

Detector Module Built at Brookhaven Featured in MoMA Art/Science Exhibit

BNL-linked science has once again entered the art world. Part of a detector — a “forward preshower (FPS) module,” built at BNL for the DZero

experiment at Fermi National Accelerator Laboratory (Fermilab) — is on display in “Signatures of the Invisible,” an art exhibit at Museum of Modern

Art’s (MoMA) P.S.1 Contemporary Art Center Gallery (PS1), now in Long Island City, NY.

The exhibition, which is on tour in the United States, was

Geneva, Lisbon, and now at PS1 until the end of August.

Elizabeth Clements of Fermilab’s Public Affairs, who had been asked to find items for the show, had suggested entering the FPS module in the exhibit. She contacted the FPS production manager, Abid Patwa of BNL’s Physics Department, who helped her put the display together. Said Clements, “As you can see from the picture, it is stunning to look at, and it also played a significant scientific role in the detector.”

Patwa explained that the FPS detector is comprised of 64 modules. “The FPS module that was put on display was built as a spare,” he said. “It is an exact representation of the FPS modules in the detector and is fully functional.”

Now, the FPS module is

born of a collaboration between artists of the London Institute, the world’s largest college of art and design, and physicists from CERN in Geneva, Switzerland, the world’s largest particle physics center. The exhibition features contemporary art inspired by particle physics. The initiative began in 1999 and resulted in a group of artworks’ being exhibited in London, Beijing, Rome,

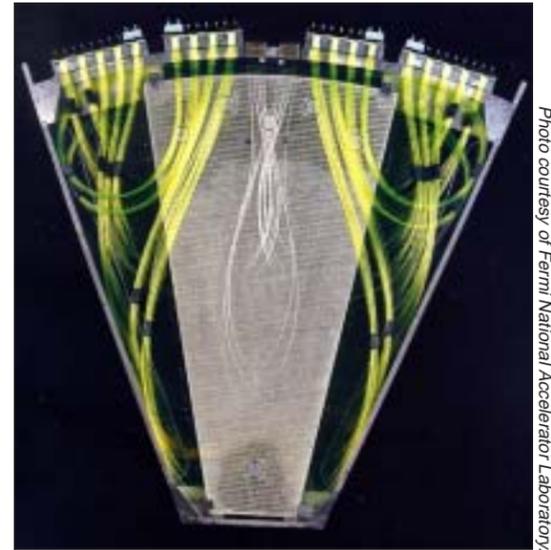


Photo courtesy of Fermi National Accelerator Laboratory.

A module from the Forward Preshower Detector, built at BNL for the DZero experiment at Fermi National Accelerator Laboratory, is on exhibit through August at the Museum of Modern Art’s P.S.1 exhibit, “Signatures of the Invisible.”



Roger Stoutenburgh A0040400

The BNL/Stony Brook University (SBU) Forward Preshower Detector team: (back, from left) Jonathan Kotcher, Anatoli Gordeev, Robert Soja, and Neil Donahue, all BNL; middle row: Bob Wheeler, BNL; Andrei Talalaevskii, SBU; Peter Yamin and Russell Burns, both BNL; (front) Satish Desai, SBU; and Abid Patwa, then SBU, now BNL. Other team members (not pictured) include Julian Brody, James Joffman, Laura Mgrdichian, Michael Rijssenbeek, Dennis Shpakov, and Jack Steffens, all of SBU; Ming Xiong Liu, BNL; and Manho Chung, University of Illinois, Chicago.

Sambamurti Memorial Lecture, 4 p.m., 7/25 Dustmaids Down a Drafty Hall: Neutrinos Observed at Sudbury

Thirty years ago, Ray Davis and his colleagues hoped to learn something new about the Sun by observing its neutrinos — particles that interact so weakly that they travel from the solar core to and through Earth, undisturbed by intervening matter.

What Davis found was a surprise: He saw far fewer neutrinos than were predicted by models of solar-energy production. This ostensible setback for solar astronomy was a great opportunity for particle physics: It raised the possibility that the apparent deficit resulted from new neutrino properties, which studies of the Sun could elucidate.

Six different experiments followed Davis’s, and all found that a large fraction of the neutrinos expected to be arriving from the Sun appeared to be missing. Although it was possible that the experiments were inaccurate, or that the theory of

how the Sun worked was incorrect, physicists began to believe that perhaps the error was due to scientists’ understanding of the neutrino itself.

The most complete theory of the fundamental particles and their interactions — the “Standard Model” — holds that there are three distinct types of neutrinos, in the same way there are three types of light-charged particles — the electron, the muon, and the tau. But if neutrinos — unlike electrons, muons, and taus — can change from one type to another as they travel from the Sun to Earth, then the electron-type neutrinos produced in the Sun might change to muon-type neutrinos and sail right through experiments like Davis’s completely undetected.

The Sudbury Neutrino Observatory (SNO) was designed to determine whether this hypothesis was correct, by directly comparing measurements of the

BNL, Battelle Biological Research Collaboration May Lead to Novel Anti-microbial Drugs

BNL and Battelle of Columbus, Ohio, have joined together in a Battelle-funded Cooperative Research & Development Agreement (CRADA) to determine the structures of microbial proteins — research that may lead to the design of novel anti-microbial drugs.

These drugs would be able to stop fungal or bacterial infections in patients whose immune systems are compromised, such as those with cancer or AIDS, or patients undergoing immunosuppressive therapies for organ transplantation or for the treatment of diseases such as multiple sclerosis and psoriasis.

As a first step in reaching this goal of developing new

drugs, Maria Bewley, Biology Department, will use the National Synchrotron Light Source (NSLS) at BNL to determine the structures of three proteins that are found in the metabolic pathways, or sequence of reactions catalyzed by enzymes, that enable lysine to be synthesized by microbes. Lysine is one of eight essential amino acids that humans must consume because they cannot synthesize it.

Fungi and bacteria have pathways that can synthesize lysine. The enzymes in these pathways are ideal targets for developing anti-microbial drugs, since they are absent in humans.

“We can kill fungi and bacteria if we can develop a drug that can block the enzymes in their pathways before they synthesize lysine,” Bewley explained. “Since



Roger Stoutenburgh D0041199

Maria Bewley

these drugs would attack enzymes that don’t exist in humans, it is unlikely that they would have negative effects in the human body.”

— Diane Greenberg
For more information, see www.bnl.gov/bnlweb/pubaf/pr/2003/bnlpr052703.htm

number of solar-electron-type neutrinos to measurements of the number of all neutrino types. SNO does this by using 1,000 tons of heavy water (D₂O) located two kilometers underground as both a neutrino “target” and a detector.

