BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

# 'Recharged on Physics' at 1998 AGS/RHIC Users' Meeting

"Exciting," "uplifting," "excellent" were the ratings given by users having attended this year's Alternating Gradient Synchrotron (AGS)/Relativistic Heavy Ion Collider (RHIC) Users' Annual Meeting, held last week at BNL on July 16 &17. The more than 180 participants were "recharged on physics," as one attendee declared.

"It's easy to have a great meeting when great physics is the topic — and the speakers did a fantastic job in conveying that message," said meeting organizer David Hertzog, University of Illinois, who is Chair of the Users' Committee.

In addition to discussions on physics results and prospects, Peter Rosen, Associate Director of High Energy & Nuclear Physics, U.S. Department of Energy (DOE), and Dennis Kovar, Acting Director, DOE Division of Nuclear Physics, described the anticipated future funding for BNL's high-energy and nuclear physics programs.

Jack Lightbody, Program Director of Nuclear Physics, National Science Foundation (NSF), the agency that funds the experiments of many university-based AGS users, explained that NSF support will be improving somewhat over last year.

Thomas Kirk, Associate Director for High Energy & Nuclear Physics discussed the physics program's highlights of the past year — such as the first convincing observation of an exotic meson; the first positive kaon decay to positive pion, neutrino and anti-neutrino event ever observed; and the first data from muon g-2; and future directions — such as the muon conversion, and the neutral kaon to neutral pion, neutrino and anti-neutrino experiments proposed in the "AGS 2000" package.

**Outside the Physics Department building during a break in the AGS/RHIC Users' Annual Meeting held July 16 & 17 are: (seated) Peter Rosen, Associate Director of High Energy & Nuclear Physics, U.S. Department of Energy; with (standing, from left) Satoshi Ozaki, RHIC Project Director; David Hertzog, University of Illinois, who is Chair of the AGS Users' Committee; and Thomas Kirk, BNL's Associate Director for High Energy & Nuclear Physics.**

He pointed out that, whereas funding for the program envisaged is still under discussion with DOE, reasonable optimism seems justifiable at this time.

BNL is at a crossroads in the evolution of the high-energy physics program, Kirk commented, with bright science prospects ahead and productive cross-fertilization of nuclear and medium-energy physics. In combining the groundbreaking RHIC program with the unique physics reach of the AGS, he said, prospects have become brighter than ever before.

Satoshi Ozaki, RHIC Project Director, began his discussion of RHIC by saying, "This is the first month of the last year of the RHIC Project and fantastic progress has been made."

(continued on page 2.)

## Robert McNair Manages Independent Oversight

**Robert McNair**

Robert McNair, who has been a member of the Reactor Division since 1989, became the Manager of BNL's new Independent Oversight (IO) Office on April 1.

