, 9 a.m. -3 p.m.

All are cordially invited to the

BNL Employee Thanksgiving Art & Crafts Show

sponsored by the BNL Art Society

Berkner Hall, Room B

Monday-Wednesday, November 25-27

11:30 a.m. - 1 p.m.

Reception, Monday, November 25
 5-7 p.m., with refreshments

DESK - wood, 48" w/drawers, \$40. Joann, Ext. 7009.

LAMPS - Tiffany style, 20" tall, grape cluster on opaque white glass shade, metal base, like new, \$47/pair. Karen, Ext. 4262.

MAGAZINE RACK - dark wood, \$10; etched glass hanging lamp w/mauve trim, \$40. Donna, Ext. 2716 or 878-2425.

REFRIGERATOR - 21.6 cu. ft. GE, w/freezer on top, white, like new, clear shelves, storage containers, \$250 obo. Christine, 745-7197.

REFRIGERATOR - 17.5 cu. ft., bisque. James, Ext. 5993.

ROCKING CHAIR - oak, child's, like new, cost \$300, now \$100 obo. Nancy, Ext. 4303.

RUG - Rya, orange, brown & gold, 6' x 8', \$150; Oriental, 9' x 11', worn, \$150. Bruce, Ext. 4332 or 286-2114.

SOFA - 7', taupe, velvet, tufted cushion, stitched designs on back, good cond., \$300. 588-7989.

TABLE - pedestal kitchen table, \$50; Air compressor, 50 h.p., 30 gal., 220 volt, Sears, \$150. 295-0373.

TABLES - brass/glass, set of 3, \$50 for all; couch, \$25. Nancy, Ext. 4303 or 878-5449.

Tools, House & Garden

COAL/WOOD BURNING STOVE - Coal Hubby, excel. cond., free firewood w/purchase, \$300. Lori, Ext. 8370 or 727-3319.

DEHUMIDIFIER - Whirlpool, works well, \$50; scaffolding, 3 sets of 2' x 6' staging w/4 plates, \$200. Lori, Ext. 8370 or 727-3319.

LEAF VAC/CHIPPER - Craftsman, used 3-4 times, must sell, cost over \$400, ask. \$295. Andrew, Ext. 7014 or 281-8274.

TABLE SAW - 10' Sears table saw w/extensions & stand, \$100. Ron, Ext. 7588.

WINDOW W/STORM SCREEN - 41 x 33 1/2" window w/attached storm/screen, resulted from home remodeling, make offer. Martin, Ext. 3941 or 744-8632.

Sports, Hobbies & Pets

BIKE - woman's, 26", Ross 10-sp., \$50; fish tank, 10 gal., \$25; 3/4 size violin, \$300; piano, Yamaha upright p2f, walnut, excel. cond., \$2,300. Bruce, 286-2114.

BIKES - (2) 16" boys bikes & (1) 20" girl's bike, good cond., best offer. Steve, Ext. 2897.

FISH TANK - 55 gal. tank w/golden oak stand, hood & light, \$150. Joey, 445-7724.

IGUANA & CAGE - 6 yrs. old, male, green, excel. health, 3.5 ft., eats only veg, professional cage, 18"d x 36"w x 30"h, any offer considered, Nick, Ext. 5467 or 758-9197.

PIANO - Hardman Peck Console, cherry finish w/bench for sale, recently tuned, \$700. John, 369-9158.

SKI JACKET - blue, CB brand, men's, medium, like new, \$25; ski pants, pink, brand new, size 38, \$10. 473-6546.

SOLO FLEX EXERCISE MACHINE - \$375. Lori, Ext. 8370 or 727-3319.

TREADMILL - Sears Lifestyler 2800 auto incline, \$75. 475-2473.

TROMBONE - Yamaha YSL 856G w/F attachment, like new, best offer. Maryann, Ext. 4705 or 929-4978.

WEIGHT LIFTING EQUIPMENT - Joe Weider sig. series bench incl. bar & 140 lbs steel weights, \$50. Victor, 580-1432.

Audio, Video & Computers

CABLE/DSL ROUTER - DLink804, integrated firewall, 4 ports, DHCP, easy to use/program via web, year old, selling to go wireless, \$30. Gene, Ext. 7953.

CAMERA - 35mm w/28 mm lens, 55mm lens w/lens case & Vivitar flash, \$35. Lori, Ext. 8370 or 727-3319.