To learn more about the SNO experiment and how it provides a balance between astrophysics and particle physics, join Joshua Klein, SNO’s analysis coordinator and Assistant Professor at the University of Texas at Austin, on Friday, July 25, at 4 p.m. in the Physics Department’s Large Seminar Room, Bldg. 510. Klein will present the 2003 Sambamurti Memorial Lecture,

“Like Dustmaids Down a Drafty Hall: Neutrinos at the Sudbury Neutrino Observatory.”

As Klein will explain, neutrinos passing through SNO interact with the deuterium in the heavy water. Electron neutrinos can be absorbed by the deuterium, while any type of neutrino can split the deuteron apart into its constituent proton and neutron. If the rate of the second reaction exceeds that of the first, then there must be neutrinos other than electron neutrinos arriving from the Sun.

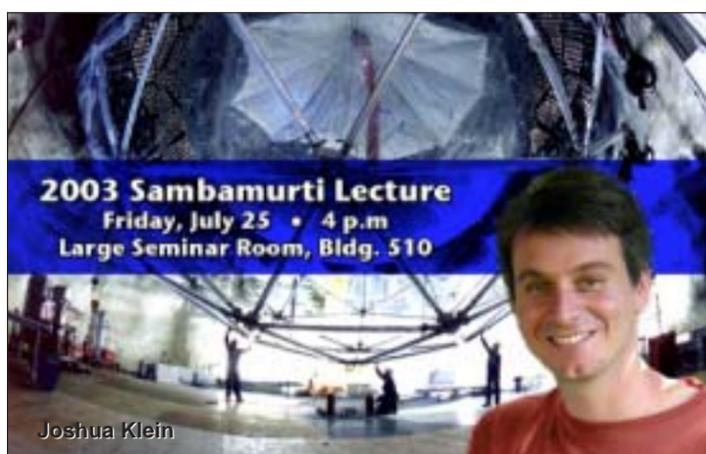
As Klein will demonstrate, SNO’s first results do in fact show a significant difference between these two measurements,

providing direct evidence that neutrinos from the Sun can change from one type to another. Also, SNO’s measurement of the number of all neutrino types agrees very well with the predictions of solar theories.

In addition to causing scientists to rethink fundamental ideas about neutrinos, Klein will conclude that these results allow a new start on the project Ray Davis began: using neutrinos to understand the Sun.

Klein began his graduate career in pulsar astrophysics at Princeton University, changing to particle physics for his thesis. As a student of Val Fitch, he

(continued on page 2)



2003 Sambamurti Lecture
Friday, July 25 • 4 p.m.
Large Seminar Room, Bldg. 510

Joshua Klein

Calendar of Laboratory Events

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

— EACH WEEK —

Weekdays: Free English for Speakers of Other Languages Classes

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

Mon., Tues., & Thurs.: Kickboxing

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

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

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

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. Hall. 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: Singles Club

5:15 p.m., Brookhaven Center. Contact: Jean, Ext. 4391.

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. Hall. Pat Flood, Ext. 7886.

Tuesdays & Thursdays: Aqua Aerobics

5:15-6:15 p.m. Christine Carter, Ext. 2873.

Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Hall. An 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. Michael Thorn, Ext. 8612.

Wednesdays: Yoga Practice

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

Wednesdays: Open Chess Night

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

Wednesdays: Exercise 101

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

Wednesdays: Dance Club Group Lessons

6-9 p.m. North Ballroom, Brookhaven Center. Series 4 lessons start 4/9. Marsha Belford, belford@bnl.gov or Ext. 5053.

Fridays: Family Swim Night

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

Fridays: BNL Social & Cultural Club

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

Fridays: Jiu Jitsu Club

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

— THIS WEEKEND —

Saturday, 7/19

Hospitality Bus Trip to Manhattan

\$10 per adult, \$5 for children ages 2-12. Bus leaves BNL at 9 a.m. from the Rec. Bldg. and leaves from Manhattan at 6 p.m. Purchase tickets at the gazebo in the apartment area on Tuesdays from 11-11:30 a.m. For more information, contact Anna Herman, Ext. 1059, or haniaherman@yahoo.com.

Sunday, 7/20

Summer Sunday Tour

10 a.m.-3 p.m. This Sunday, visitors will learn about BNL's energy and environmental research, and take a tour of the National Weather Service facility, which is located on the Lab site. For more information, see the notice on page 3 or visit www.bnl.gov/bnlweb/pubaf/summer_sundays.htm.

— WEEK OF 7/21 —

Monday, 7/21

BERA Trip to N.Y. Yankees

4 p.m. Brookhaven Center. Sold out.

BNL-Linked Science as Art

In addition to the DZero Preshower Wedge, built at the Lab and now on view as part of a Museum of Modern Art exhibition (see story, page 1), BNL science is no stranger to the world of art. Some more recent examples of BNL-linked science and art include:

RHIC STARburst in Beijing 'Art of Science 2001' Exhibit

Nobel Prize-winning physicist T.D. Lee of Columbia University, Director of the RIKEN BNL Research Center (RBRC) at the Lab, conceived of and co-sponsored the major "Art of Science 2001" exhibition of Beijing, China, which displayed approximately 600 works contributed from China and the international science community.

Lee had asked the historic Suzhou Institute of Embroidery Research in his hometown of Suzhou, China, to recreate in silk the RHIC STARburst, the tracks of thousands of particles electronically recorded by the STAR detector during one of the first collisions of the two beams of heavy ions in the Relativistic Heavy Ion Collider.

Spectacularly transformed into a one-meter-square of lustrous silk in shimmering colors, viewable from both sides, the STARburst became one of the stars of the exhibition.

The Tao of Matter at the Art of Science 2001.



The Tao of Matter, designed by T.D. Lee
Tao creates matter,
Matter generates Tao;
Tao shapes the action of matter,
Matter forms the completion of Tao.
The Art of the universe is the Tao of all matter.

Detector Module Becomes Art Exhibit (cont'd.)

The detector is one of four inner tracking subdetectors installed as part of an upgrade for DZero at Fermilab's Tevatron proton-antiproton collider. The DZero collaboration was one of two Fermilab experiments that simultaneously announced the discovery of the top quark in 1995.