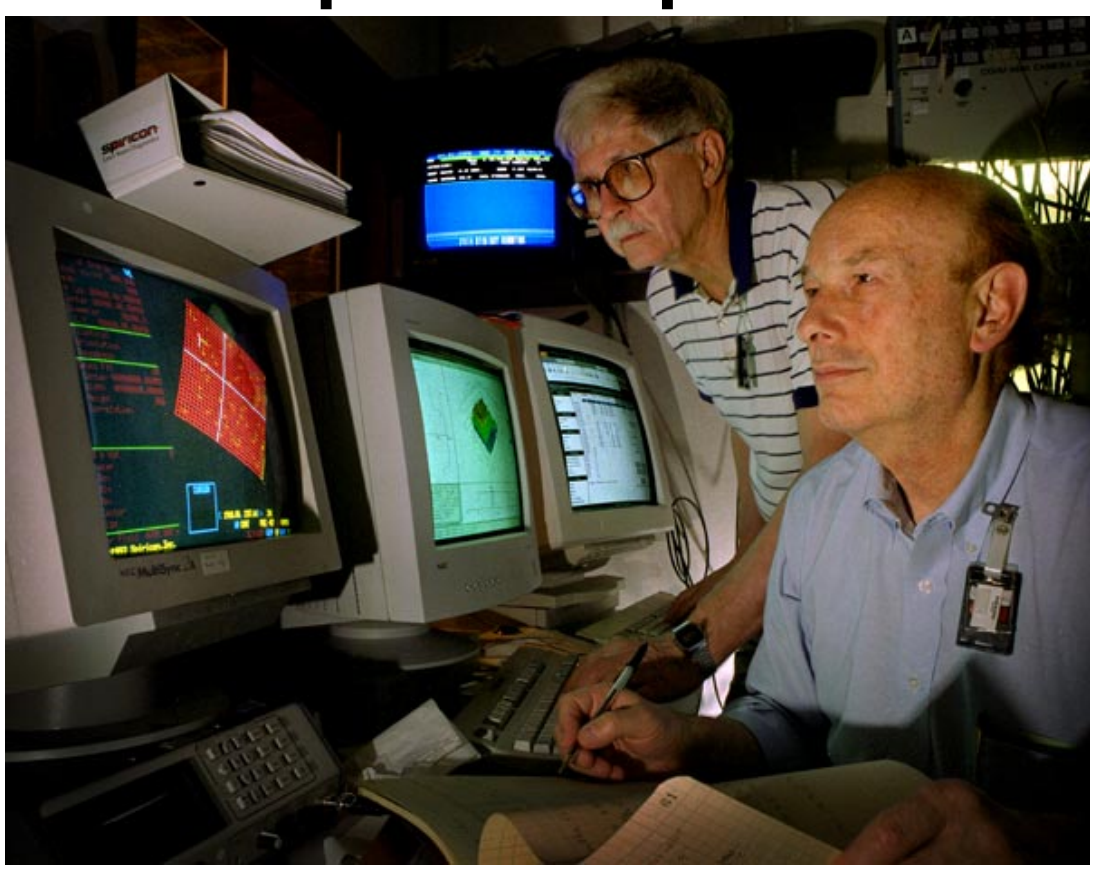
"Given McNair's experience, expertise and keen sense of the office's mission, the Lab is fortunate to have Bob as its Independent Oversight Manager," says Ken Brog, Assistant Director for ES&H (environment, safety & health) and Quality, to whom McNair reports.

The office was established to help ensure that the Lab has an adequate performance-evaluation program that is effective and efficient. Called BNL's Integrated Assessment Program, this program relies on self-assessments by each department, division and directorate; peer review by external parties; corporate oversight by BSA — and independent oversight by McNair's new office.

To help keep the Lab's performance-evaluation program on track, McNair's office has three tasks: First, to evaluate how well the results of the Lab's self-assessments are being used to

(continued on page 2.)

# AGS: Only U.S. Heavy-Ion Accelerator Helping NASA Prepare for Space Travel



**Seen at BNL's AGS during the recent NASA-sponsored run are two of the experimenters involved in radiation-biology experiments: William Holley of the Lawrence Berkeley National Laboratory, and Walter Schimmerling, who is Manager of NASA's Space Radiation Health Program, which provides funds for accelerator-based space-radiation studies.**

**Photos on this page by Roger Stoutenburg**

BNL's Alternating Gradient Synchrotron (AGS) is the only U.S. heavy-ion accelerator where experiments to predict the radiation risk to human beings from heavy charged particles in space can be performed. The AGS first hosted radiation-biology experiments sponsored by the National Aeronautics and Space Administration (NASA) in 1995, and, every year since, NASA-sponsored researchers from around the world have returned to the AGS for a week. During their special run time, the physicists and biologists, who include BNL's Betsy Sutherland and her group in the Biology Department, are the only users of the AGS because they employ an iron-56 beam with an energy less than or equal to 1 billion electron volts (GeV) per nucleon and a gold-197 beam with an energy of 11 GeV per nucleon, which are relatively low in energy by AGS physics-experiment standards. This year, during the biologists' 150 hour run in early May, the researchers irradiated almost everything that NASA could send into space, from human DNA to space-station shielding material.