SCANNER - Visioneer 7600 series w/Windows 98 software, USB port connection, \$25. Trevor, Ext. 4374 or 331-5642.

VIDEO CAMERA - SONY, 8mm, like new "Handycam", model CCD-FX311, incl. manual, remote, charger, etc. \$75. John, Ext. 3406.

Miscellaneous

BASSINET - sleeper & changing table, all-in-one, Graco Triad, \$55; infant car seat w/extra base, Graco Princeton, used, \$40; infant car seat, new, \$45. John, Ext. 7018.

CARUSO MOLECULAR HAIRSETTER - \$10. Donna, Ext. 2716 or 878-2425.

FAX - & telephone combo, 3-months-old; microwave, small vacuum, new & filled propane bottle for gas grill. Federica, Ext. 7107.

KISS BAND BUSTS - set of 4, entire band in color ceramic life-size busts, collector items, \$150/set. Nick, Ext. 5467 or 758-9197.

LASER POINTERS - red, compact keychain, batt. incl., \$5/ea. Thomas, Ext. 2225.

LENOX PEN DESK SET - 2 Golden Moire pens w/sockets, made for Scheaffer Pens in early '50s, collector items, pictures avail. Ext. 7007.

LUGGAGE - 5 various pieces w/wheels, like new, \$15/all. Nancy, Ext. 4303.

TICKETS - 2, for Emerson Quartet concert, Staller Center, SUNY Stony Brook, 12/6/02 at 8 p.m. Juan, Ext. 3523 or 331-3419.

TICKETS - 4, NY Islanders vs. Florida Panthers ice hockey, 12/30, 7 p.m., 300 section, seats known in 1st. week of Dec., orig. \$50/ticket, ask. \$30/ticket. Ext. 5283.

TOY BOX - Todays Kids doll house w/bookshelf, \$40; Intex pool filter, \$40; Conair Bath Spa, \$10; Shiatsu Massager, \$10. Donna, Ext. 2716 or 878-2425.

Lost & Found

DIAMOND STUD EARRING - lost in vicinity of cafeteria or HR, sentimental value, reward. Carol, 744-8632.

Free

CAT - adopt an adult Maine coon, male, classic coloring, declawed, needs loving home with no children or other cats. Linda, Ext. 2733 or 395-6784.

CRIB - wood frame portable crib, like new w/slide bolsters. Herb, 928-0297.

WEIGHT SET - w/bench, you pick up. Andrew, 744-5592.

Wanted

COMPANION - for elderly woman, healthy but frail, 3 hours/day, Shoreham. Ext. 5205 or 744-8765 after 6:00 p.m.

HOME FOR CAT - friendly, playful, healthy, fixed male, has had all shots. 929-8165.

HOUSE EXCHANGE - Grenoble France, family seeking house, April - July 2003 to rent or exchange. Sophie@grenoble.cnrs.fr.

LOG SPLITTER - gasoline driven. Andrew, Ext. 7014 or 281-8274.

MOTORCYCLES - bent or broken, any age or condition. Kevin, 281-8031 eves.

RAILROAD COLLECTIBLES - china, silverware, hardware, photos time tables, books. Bruce, 924-4097

PEOPLE - Model Railroad Club forming soon! Interested? Tell us about scale preferences, avail. days/times, ideas, etc. Ext. 6202 or siemens@bnl.gov.

SKIERS - Sierra Club trip to Stowe, Vermont, 1/17/03 thru 1/20/03, \$345/person, includes bus, lodging & some meals. 516-883-7850.

Community Involvement

HALLOWEEN COSTUMES - used Halloween costumes & accessories for charity sale. Susan, Ext. 5979.

Happenings

FINE CRAFT HOLIDAY FAIR - 11/30 - 12/1 at the Gallery at the Brookhaven Amphitheater. For information call BAHC, 732-3536.

POTLUCK DINNER - BNL Toastmaster Club invites everybody who is interested in improving communication skills & meeting friendly people to join in a potluck dinner, 6 - 8 p.m., 12/17, in the BNL Recreation Hall. Contact Benny, Ext. 8107, or Nancy, Ext. 5744.

For Rent

BELLPORT - lg. 1 bdrm apt., ground floor, village amenities, \$950/mo. incl. util., plus 1 month's sec. Jim, 744-2095 after 6:30 p.m.