— Liz Seubert

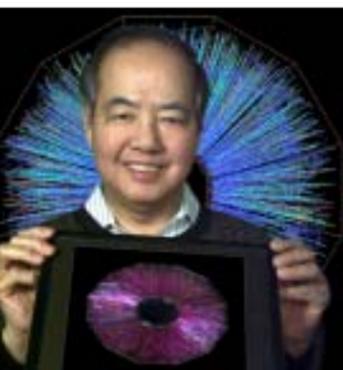
For more information: on the forward preshower module, http://www-clued0.fnal.gov/~abid/fps_moma_ny.pdf; on the museum's exhibit, including background on the N.Y. PSI Contemporary Art Center, www.ps1.org and click on Current Exhibition; on the Museum of Modern Art (MoMA), N.Y., go to www.moma.org; on Signatures of the Invisible site, www.signatures.linst.ac.uk/exhibition.htm; and for history of the exhibit, go to www.cern Courier.com/main/article/42/3/19 and <http://cern Courier.com/main/article/41/4/17>.

Sambamurti Memorial Lecture (cont'd.)

worked with members of the BNL E791 collaboration to search for the H dibaryon at BNL's Alternating Gradient Synchrotron.

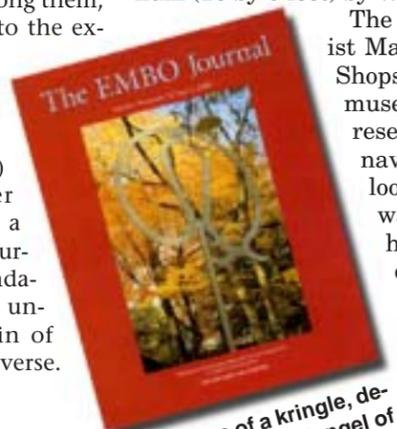
Klein then joined the University of Pennsylvania and worked on the SNO experiment, beginning with the design and construction of the trigger system, then moving to analysis.

In 2002, Klein took his present position as an assistant professor at the University of Texas at Austin. His future research interests



T.D. Lee, Columbia University and BNL, holds the Suzhou Institute of Embroidery Research's first silk-embroidered model of the RHIC STARburst, which was then created in a larger format for the exhibit.

Another major work on display at the Art of Science exhibit, the Tao of Matter, was designed by Lee. Representing the duality and perfect balance called Tai Chi, the Tao of Matter was one of two giant moving sculptures that greeted visitors, among them, China's President, to the exhibition. Now depicted on the brochure cover of the RIKEN BNL Research Center (RBRC) the Tao of Matter can be considered a symbol of RBRC's pursuit of modern fundamental physics to understand the origin of matter and the universe.



A sculpture of a kringle, designed by Walter Mangel of the Biology Department and built in the Central Shops Division to be used as a science museum exhibit.

BNL Science in Millennium Art Exhibit

On January 6, 2000, visualizations of BNL's scientific research were featured in "Beyond Appearances: Imagery in Science at the Millennium," an art exhibit at the Paine Webber Art Gallery in New York City. The exhibition, organized by the Binghamton University Art Museum of the State University of New York, looked at how scientists use contemporary technologies to explore and understand the surrounding unseen world.

The BNL exhibit consisted of an animation and still shots of anticipated RHIC "big bang" data and four-dimensional quantum chromodynamic data.

The "big bang" images were computer simulations of what was expected to happen on the subatomic scale when collisions of gold ions began in RHIC later that year — the formation of a quark-gluon plasma. The "gold on gold" collision model was the work of Ron Longacre and the late Klaus Kinder-Geiger of the Physics Department. The visualization was the work of Ballard Andrews, Mike McGuigan, and Gordon Smith of the Information Technology Division.

Another highlight from BNL was a visualization of four-dimensional quantum chromodynamic (QCD) data of the pion propagator used to calculate properties of subatomic particles.

The data were calculated on the RIKEN/BNL/Columbia University QCDSF supercomputer by Shigemi Ohta of RIKEN and Cheng-Zhong Sui and Bob Mahwhinney of Columbia University. The QCD visualization was generated by McGuigan and Smith.

More details and photos are available at http://www.ccd.bnl.gov/visualization/art_exhibit/.

Pictured at the 2000

"Imagery in Science"

exhibit at

Manhattan's Paine

Webber Art Gallery

are (above) Shigemi Ohta of RIKEN

with the visualization of QCD data

used to calculate properties of sub-

atomic particles; and (below) Mike

McGuigan, Information Technology Division, and Ron Longacre,

Physics Department, with the "big bang" images between them.



Kringle Sculpture Makes EMBO J Cover

The cover of the June 1, 2000, issue of the *European Molecular Biology Organization Journal (EMBO J)* shows a photograph of a sculpture, captioned "Kringle (1989), brushed aluminum (16 by 6 feet) by Walter F. Mangel."

The sculpture, designed by BNL's Biochemist Mangel, and built at BNL by the Central Shops Division for a conference and science museum exhibit, was inspired by Mangel's research. A kringle is the name of a Scandinavian pastry shaped in three interacting loops. When a domain in several proteins was discovered by a Danish scientist to have a shape similar to the pastry, the domain was called a kringle.

In biology, kringles are triple-loop structures of 80-100 amino acids constrained by three disulfide bridges, and they are closely involved in the formation and dissolution of blood clots and in the metastasis of cancer cells.

Mangel designed the kringle sculpture during a period of intense research involving kringles.

But how did the sculpture get on an *EMBO J* cover?

In 1996, Mangel and coworkers William McGrath and Bob Sweet, all from the Biology Department, published in *EMBO J* the crystal structure of the adenovirus proteinase, a target for antiviral therapy. One of their drawings was featured on the cover of the April 1996 issue.

An *EMBO J* editor interested in science as art heard about Mangel's kringle sculpture and asked for a photo of it seen against autumn leaves. Mangel took the photo, which was eventually used on a June cover.

— Liz Seubert

Blood-Pressure: Free Checks

Stop by the lobby of Berkner Hall any Tuesday in July from noon to 12:30 p.m. to have your blood pressure checked by registered nurses from the Occupational Medicine Clinic (OMC).

Blood-pressure checks are also available daily in the OMC between 8:30 a.m. and noon, and again from 1 p.m. to 4:30 p.m. For more information, contact the OMC, Ext. 3670.

BNL's Science Museum Open on Fridays

The Lab Science Museum will be open from 11 a.m. to 2 p.m. on Fridays from today, July 18, until Friday, August 22. The BNL community is invited to come and see the intriguing hands-on science exhibits that keep thousands of school children coming to the Lab. Children may visit if escorted by a parent.

Energy, Environment & Weather
THIS SUNDAY, 7/21

Summer Sundays

This Sunday, July 20, Summer Sunday visitors to BNL can learn about the Lab's state-of-the-art research in energy efficiency, pollution prevention, and BNL initiatives in advanced technologies for home heating, alternative-fuel vehicles, and fuel cells.