— Marsha Belford

# Two New BNL Society Fellows: Rohatgi, DAT; Springer, Chemistry

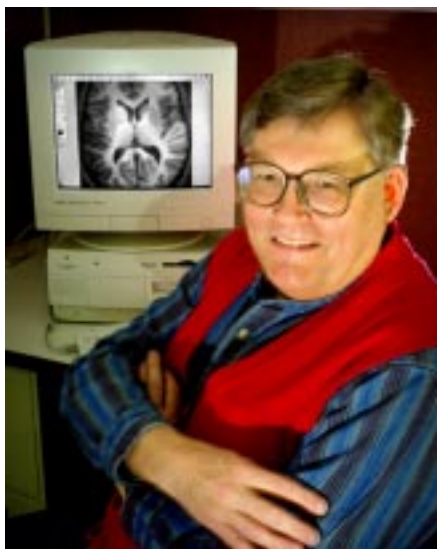
**Upendra Rohatgi**, a mechanical engineer in the Department of Advanced Technology (DAT), has been elected a Fellow of the American Society of Mechanical Engineers. Fewer than 3 percent of this professional organizations's 93,300 members are honored with this distinction, which indicates significant contributions to the society and the engineering profession.

After earning a B.S. in mechanical engineering from the Indian Institute of Technology in Kanpur, India, in 1970, Rohatgi received an M.S. in mechanical engineering in 1972 and a Ph.D. in fluids and thermal sciences in 1975, both from Case Western Reserve University.

He joined BNL in 1975, to work on developing computer programs that simulate accidents in current and advanced nuclear reactors, and accidental chemical releases — information that is important in formulating nuclear safety regulations and procedures.

In other work related to nuclear reactors, Rohatgi has investigated the fundamental interactions of boiling fluids, and he has analyzed pumps for nuclear reactors and aircraft fuel-system applications.

He is currently working with a computer model developed at BNL in the 1970s that identifies ideal energy-technology choices in terms of cost and environmental impact. The model is being used by 35 countries and over 70 institutions.



**Charles Springer**, a senior chemist in the Chemical Department, has been named a Fellow of the International Society for Magnetic Resonance in Medicine. Springer was one of nine members of the approximately 4,500-member society who were given this honor at its sixth annual meeting, held recently in Sydney, Australia.

Fellows were commended for contributions to the field of magnetic resonance through their scientific work and for their service to the society. Though introduced over 25 years ago and now used routinely to diagnose numerous diseases, *in vivo* nuclear magnetic resonance, which is known to the public as magnetic resonance imaging (MRI), is still undergoing tremendous development.

After receiving his B.Sc. in chemistry in 1962 from St. Louis University, Springer earned his 1964 M.S. and 1967 Ph.D., both in chemistry, from Ohio State University. From 1965 to 1968, he was a research chemist in the Aerospace Research Laboratories at Wright-Patterson Air Force Base in Ohio, and he then became a member of the chemistry faculty at the State University of New York at Stony Brook.

Springer joined BNL in 1994 to head the new MRI research facility, which was then under construction and is now part of the Lab's Center for Imaging & Neuroscience.

## AGS Users (cont'd.)

Ozaki then commented that, with collider construction more than 90 percent complete, all indications are that a facility-commissioning run will take place in June or July 1999, and the first physics run will be under way that November.

The detector program, with its four experiments involving 882 participants from 88 institutions in 19 countries, is approximately 80 percent complete and making progress, Ozaki observed.

At the RHIC Computing Facility, hardware installation is proceeding, and software, now that some hurdles have been overcome, should be operational by mid-August, in time for a mock-data challenge that is scheduled for September 7, he said.

Ozaki also explained the goal of RHIC outreach: to gain the community's understanding of RHIC as the world's leader in its field of research into the very early universe, and, also, as an inherently safe and environmentally friendly machine.

Among the plans being made to achieve this understanding is to organize volunteers, who, with training, will speak to school, civic, and other groups from the community to establish contacts through which questions and concerns can be more effectively addressed.

A round-table discussion centered on future nuclear and high-energy physics at BNL was held during the second morning of the meeting, with panel members Frederick Gilman, Carnegie-Mellon University; Stephen Heppelmann, Pennsylvania State University; Kovar; and Kirk giving five-minute statements and answering questions from the audience.

Heppelmann, in discussing the status of quantum chromodynamics and small experiments, suggested that more support for this program might be provided by nuclear physics.

Kovar, while emphasizing DOE's limited funding, expressed his interest in retaining a medium-energy program, which will be the subject of an upcoming DOE review.

After summarizing the now well-known Gilman High Energy Physics Advisory Panel findings, with regard to the recommendation that, on becoming the RHIC injector, the AGS should restrict the high-energy program at most to two concurrent experiments, Gilman said, "This level of AGS operation represents a major reduction and is one of the significant sacrifices required to meet budget constraints."