BELLPORT - in Village, furnished, 4 bdrm., 2 bath, screened porch, deck, 1-car garage, walk to water & village, \$2,000/mo. Louisa, 286-8659.

APAA, SCC & IAA Clubs' Holiday Party, 12/7

The BERA-Asian Pacific American Association, the BNL Social & Culture Club, and the Indo-American Association will host a Holiday Party on Saturday, December 7, 5-11 p.m.

• 5 p.m.: Dinner at Kings Buffet (LIE Exit 65, pay at the door)

• 7-11 p.m.: Activities at the Brookhaven Center: North Room, ballroom dancing; South Room, cookies contest, tea-tasting, Santa Claus, karaoke, caroling, arts & crafts, and a magic show. The cost is \$3 for members, \$5 for non-members. For more information, call Susan Wong, Ext. 7988, or Rudy Alforque, Ext. 4733.

BELLPORT - 3 bdrm, lg. Cape in Village, ohw heat, new windows, recently repainted, hw floors, beach, f/p, mod. kitchen, beach rights, bsmt., garage, furnished or unfurnished, \$1,800. Bruce, Ext. 4332 or 286-2114.

BELLPORT - furnished, 3 bdrm., 2 bath house in the Village, quiet street, walk to town, avail. now, \$1,800/mo. Michael, 286-7126.

BROOKHAVEN HAMLET - room in house on quiet acre of land, 15 mins. from Lab; cable TV in room; use of house, incl. washer/dryer. \$450/mo. 286-4028.

CALVERTON - 1 bdrm bsmt. apt., lg. glass door entry, l/rm, kit. w/pantry, full bath, fp, single, no smoking, no pets \$850/mo incl. util. Celeste, Ext. 4980 or 727-5646.

CORAM - 1 furnished bdrm in 2-story townhouse, all util. incl., cable modem incl., sep. bath, private parking, \$570/mo, avail. 12/1. 451-3920.

MANORVILLE - short-term rental, Nov. - April., 1 mo. minimum, 2 bdrm, 2 bath townhouse, near LIE, exit 69, furnished, \$1,500/mo, no pets/smoking. Nancy, 821-4174 or 352-688-9136.

NORTH PATCHOGUE - share house, spacious bdrms, parking avail., close to Lab and shopping areas. 447-6899.

STONY BROOK - in village, l/rm, d/rm, eik, 3 bdrm, 1.5 baths, walk to shops & beach, lg. yard, quiet street, \$2,250 neg., lease, avail. 12/1. Ext. 7787 or 474-8715.

STONY BROOK - 3 bdrm, 2 bath, l/rm, d/rm, office, sunroom, bike to LIRR & SUNY, clean, bright, private beach access, avail. 3/1/03, \$1,950/mo. Irina, Ext. 3776 or 689-0475.

WADING RIVER - 3 bdrm, 2 bath, SWR school dist., located on private cul-de-sac, will rent by month but prefer a year, \$2,350/mo. Sharon, 929-8232.

ENGLEWOOD, FL. - Christmas in Florida, 5 mins. to Gulf beaches, heated pool, screened lanai, 2 bdrm/study, 2-bath home, avail. 12/15 to 1/15, \$400/wk. Donna, 941-460-1724.

FT. LAUDERDALE - vacation village time-share property Gold Crown Resort, world class golf, fitness center, 3 bdrm lockout unit, sleeps 8, 1 maint. fee, trades for 2 weeks, week 51, \$8,000. Ken, 281-5565.

BARTLETT, NH - Grand Summit Resort 1/24/03-1/31/03, luxury 1 bdrm, sleeps 8, 4 privately, full kit., fp, downhill skiing on site, \$700/week. Maryann, Ext. 5124.

For Sale

MIDDLE ISLAND - spacious 3 bdrm townhouse, mint cond., 1.5 baths, l/rm, d/rm, fp, patio, new roof, new windows, low taxes, amenities w/pool, \$189,900. 345-5492.

PORT CRANE - more than 9 acres for sale near Binghamton, close to State colleges, fantastic views, \$29,900, owner-financing avail. Jim, 664-4931.

ROCKY POINT - mod. conveniences, 3 bdrm, 1 bath, eik, d/rm, l/rm, custom woodwork, cabinets, railings, wood floors, oil heat; new windows, doors, roof, siding; park-like setting, \$249,900. Ext. 3756 or 821-8827.

SHIRLEY - house, lg. property, \$210,000. Fernando, 345-3754.