Everyone is also invited to attend this Sunday's free tour of the National Weather Service facility located at BNL. Come visit the Weather Service Forecast Office where all the day-to-day forecasts and warnings are issued. There will be a weather balloon launch at 3 p.m.

Every Sunday, in addition to the featured tour, visitors will see:

- "Brain Matters," a hands-on exhibit on the brain
- "Whiz Bang Science Show," at 10:30 a.m., 12 noon, 1:30 p.m., and 3 p.m. Children and adults can learn scientific principles by watching lively, interactive demonstrations at this fun show
- Poster on the 2002 Nobel Prize in Physics won by BNL scientist Ray Davis
- Camp Upton Historical Collection: memorabilia from World Wars I & II.

Tour hours are between 10 a.m. and 3 p.m. Admission is free and no reservations are needed. To be admitted on site, all visitors age 16 and over must bring a photo ID.

Car-Seat Safety Talk

Nationwide, four out of five car seats are installed incorrectly — could yours be one of them? To find out, join Vytra Health Plan's Julie Boffardi, registered nurse and certified child passenger safety technician instructor, on Tuesday, July 29, at noon in Berkner Hall, Room B, for a talk on car-seat safety. Complete and return the registration form (sent to each employee) to Denise DiMeglio, Bldg. 185, by Monday, July 21. For information, contact DiMeglio, Ext. 2881.

APAA Summer Picnic

All Lab employees and friends are invited to a picnic sponsored by the BNL Asian Pacific American Association on Friday, August 1, 5 p.m. to sunset at the BNL Gazebo near the ball fields. The cost is \$2/person over 12 years old. Bring your own food and games. Grills, charcoal, watermelon, potato and macaroni salads, drinks, and cookies will be provided. Rain date, August 2. For more information, call Beth Lin, Ext. 3372, or Samantha Lin, Ext. 3471.

Classified Advertisements

Farewell Gathering

BROTHER REMEMBERED - Steven Halderman of Central Shops invites friends to a ceremony held by Suffolk County to honor his late brother, firefighter David Halderman of Squad 18 of the N.Y. Fire Department, who gave his life in service to others on 9/11 at the WTC. On Fri., 7/25, at 11 a.m., at Suffolk Ave/Willoughby St. intersection, Brentwood, part of Suffolk Ave. will be renamed in David's honor. A luncheon will follow at the Irish Coffee House, East Islip. To attend the lunch, contact Steve Halderman or Mark Walker, Ext. 3499, or steve@ttlart.com.

For Rent

CENTER MORICHES - 3 bdrm., 1 full bath, eik, l/rm., full basement, w/d, 1.5 car garage, beach & boating community, \$1,800 plus 2/3 util., Peter, Ext. 4028 or 878-6505.

EAST MORICHES - share lg. house w/professional, 300 ft. to water, 10 mi. to BNL, furnished, own bdrm. w/a/c, cable & phone, single, non-smoker. 744-8386.

EAST QUOGUE - 1-bdrm. furnished apt., minutes from the beach & Westhampton Village, avail. 8/15. \$1375 incl. utilities, cable, lawn maint. Patricia/Russ 758-3952, lv. message.

FARMINGVILLE - 2 bdrm. house, l/r, eik, bath, deck, garage, yard. No smoking/pets. Avail. 8/15. \$1375 incl. utilities, cable, lawn maint. Patricia/Russ 758-3952, lv. message.

MANORVILLE - new, lg. studio apt., priv. ent. & drwy., yard, eik, full bath, lots of closets, cable, nr. BNL, no pets, no smoking, sec./ref. required, \$1,000/mo. Susan, 722-3310.

MEDFORD - 2-bdrm apt., sep. ent., all util. & cable incl., non-smoker, no pets or children, \$1,000/mo., 1 mo. sec. 698-9016.

MILLER PLACE - 1 bdrm., partly furn. in shared house, 1/rm, kitch., full bath, fp, a/c, lg. porch, 5 min. to priv. beach, basement, single, avail. 9/03, \$700 plus util. Ext. 6110 or 474-3710.

MILLER PLACE - fully furn., 1-bdrm. apt., lg. living area, full kitchen & bath, cable, phone & optimum online, 9 mi. to BNL, 10 mi. to Suny SB, no pets, non-smoker. 744-8386.

MILLER PLACE - 4 bdrm., 2 baths, l/rm., kitchen, d/rm., finished basement, security system, washer, dryer, great yard, \$2,200/mo. Vitthal, 889-0735.

MONTAUK - Gurney's Inn timeshare, ocean beachfront, sleeps 4, 15th wk approx. Easter-Passover, \$5,000 obo. Frank, (845) 986-0066.

MT. SINAI - spacious 1-bdrm. apt. with private deck & waterview, avail. 9/1, \$1,300/month, incl. utilities. Michael, Ext. 7787 or 474-8715.

N. PATCHOGUE - share house, spacious bdrms., pkg. avail., close to Lab & shopping area. 447-6899.

N. SHIRLEY - 2-bdrm. apt., 10 min. to BNL, eik, l/rm, no pets, private, fenced yard w/patio & BBQ, \$1,100 all.1st mo. & sec. 399-8383.

PORT JEFF STATION - 1-bdrm. apt., eik, full bath, l/rm., all util. but phone, priv. yard, pkg., no pets/smkg., \$900/mo. for singles, \$975/mo. for 2, 1st mo. rent + 1 mo. sec. John, 473-9114.

RIDGE/SHOREHAM - 1-bdrm. apt., l/rm./kitch. combo, renovated, \$800/all, prefer single person; RIDGE/SHOREHAM - col., 4 bdrm., 2 bath, l/rm., den, laundry, pool, patio, yard, \$1,675/plus 1st & last mo. rent, 1 mo. sec., ref. & credit check. Greg, Ext. 2278.

BNL Summer Camp 2003 offers: Call-In Child-Care Service

BNL's 2003 Summer Camp Program is expected to have daily openings for BNL families in need of emergency child care for a 5 to 14-year-old child. This service will be based on space available day-to-day during August. Call Ext. 5090 the day before, or Ext. 5090 /3033 between 8-9 a.m. on the day itself, to see if space is available.

The fee is \$30 per day, with a maximum of 3 call-in occurrences per child during the month. The BNL Summer Camp operates at the Recreation Hall through August 22, 8:30 a.m.-5 p.m. Snacks will be provided twice a day. Children must bring a bag lunch and a swimsuit for a daily swim.