Kirk, who talked about the Lab's reactions to various reports and charges, made it clear that BNL is working towards a plan consistent with the Gilman and DOE recommendations. — Liz Seubert

## Arrivals & Departures

**Arrivals**

**Gry Mine Berg** ..... App. Science
**Mitchell DeLa Vergne** ..... RHIC
**Madina R. Gerasimov** ..... Chemistry
**Michael S. Manna** ..... RHIC
**Renee J. McNeil** ..... Financial Services
**Martin VonZimmermann** ..... Physics

**Departures**

This list includes all employees who have terminated from the Lab, including retirees:

**Shiping Zhang** ..... Biology

## Robert McNair (cont'd.)

correct weaknesses that are identified through these self-assessments.

Taking a systems approach, "We provide an independent view, to determine if the self-assessment tools and processes that the departments, divisions and directorates are using provide reliable results that can drive our improvement agenda," he explains.

Second, upon request, McNair and his staff of three perform special case studies to evaluate systems, processes, or programs in the areas of environment, safety and health; quality, safeguards and security, etc.

For instance, says McNair, "The Environmental Management Directorate recently asked us to evaluate the Lab's progress in responding to the U.S. Environmental Protection Agency's findings following its 1997 inspection" of BNL's emissions and waste-handling.

Finally, IO oversees Lab compliance with the Price-Anderson Act (PAA), which is the government insurance program that provides indemnification to DOE contractors who manage and conduct nuclear activities on behalf of DOE.

Specifically, McNair and his coworkers are charged with ensuring the Lab's event-reporting compliance as required by PAA occupational radiation-protection standards, and quality assurance within the Lab's four nuclear facilities: the High Flux Beam Reactor which is currently shut down, the Brookhaven Medical Reactor, the new Waste Management Facility (WMF), and the old hazardous waste management facility which is no longer in use.

Overall, "We ensure that the Lab's perception of itself matches reality," concludes McNair. Working with him in IO are: Michael O'Brien, John Usher and Peggy Sparrow, who can be found in Bldg. 426 at Ext. 5202.

With eight years of Reactor Division experience, first as Reactor Supervisor and then as Group Leader for Training Program Development & Evaluation, Robert McNair has developed inspector-training courses for the International Atomic Energy Agency, in conjunction with BNL's Department of Advanced Technology; assisted in the Lab's highly-enriched uranium environment, safety & health vulnerability assessment; and co-led the team that performed the nuclear operational readiness review for the WMF. In 1997, he served as the Project Manager of the Tritium Remediation Project, working closely with DOE and the Lab's regulators.

Before coming to BNL, McNair had worked at as a nuclear engineer for the Long Island Lighting Company at the Shoreham nuclear power station; for Nuclear Energy Service, Inc., of Connecticut; and for Jersey Central Power & Light. Earlier, he was an engineering officer on board an oceanographic research vessel of the National Oceanographic & Atmospheric Administration. He holds a B.S. in nuclear science from SUNY Maritime College, an MBA from Mammoth College, and two M.S. degrees from the New York Institute of Technology.

*Did You Know?*

## Physical Plant Facts

- BNL has 695 buildings, including trailers, on the 5,265 acres.
- About 27 percent of the Lab's buildings are more than 50 years old, 52 percent are more than 40 years old, and 78 percent are more than 30 years old.
- The oldest building on site is Bldg. 482, which is a silo in the warehouse area and was built in 1919. The newest building is the Waste Management Facility, Bldg. 855, which was built in 1997.
- The following lists the number of buildings still standing built over the past seven decades:

| decade | standing |
|---|---|
| 1930s | 2 |
| 1940s | 90 |
| 1950s | 21 |
| 1960s | 75 |
| 1970s | 26 |
| 1980s | 55 |
| 1990s | 53 |