For more information about this service or the BNL Summer Camp program, call Christine Carter, Ext. 5090.

Arrivals & Departures

Arrivals
Tomasz Szreder Chemistry

Departures
Zahid Baccus Central Shops
John Ryan C-A

Table Tennis Club

The BERA Table Tennis Club and the Quality of Life Office are organizing a table tennis tournament to be held at BNL for employees, guests, and their families. To participate, e-mail oconor@bnl.gov.

Service Anniversaries

The following employees celebrated BNL service anniversaries during May 2003.

35 YEARS
Micheal Le Vine Physics
Joseph Curtiss S&HS
Kenneth Sutter Mat. Sci.
Richard Sautkulis Biology

25 YEARS
Elaine Zukowski HENP Dir.
Daniel Mullaly C-A
Joseph Cracco Physics
Melanie Covitz Staff Svcs.
John Kulesa III Plant Eng.
Darlene Sappo C-A
William Jensen Cent. Shops
David Elling ES&T
Patricia Carr EENS Dir.
Payman Mortazavi NSLS
Karen Cestra C-A
Patricia Bender F&O Dir.

20 YEARS
Ulises Feliciano P&PM
Christopher Johnson ... Plant Eng.
Steven Bubka C-A
Paul Callegari C-A
Joseph Sanfilippo C-A

10 YEARS
Adam Rusek C-A
Jane O'Brien-Fox Staff Svcs.
Catherine Glaser Staff Svcs.
Jeffrey Swenson F&A Dir.
Stephen Jao C-A

Retirement Counseling

A TIAA-CREF representative will visit BNL on Friday, July 25, and Friday, August 15, to answer employees' questions regarding the TIAA-CREF retirement plan, such as TIAA and CREF differences, allocating funds between TIAA and CREF, flexibilities with TIAA-CREF, and retirement options. For a 45-minute appointment, call Valerie James, (800) 842-2733, Ext. 7980.

Ferry Cruise, 8/13

On Wednesday, August 13, the Hospitality Committee invites all BNLers and guests to join a sunset cruise on Long Island Sound, with live reggae music performed by King Wellington. Ferry boards at 5:45 p.m. at the dock in Port Jefferson and returns at 9 p.m. The reduced group fares are: adults, \$11; children 6-12, \$7; under 6, free. Buy tickets on board.



VHDL Training

The Information Technology Division has scheduled a five-day intermediate course in Very High Speed Integrated Circuit Hardware Description Language (VHDL). VHDL is used in industry for the synthesis and simulation of the design of digital systems. This course is for students with experience in VHDL topics. The class begins Thursday, July 31, and continues each Thursday through August 28. The fee is \$2,500 per person. Registration must be completed no later than Wednesday, July 23. For more information, contact Marcia Swiss, Ext. 4120.

Calendar Monday, 7/21 (cont'd.)

Apple Computer Lecture Series

10 a.m.-1:30 p.m., Berkner Hall. Apple will present a full program of demonstrations and talks with emphasis on both scientific and administrative applications of their products, including the OSX operating system. Agenda is as follows:
10 a.m. Security
10:30 WWDC Conference Update
11:30 BNL Benchmarks
12 p.m. Update on Sci/Tech
There will be a raffle for an iPod. For more information, contact Sebastian White, Ext. 5488 or white1@bnl.gov.

Thursday, 7/24

Film: 1899 Philippine-American War
Noon-1:30 p.m. Berkner Hall. Memories of a Forgotten War: A Documentary on the Philippine-American War of 1899. A powerful, violent, controversial film. Free, all welcome.

BERA Bridge Club
7 p.m., Berkner Hall. Morris Strongson, Ext. 4192, mms@bnl.gov.

Friday, 7/25

***Blues Concert, Sam Taylor, Wolfe**
8 p.m. Berkner Hall. See notice, page 4.

Sunday, 7/27

Summer Sunday Tour
10 a.m.-3 p.m. This Sunday is "Family Fun Day." For more information, see www.bnl.gov/bnlweb/pubaf/summer_sundays.htm.

— WEEK OF 7/28 —

Monday, 7/28

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, 7/29

***Car-Seat Safety Lecture**
Noon, Berkner Hall, Room B. Join Vytra Health Plan's Julie Boffardi, registered nurse and certified child passenger safety technician instructor, for a talk on car-seat safety. Check your mailbox for registration forms. Denise DiMeglio, Ext. 2881.

Friday, 8/1

APAA Summer Picnic
5 p.m. at the gazebo by the softball fields. See notice at left. For more information, call Beth Lin, Ext. 3372, or Samantha Lin, Ext. 3471

Sunday, 8/3

Summer Sunday Tour
10 a.m.-3 p.m. Tour features BNL's National Synchrotron Light Source and an overview of the Lab's nanoscience research initiatives. For more information, visit www.bnl.gov/bnlweb/pubaf/summer_sundays.htm.

— WEEK OF 8/4 —

Thursday, 8/7

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

Friday, 8/8

BERA Trip to N.Y. Yankees
4 p.m., Brookhaven Center. \$55. Purchase tickets at the BERA Sales Office.

Sunday, 8/10

Summer Sunday Tour
10 a.m.-3 p.m. Tour features BNL's superconducting magnet production facility. For more information, visit www.bnl.gov/bnlweb/pubaf/summer_sundays.htm.

— WEEK OF 8/11

Thursday, 8/14

Community Advisory Council Meeting
6:30 p.m., Berkner Hall, Room B. Open to the public. For information, see http://www.bnl.gov/community/CAC.htm.

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. Write "Bulletin Calendar" in the subject line.

(cont'd.)

SHOREHAM - 4-bdrm., 2-bath ranch on cul-de-sac, on 1/2 acre, finished basement, SWR SD, \$329,000. Lynn, 821-2040.

SOUND BEACH - new colonial, 3 bdrm., 2 1/2 bath, l/rm., d/rm., eik, oil heat, Miller Place SD, \$325,000. 821-1271.

WADING RIVER - built in '01, 4 bdrm., 2.5 bath, 2-car garage, CAC, CVAC, igp, igs, lg. deck, sunroom, close to park/beach, mint cond., \$462,000. 821-9703.

SWIFTWATER, NH - lovely 2-bdrm., custom-built, year-round chalet on 4 acres in White Mtn. region, wonderful mountain views, open floor plan, \$130,000. Austin, 363-2796.

Lost and Found

CENTRAL SHOPS - has lost almost all its work. If you have found, please call Tom Lambertson, Acting Div. Manager, Ext. 3354.