- With 179,150 square feet, Bldg. 912, which houses the Alternating Gradient Synchrotron, is the largest building on site.
- The smallest building on site is Bldg. 597, which is an environmental monitoring station measuring 44 square feet.
- BNL has 29 miles of paved roads, 14 miles of unpaved roads, 11 miles of sidewalks, and 3,958 parking spaces, including more than 80 that are designated for the handicapped.
- There are 5,500 telephones and 136 faxes on site.
- About 900 of Brookhaven's 5,265 acres are developed, of which some 400 acres are taken up by the Lab's big machines.
- The Lab's annual heating bill is $2.5 million, and BNL spends $18 million yearly for electricity.
- With a seating capacity of 450, the largest auditorium on site is in Berkner Hall. The cafeteria within Berkner can accommodate 750 people.
- BNL has 31 miles of sewage-collection piping. The on-site sewage treatment plant can process 2.3 to 3 million gallons per day and, in an emergency, can store 2 million more gallons. On the average day, some 1 million gallons are processed.
- While fencing within the Lab totals some 14 miles, there is no fencing of the site boundary.
- Eight employees maintain BNL's approximately 500 acres of lawn.
- Built in 1946 by the U.S. Army as a rehabilitation pool for injured soldiers returning from World War II, the on-site swimming pool is a nonstandard size: 40 feet wide by 100 feet long.
- There are five softball fields on site.
- The tennis courts were built by the U.S. Army during World War II as one of Camp Upton's recreational facilities.
- There are 20 miles of fiber-optic cable on site. — Diane Greenberg

## Routine Maintenance On Stack Now Ongoing

Although the High Flux Beam Reactor (HRBR) is shut down, Bldg. 750 continues to discharge air into the red-and-white stack, and the stack continues to be used by Bldgs. 701, 703, 815 and 830. Therefore, due to the stack's age and its continued usage, maintenance is now being performed on the stack, to ensure its structural soundness.

So, over the next six to eight weeks, the stack's existing paint will be removed, cracks in its concrete surface will be repaired, miscellaneous bolts will be installed and rewelding will be done, and the stack wil get one coat of sealer and two coats of weather-resistant paint.

To perform this routine maintenance in a safe and environmentally sound manner, scaffolding will be erected about the stack and a tent will cover different portions of the stack as the job progresses, both of which will be visible on and off site. For more information about this project, call Chris Harris, Reactor Division, Ext. 2972.

## Tennis Tournament

Employees, retirees, facility-users, summer visitors, and their families are invited to sign up now for the 1998 annual Tennis Tournament.

Scheduled for August 3 through 21, the tournament may include men's singles and doubles, women's singles and doubles, and mixed doubles, depending upon the signup. While spouses may sign up for singles and doubles, sons and daughters may only sign up for doubles and then only when their partner is a parent.

Sign up Tuesdays through Fridays, 9 a.m. to 1:30 p.m, through 1:30 p.m. on Tuesday, August 2, at the BERA Sales Office, Berkner Hall, where the tournament's rules are also available.

The draw will be posted at the BERA Sales Office and courtside. Matches may be played any time afterwards, but play must be completed by the scheduled dates.

For more information, contact Joe Carbonaro, Ext. 5139 or e-mail joe1@bnl.gov, or Rita Kito, Ext. 3320 or e-mail kito@bnl.gov.

## IBEW Meeting

Local 2230, IBEW, will hold its regular monthly meeting on Monday, July 27, at 6 p.m. in the Knights of Columbus Hall, Railroad Avenue, Patchogue. There will be a meeting for shift workers at 3 p.m. at the union office. The agenda includes regular business, committee reports and the president's report.

## Amateur Radio

The BERA Amateur Radio Club will next meet at noon on Thursday, July 30, in the lounge of the Recreation Building, Berkner Hall. All BERA members and licensed amateur-radio operators are invited to attend. For more information, call Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

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***Summer Sundays Continue Through August 31st***

## Tandem Is Focus of This Sunday's Mini-Tour

Doug Humphrey

**Inside one of the Tandem's electrostatic accelerators.**

This Sunday, July 26, during one of the Lab's Summer Sundays, take a mini-tour of the Tandem Van de Graaff facility, to see couple that has made some historical discoveries since 1970, has made a historic space mission to Mars possible, and will help the Relativistic Heavy Ion Collider make history into the new millenium.

Brookhaven's Tandem Van de Graaff Accelerator became one of BNL's "big machines" in 1970, at which time it also became the highest-energy electrostatic accelerator in the world. Operating the two 80-foot-long Van de Graaff electrostatic accelerators in tandem — a world's first — pushed protons and ions to higher energies than possible before using one such accelerator alone.

In its day, this facility also pushed BNL's nuclear physics to higher energies and into using a wider range of particles, including heavy ions, making many discoveries in nuclear structure and reaction mechanisms possible.