Yard & Garage Sale

PATCHOGUE - 220 Jayne Ave., 7/26, 8 a.m. - 3 p.m., rain date 7/27. Lore, Ext. 5125.

SHOREHAM - Shoridge Hills yard sale, start at Harvard or Valentine Road, 7/26 9 a.m. - 4 p.m. Carol, 744-8632 or 744-5755.

In Appreciation

To my BNL friends, your kindness & concerns at the sudden loss of my mother has meant so very much & will always be remembered. Thank you also for your many cards & kind words during my hospitalization.

— Melanie Covitz

The list of Services advertized by BNLers is on the web at www.bnl.gov/bnlweb/pubaf/bulletin/services.htm

Blues Concert at BNL, 7/25 Featuring Sam Taylor, Wolfe

The BNL Music Club and the Long Island Blues Society are sponsoring a blues concert, "Soaring with the Bluz," at Berkner Hall on Friday, July 25, 8-11 p.m. Featuring Sam "Bluzman" Taylor and the band Wolfe, the concert is open to the public. All visitors age 16 and over must bring a photo ID to be admitted on site.

Tickets for the concert are available at the BERA Sales Office in Berkner Hall, at \$15 per person. They must be bought in advance; no tickets will be sold at the door. For more information, call 631 344-3846, or send an e-mail to jjv@bnl.gov.



Joseph Rubino A0010702

Sam Taylor

Classified Advertisements

Placement Notices

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

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates.

MK2582. ASSISTANT PHYSICIST (S-1) – Requires a Ph.D. in elementary particle or nuclear physics, further experience in large, modern high energy nuclear physics experiments, and the ability to work on large projects as part of a team of diverse scientists. Expertise with data analysis and GEANT-based simulations desirable. Research is in the area of neutrino physics, present and future. The experimental particle physics group is currently participating in the MINOS experiment at Fermilab. Responsibilities in the MINOS collaboration include the offline software framework and the analysis of data for electron neutrino appearance. Will also be actively working to define the next stage of experiments in neutrino oscillations, in particular, the optimum method for determining CP violation in the neutrino sector. Under the direction of M. Diwan, Physics Department.

MK2581. POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in elementary particle or nuclear physics. Experience with data analysis and GEANT-based simulations desirable. Research is in the area of neutrino physics, present, and future. The experimental particle physics group is currently participating in the MINOS experiment at Fermilab. The group is also actively working to define the next stage of experiments in neutrino oscillations. Under the direction of M. Diwan, Physics Department.

MK2813. POSTDOCTORAL RESEARCH ASSOCIATE (two positions) - Requires a Ph.D. in structural biology, molecular biology/biochemistry and/or crystallography. One position requires a strong background in molecular biology/biochemistry with an interest in learning protein crystallography, and the second requires experience in protein crystallography. Candidates should be able to work independently. The research program involves structure determination of macromolecules and macromolecule complexes. The Biology Department has excellent facilities for molecular and structural biology and there are state-of-the-art x-ray diffraction data collection facilities available at the NSLS. Under the direction of S. Swaminathan, Biology Department.

MK3137. POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in physics, chemistry, materials science or biology and experience with synchrotron-based x-ray techniques; x-ray diffraction experience highly desirable. Research will involve applying hard x-ray micro-beam versions of standard structural and spectroscopic techniques such as diffraction and XANES to nanostructured materials. This will include developing and testing the microbeam optics, instrumentation, and techniques at the micro-diffraction beam line. Will also require working with general users in a joint interdisciplinary program with the BNL Center for Functional Nanomaterials. Under the direction of K. Evans-Lutterodt, Center for Functional Nanomaterials.

NS2383. WORK FOR OTHERS SPECIALIST (M-1) – Requires a bachelor's degree, preferably in a scientific field, at least five

years' experience in a senior position in grants and sponsored research administration, management experience in a multi-disciplinary research environment, excellent oral and written communication skills, and the ability to work independently with minimal supervision. Knowledge of OMB circulars, NIH, NSF, and DARPA grant/sponsored research policies, rules and regulations highly desirable, as is a master's degree in business or finance. Will be responsible for the conduct of the total Work for Others Program within the Office of Intellectual Property & Sponsored Research (OIP), all OIP interaction with the BNL Budget Office concerning fiscal aspects of the Work for Others Program and all Laboratory interaction with DOE and reporting to DOE relating to the Program. Will play a leadership role in identifying grants and sponsored research funding opportunities with Federal, industrial, state, and non-profit sponsors consistent with BNL research capabilities and interests. Office of Intellectual Property & Sponsored Research.

NS3191. SR. PROJECT ENGINEER (P-10)/COUNTERTERRORISM TECHNICAL SPECIALIST - Requires undergraduate and graduate degrees, extensive police/military experience in counterterrorism, and the ability to obtain and maintain DOE Q and/or DOD Top Secret and SCI level clearances. Working knowledge and experience with the National Nuclear Security Administration's (NNSA) Office of International Material Protection & Emergency Cooperation (NA-25) Radiological Dispersal Device required. Will help define and implement global radiological security initiatives with special emphasis on the former Soviet Union, Middle East, Asia, Africa, and South America. In support of these initiatives, the candidate must be able to develop plans for the initiatives and their implementation. In the implementation phase, the candidate will lead/support teams to other countries to help consolidate and secure the most dangerous radioactive materials in the most vulnerable locations. Must be able to write concisely and quickly and to prepare briefing packages for NNSA Administrator and the U.S. Congress. Knowledge of methods for detecting smuggled radioactive materials at overseas ports and border crossings is required. Will plan and assist foreign partners to recover, consolidate, and secure orphaned and disused radioactive materials. Will design, develop, plan, coordinate, and execute counter and anti-terrorist exercises with federal, state, and local authorities. Will participate in vulnerability assessments of US infrastructures and serve as a subject matter expert providing technical analyses of facility-specific vulnerabilities. Position requires continuing presence in the Washington, D.C. vicinity and extensive/frequent foreign travel. Non-proliferation & National Security Department.

TB9034. SR. SECRETARY (CW-3, Part-time/Term Appointment) – Requires three years' relevant experience and proficiency in Microsoft Word and Outlook, and competence in administrative and/or technical secretarial skills. Knowledge of Laboratory policies, practices, procedures and BNL administrative computer systems is desirable. Duties include arranging meetings, organizing schedules, performing complex word processing and desktop publishing assignments and assisting in maintaining property records in the Office of the Assistant Laboratory Director for Finance & Administration. Schedule will be 1 p.m. to 5 p.m., Monday - Friday. Finance & Administration Directorate.