Since 1992, the Tandem has been the source of heavy ions for nuclear-physics research at higher energies at BNL's Alternating Gradient Synchrotron. At the same time, the Tandem became the source of heavy ions used to bombard computer and electronic components bound for space.

With its ability, it is no wonder that the Tandem will be used as the source of ions as heavy as gold for the Relativistic Heavy Ion Collider (RHIC), which will push these ion beams to even higher energies for nuclear-physics experiments beginning in 1999.

While beam production for RHIC will be the Tandem's priority, it will continue to be used for testing the effects of space-like radiation — as it did when it was employed to test the the radio equipment that was used by the Sojourner rover sent to Mars on board the Pathfinder spacecraft in 1997.

BNL's Summer Sunday tours run from 10 a.m. to 5 p.m., but visitors must arrive before 3 p.m. The tours are free and open to the public, and no reservations are needed.

Guided bus tours of the Lab site run continuously throughout the day, and, in addition to a Tandem mini-tour, Lab tourists may participate in the Whiz Bang Science Show. Fun for children of all ages, this show is a lively, interactive demonstration of basic scientific principles, and it is presented at 10:30 a.m., noon, 1:30 p.m. and 3 p.m. in Berkner Hall.

## Software Demo

On Monday, July 27, IBM Engineering Solutions will present CATIA, three-dimensional mechanical design software, and its computer numerical control (CNC) software for machining during two presentations.

At the first, from 10 a.m. to noon in the second-floor conference room of Bldg. 911, mechanical design intent, processes, technology, analysis and simulation will be discussed. During the second, from 1 to 3 p.m. in Bldg. 462, manufacturing solutions involving CNC will be discussed and demonstrated. For more information, contact Chris Neuberger, Ext. 4160.

## Computer Training

The Computing & Communications Division (CCD) will offer a three-day introduction to visual basic programming class, to be held Wednesday-Friday, August 19-21, from 9 a.m. to 4 p.m. in the Bldg. 515 training room.

To register, send a Training Request Form and an ILR for the course fee of $590 to Pam Mansfield, Bldg. 515, by Friday, August 7. For more information, contact Mansfield at pam@bnl. gov or Ext. 7286.

## CIGNA Medical Office To Have New Address

Effective August 1, CIGNA will close its Newburgh, New York, claims office, and all BNL claims previously handled there should be addressed to P.O. Box 962, Bristol, CT 06010.

Therefore, beginning August 1, all participants in the CIGNA indemnity medical plan, including employees, retirees, persons on long-term disability and their families, should send claims to the new address. The new toll-free phone number for the Bristol office is 1-800-462-7486, where CIGNA staff will be able to assist with claims.

Current medical claims forms and identifications cards with the Newburgh, NY, address may still be used. CIGNA will forward all Newburgh mail and phone lines to the Bristol office.

New claim forms are available at the Human Resources Division, Bldg. 185. The only change to the claim forms is the mailing address. New identification cards will not be issued.

The change in claims office does not affect the CIGNA point-of-service medical plan or the CIGNA dental plan.

For more information, call Muriel Pfeiffer, Ext. 2877.

## BERA Summer Offers

*Tickets will be on sale, first-come, first-served, at the BERA Sales Office in Berkner Hall, Tuesday-Friday, 9 a.m. to 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347, or M.Kay Dellimore, Ext. 2873.*

- **Summer Splash at Brookhaven Center, Friday, July 31**: Eat, dance and relax with friends and coworkers at the first annual BERA Summer Splash! to be held, rain or shine from 5:15 to 11 p.m. on the Brookhaven Center patio. The cost of $5 per person includes admission, two hot dogs, a soda and music by deejay E.T. Tickets may be bought at the BERA Store or from:

| | Bldg. | Ext. |
|---|---|---|
| Patti Bender | 134 | 3145 |
| Tracy Blydenburgh | 750 | 4422 |
| Robert Colichio | 535 | 7267 |
| Charles Gardner | 911 | 5214 |
| John Ingoglia | 461 | 3142 |
| Deborah Keating | 355 | 3888 |
| Elliot Levitt | 134 | 2495 |
| Bob Marascia | 830 | 7779 |
| Guy Mastrion | 461 | 3147 |
| Lou Nieves | 179 | 4897 |
| John McCaffrey | 905 | 2075 |
| Ed Meier | 510 | 3931 |
| Arlene Wolochuk | 902 | 3428 |

- **Waldbaum's Balloon Festival, Brookhaven Airport, Friday, August 14-Sunday, August 16:** BERA offers discounted tickets at $11 (saving $4) for adults or $6 (saving $5) for children 4-12 for the Festival, to be held 1 p.m-10 p.m. on Friday, 6 a.m.-10 p.m. on Saturday, and 6 a.m.-8:30 p.m. on Sunday. More than 100 unique, colorful balloons will participate in five ascensions at dawn and dusk — at 6:30 p.m. on Friday, Saturday, and Sunday; and at 6:30 a.m. on Saturday and Sunday. Events also include: an old-time barnstorming air show featuring the Iron Eagles; arts & crafts exhibits; a petting zoo; the Skydiving Elvises in a 10,000-foot free-fall; and PBS's Arthur in his "Kids-Day Play Along Show." Friday night features the Coasters, Drifters and the Platters. On Saturday night, the Beach Boys will perform, followed by Grucci fireworks.

## *Computerized Nutrition*

The Health Promotion Program of the Occupational Medicine Clinic has acquired a software program that analyzes individual diet and exercise habits, in order to make recommendations on ways to achieve health goals.

The program includes the following four analyses: general nutritional status, weight management, vitamin and mineral intake, and personalized exercise program.

To receive one of these analyses, contact Mary Wood, Bldg. 490, Ext. 5923, for a questionnaire or more information. Once you return the completed forms, your information will be analyzed and the results, along with some suggestions on eating and exercise habits, will be sent to you. Your personal information and results will be kept in strict confidence.

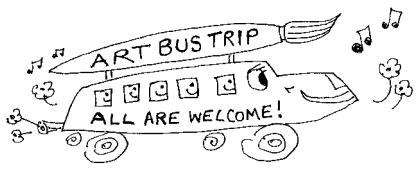
## Softball

**Results reported as of July 20**

| League E1 | | League M1 | |
|---|---|---|---|
| Magnuts | 7-1 | Gour-Mets | 8-1 |
| Cobras | 6-2 | Happy Hour | 7-1 |
| Cleen Sweep | 4-4 | OER Wellheads | 3-5 |
| Phoubars | 4-4 | Stingrays | 2-7 |
| Blue Jays | 3-5 | | |
| Scram | 0-8 | **League M2** | |
| **League E2** | | Here for the Beer | 3-2 |
| Gas House Gorillas | 6-3 | Odd Sox | 3-2 |
| Hammerheads | 6-3 | Skeleton Crew | 3-3 |
| Mesocyclones | 6-3 | Ten Samurai | 0-6 |
| Rockets | 6-3 | | |
| CCD | 5-4 | **League E3** | |
| Hy Tech | 3-6 | Bombers | 6-2 |
| Lights Out | 3-6 | Sure Fire | 6-2 |
| Phase Out | 1-8 | Medical | 2-6 |
| | | Sultans of Swat | 2-6 |

*Internet: http://www.l2ball.bera.bnl.gov/*

## *Midnight Madness Trip: Art, Flowers, Flamenco*




Join the Saturday, August 22, art-and-flowers bus trip sponsored by the Art Society to Brandywine Valley Museum and famed Longwood Gardens.

The bus will leave Brookhaven Center at 7 a.m. for Brandywine, an old riverside mill house just south of Philadelphia with a magnificent collection of Andy Wyeth paintings.

From there, the bus will continue on the 15 or so minutes' ride to Long wood Gardens, hundreds of acres of some of the most beautiful and varied horticultural wonders of the U.S.

To conclude the Longwood visit, a free mini-concert and exhibition of flamenco dancing (*Olé!*) will be held 7-7:45 p.m. — allowing just enough time to rush to the bus by 8 p.m. for a snooze back to the Lab before midnight strikes or the coach turns into a pumpkin.

Food can be as you like — there are cafe-restaurants at Brandywine and Longwood, or you can take your own picnic. A leg-stretching coffee stop will break the journey each way.

The price of the luxury-bus-with-bathroom, including driver's tip, is $27; Longwood Garden entrance is $10; Brandywine Museum is $4 or $2.50 for seniors. For more information or to reserve a place, call Liz Seubert, Ext. 2346 or 286-8563, or e-mail lseubert@bnl.gov.