Motor Vehicles & Supplies

01 FORD TAURUS - silver, 3L, 50K mi., a/t, a/c, all power, am/fm/cass., well maint., \$9,000. Henri, Ext. 8294 or 776-2779.
99 VOLKSWAGON PASSAT - all power, 5-spd., 64K mi., excel. cond. in/out, 8K remaining on B/B warr., auto., 6-disc CD changer, all service records. Michele, Ext. 3281 or 732-1028.
97 DODGE STRATUS green, a/t, a/c, p/s, p/b, great cond. in/out, \$2,800. Cheryl, Ext. 3571.
95 GEO PRIZM - 4-dr., a/c, auto., airbags, 119K mi., pampered, garaged, \$2,800. Tony, 929-4903.
95 PLYMOUTH VOYAGER, white, a/t, a/c, p/s, p/b, 117Kmi., remote starter, \$2,500. Ext. 7013 or 698-5294.
94 FORD EXPLORER XLT - all power, excel. cond., running boards, alarm, tow pkg., 120K mi., new brakes & tires, no rust, orig. own., \$4,500. Liz, 581-1147.
94 FORD TAURUS - all power, runs very well, 144K mi., must sell by the end of July, \$1,200 neg. Ahmed, Ext. 7421.
94 MAZDA 626 - all power, 110K mi., excel. cond., clean, gas saver, new timing belt, \$3,500. Jim, Ext. 5018 or 689-3063.

93 CHEVY CAVALIER - all power, 6-cyl., 105K mi., JVC CD stereo, new convertible top, new exhaust, new tires, great cond., \$1,950. Linda, 981-2086.

93 FORD PROBE GT - red, 5-spd., a/c, p/s, p/b, p/w, recent tires, brakes, exhaust, battery, timing belt, v.g. cond., \$2,200. Tirre, Ext. 3288 or 281-0360.

93 LINCOLN TOWNCAR - loaded, clean, 227K mi., \$1,000 firm. Marilyn, 516-297-6256.

92 MERCURY MARQUIS - maroon, full power accessories, good fuel economy, 140K mi., very clean, quiet & luxurious, \$3,200. Bob, Ext. 3401 or 744-6229.

92 VOLVO 960 - black station wagon, all power, black leather int., sunroof, new brakes, 160K mi., \$3,000. Lisa, 205-0028.

87 VOLVO 760 - 182K mi., good cond., \$1,200. Ext. 2058.

84 CHEVY Z28 CAMARO - 8V, t-tops, alum. wheels, needs motor, \$200. Rich, Ext. 4201 or 589-9103.

84 LINCOLN TOWN CAR - a/c, all power, digital dash, CD changer, 117K mi., \$1,199. Tom, Ext. 3479 or 645-6110.

77 Honda 750CC, clean, runs well, \$500. Marilyn, 516-297-6256.

73 DODGE CHARGER - 318 eng., new exhaust, runs well, needs body work, \$650 firm. Jim, Ext. 2756.

TIRES - 3 Firestone P205/75R/15, mounted on 5 lug Chevy truck, white rims, less than 1,000 mi. on each, \$25/ea. obo. Carl, 369-3730.

TIRES - one pair of Firestone slicks, 28.5" tall x 9" wide, \$175, Crager, 8 in., Five Star rims w/tires. Wayne, 698-1184.

TIRE COVER - for spare, Mitsubishi Montero, \$20; rear brake pads, 01 Nissan Sentra GXE, \$45; rear brake pads, Toyota Forerunner (Limited), \$50; antenna Toyota Avalon, \$35. Ozzie, Ext. 5497.

Boat & Marine Supplies

22' WESTERLY SAILBOAT - twin keel, fiberglass, clean, newly painted, many extras, needs some work, \$2,500. 744-3569.

17' COBIA - new seats, trailer, '70 60 Johnson, needs work, \$400; lark, '76, 40 hp, great cond., short shaft, \$300. Jim, 395-8329.

LOBSTER POTS - professional, two, \$20/ea. John, 543-7065.

Furnishings & Appliances

AIR CONDITIONER - 8000 Btu carrier, built-in timer, good cond., \$50. 751-8240.

BEDS, AIR COND. - queen mattress, box-spring & frame, \$100; black, wrght-iron day bed w/mattress, \$100; Sharp & Whirlpool window air conds., \$100/ea. Mary, Ext. 6344

AREA RUG - off white, 8x10, Berber area rug w/fringe on 2 ends, \$40. Sandy, 447-1423.

BABY MATTRESS - Evenflo, classic infinite inner spring mattress, like new, cost \$70, ask. \$30. Gene, Ext. 7113.

BUNK BED - full-size futon on bottom, twin-size top, white, metal frame, mint cond., \$175. Bill, Ext. 2906.

COUCH - 84" traditional, jewel-tone, paisley print, excel. cond., \$250. Pat, 744-8512.

CRIB - washed-oak crib w/mattress, changing table, 4-drawer dresser, 3 1/2 yrs. old, excel. cond., \$150. Barbara, Ext. 5165.

DESK - 50"L x 22"W x 29"H, cherry wood, executive desk, 7 drawers, excel. cond., \$250. Gene, Ext. 7113.

DINING ROOM SET - maple, oval table, 38x56, 2 leaves, 6 chairs, hutch, 9 drawers, 2 cupboards, "Moosehead" furniture, colonial style, good cond., \$400. Kathleen, Ext. 3926.

FURNITURE - solid-ash crib, \$50; desk, \$30; computer desk, \$30; dresser, \$30; entertainment center, \$35, console, \$25. William, Ext. 3748.

FUTON - Good cond. \$200. Lucas, Ext. 7247.

OAK SHELF UNIT - \$150; oak unit w/4 shelves, one w/glass doors, 7 ft tall; shelf unit, \$75, 7-ft-tall multi-shelf unit w/dollhouse roof for girls room, Corinne, 331-1387 after 5 p.m.

STROLLER - Graco deluxe, 4 dual swivel wheels, adjustable handle, bottom basket, excel. cond., cost \$140, ask. \$70. Gene, Ext. 7113.

TABLES - glass top, brass base, coffee, end, sofa, \$50/set; walnut antique w/leather top, coffee, end, \$40. Nancy, Ext. 4303.

TRUNDLE BED - plastic covers & mattress pads. Joyce, 289-5770.

BNLer Pam Betti Sings Blues, 7/19

Pamela Betti of the Medical Department, also a blues singer, will perform with her band, Black Cat Bone, on the KeySpan Main Stage at the Riverhead Blues Festival tomorrow, Saturday, July 19, at 7 p.m.



Pamela Betti

Long Island's largest free music event, the Riverhead Blues Festival will run Friday through Sunday, July 18-20. During the festival, Black Cat Bone will also play at Club 91 in Riverhead tonight and tomorrow night to promote their latest CD, "Get Your Cat Clothes On." The CD features songs written by Betti. The band will also be performing live this Friday morning on News Channel 12.

Betti's previous musical projects in the New York City area have included providing lead vocals for blues music for the Full Spectrum Band and her own band, Betti's Blues. More recently with Black Cat Bone, she has sung at numerous Long Island venues and was featured during a live broadcast on WRCN - FM 103.9's 'Graveyard Blues.'

Betti's music is not her sole interest, however. "I have always worked in the medical field," she says. "Health care has always been important to me, and I decided to make it my career." After getting her B.S. in health education from Hunter College in the City University of New York, Betti worked as a diabetes health educator, HIV counselor, and hospital administrator in the New York City area.

This March, Betti joined BNL as Clinical Protocol Coordinator for the Positron Emission Tomography (PET) group. She recruits subjects to participate in imaging research studies to measure brain functioning. She is also training to assist during the studies.

"My work is interesting, and I like to feel that I am helping with the Lab's effort in such a vital field of research," says Betti.

But this weekend, Betti will be concentrating on her music. "This is my first Riverhead Blues Festival performance," she says. "It's a wonderful opportunity for local musicians to get together and support one another while doing what they love to do."

— Liz Seubert

WASHER/DRYER - Lady Kenmore, heavy duty, 90 series washer, Roper heavy duty electric dryer, XL capacity, both in v.g. cond., \$150/ea. neg. Greg, Ext. 7810.

WASHER/DRYER - Lg. capacity Maytag washer, good cond., \$50, you pick up; Lg. capacity Whirlpool Dryer, good cond., \$25, you pick up. Joe, Ext. 2975.

Tools, House & Garden

DEHUMIDIFIER - \$55; chainsaw, \$60; lawn edger, gas powered, \$75. Joe, Ext. 3783 or 929-8321.

LAWN MOWER - 20", 3 1/2 hp, \$30. Rich, Ext. 4201 or 589-9103.

POLE SAW - electric, 10" chainsaw on a telescoping fiberglass pole, unit can be separated from pole for use as a conventional saw, \$70. Roy, Ext. 3973.

TROYBILT CHIPPER/VAC - heavy duty, self prop., excel. cond., 10-to-1 leaf vol. reduct., chip 2.5" diam., cost \$1,600, best offer. Rich, Ext. 5860 or 345-2863.

WALL OVEN - Tappan, electric, self-cleaning, older Singer sewing machine w/hide away cabinet, \$45/ea. Linda, 722-4821.

Sports, Hobbies & Pets

POOL CLEANER - Polaris 65, used 1 season, \$100; Body By Jake firmflex ab exerciser, like new, best offer. Barbara, 744-9802.

WEIGHT BENCH - st. bar, curl bar, some wts., \$60. Wayne, 698-1184.

Audio, Video & Computers

CD PLAYER - Sony CDP-265 5-disc changer for home audio, excel. cond., make offer. Greg, Ext. 7810.

DELL COMPUTERS - 2 Dells, 1.1Ghz CPU, 20 Gb HD, 256Mb memory, CDRW/DVD Combo, NIC, keyboard & mouse, Win 2000 OS, \$400/ea. Donald, Ext. 7237 or 929-6571.

MINOLTA CAMERA - x570 w/wide-angle lens & case, \$120; Telephoto lens for Minolta camera, \$30. John, 543-7065.

SONY TIVO - new in box, cost \$400, ask. \$225. Jim, Ext. 2756.

TELEVISION - 13" color, good cond., works well. Corinne, 331-1387 after 5 p.m.

TOSHIBA PORTEGE LAPTOP - model 7140, PIII/500/192Mb/6Gb, HQ TFT 4-hour battery, DVD dock, floppy, replicator, only 4lbs., truly mobile, \$450 obo. Ext. 4375 or 662-4881.

Miscellaneous

BABY ITEMS - EvenFlow car seat, brand new, \$25; LiteTravel Infant car seat w/base, \$20; Lanshorne Double Electric Breast Pump, \$50. Christine, 821-7297.

UNIQUE PIÑATAS - all occasions, all characters, cartoon, Disney, Sesame Street. Donna, 821-0359.

Wanted

CERTIFIED LIFEGUARD - needed for child's party, 7/26, 3-8 p.m., \$15/hour, must be 18 years or older, proof of certification required. Karen, 236-2465.

COMPACT REFRIGERATOR - Jay, Ext. 2024 or 369-2269.

HOUSE - looking for house to rent/buy, 2-3 bdrms., Wading River/Miller Place area, 2 professional adults, 1 teenager. Cindy or Steve, 929-0269.

RELIABLE PERSON - to mow lawn weekly for senior citizen, Shirley area. Nancy, Ext. 4303.

RESEARCH VOLUNTEERS - men and women who smoke cigarettes, ages 18 and over, are needed for MRI study. Strictly confidential, fee provided. 344-2773.

TRAINS - Lionel, American Flyer & others, cast metal toys, high cash paid, also have some sets for sale. Bruce, 924-4097.

WORK - Central Shops' backlog is at historical lows (>900 hrs). Bring small jobs to 479 tonight, pick up in the morning - guaranteed! Tom, Ext. 3352.

Free

FIREWOOD - you pick up, some already cut. Ext. 2384.

MODULAR FURNITURE - computer station, entertainment center, bookcase, other items, moving. Rich, Ext. 5860 or 345-2863.

WORK - Now that I have your attention, if you have work, call Central Shops 3352, can do small jobs NOW!

Happenings

FINE ART SHOW, SALE - Patchogue Garden Club's 3rd. Ann. Outdoor Juried Art Show, Sun, 7/27, rain date 8/3, in gardens of S. Ocean Ave./Terry St., one block so. of Main St., 10 a.m.-5 p.m. Classical guitar, 2-4 p.m. Free, open to all. Contact Lynn, 447-6986.

(Continued on page 3.)

On-Site Service Station NYS-Certified Inspections

The on-site service station, Upton Industries Inc., is a New York State-Certified inspection station offering inspections on all passenger vehicles, including motorcycles.

New Operating Hours

The service station will now be open weekdays from 7:30 a.m. to 5:30 p.m.

For more information, or to make an appointment, call Ext. 4034.