## Hospitality Committee

*The Hospitality Committee invites all on-site residents, their spouses and friends to participate in the following events. Details about these and other events are posted in the on-site laundry and on the back of the Lollipop House in the apartment area. For more information, call Julie Kim-Zajonz, 929-0405.*

- **Welcome Coffee**: held every Tuesday, 10-11:30 a.m. at the covered barbecue area near the playground in the apartment area.
- **Bring-your-own BBQ**: will be held after work today, Friday, July 24, at 5:30 p.m. at the covered barbecue area. Charcoal and drinks provided; you bring the food.

# 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 complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at http://www.bnl.gov/JOBS/jobs.html.

*The following vacancies are exempt from the Director's hiring freeze.*

**SCIENTIFIC RECRUITMENT** - Doctorate usually required. Send C.V. to M. Kipperman, Bldg. 185.

MK7424. POSTDOCTORAL RESEARCH ASSOCIATE - to be responsible for writing off-line analysis software for the PHOBOS experiment, helping with the day-to-day coordination of the PHOBOS software effort, including PHOBOS users and the RHIC Computing Facility. Will also be responsible for strengthening the scientific activity of the group once data are taken. Under the direction of M. Baker. Chemistry Department.

MK7709. SCIENTIST - experienced in the development of accelerator instrumentation for beam monitoring and control. Requires a Ph.D. in physics or electrical engineering, at least five years' experience in accelerator instrumentation, and strong leadership and communication skills. Will be responsible for the design, construction, installation and commissioning of the systems used to measure the properties of the charged particle beams in the injection transport line, ring and extraction transport lines of the Spallation Neutron Source Project. Under the direction of W.T. Weng. Alternating Gradient Synchrotron Department.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees.

DD8042. ADMINISTRATIVE/SECRETARIAL POSITION - (term appointment) Requires an AAS degree in secretarial science or equivalent, several years' relevant experience, excellent oral and written communication skills, the ability to work under pressure, and strong organizational skills. Experience with WordPerfect 8 and MS Word, Power Point, database systems, IPAP and BNL travel system required, as well as extensive knowledge of Lab policies and procedures. Will perform a variety of secretarial duties, including scheduling meetings, preparing correspondence, tracking commitments, handling telephones and filing. Director's Office.

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

DD7474. SECRETARIAL POSITION - (part time, reposting) Requires a high level of competence in secretarial, organization and communication skills, and the ability to work under minimal supervision. Knowledge of IPAP, Inform, WordPerfect and MSWord required. Primary duties will include processing NSLS publications and library organization. Will job-share as secretary to the Operations and Accelerator Test Facility Groups. National Synchrotron Light Source Department.

DD7711. TECHNICAL POSITION - (term appointment) Requires an AAS degree in electro/mechanical technology or equivalent, and extensive experience in installation, operation, repairs, and maintenance of vacuum systems. Experience necessary in the use, troubleshooting and repair of leak detectors, mechanical pumps, turbo molecular pumps, ion pumps, titanium pumps, cryopumps, residual gas analyzers and vacuum gauges, and their associated controls. Extensive experience in the use of hand tools and electronic test instruments is required, as well as a working knowledge of PCS. Programmable logic controller (PLC) and/or machine shop experience a plus. Must have strong construction skills and the ability to work from drawings, schematics, and verbal instructions. Alternating Gradient Synchrotron Department.

DD7708. TECHNICAL POSITION - (term appointment) Under general supervision, performs a variety of technical functions involved in the fabrication, installation, operation, maintenance and repair of vacuum systems throughout the AGS complex. Requires knowledge of basic mechanical assembly techniques and basic electrical skills, such as wiring and troubleshooting of basic electric circuits. Knowledge of vacuum systems and/or equipment, such as helium-leak detectors, is also helpful. Must be capable of following complex job procedures. Alternating Gradient Synchrotron Department.

DD7710. TECHNICAL POSITION - (term appointment) Under direct supervision, will perform technical support functions typically involved with the fabrication, assembly, maintenance and operation of electronic equipment. Will perform work assignments in accordance with general instructions and established procedures. Duties will consist of testing and installing electronic assemblies and chassis in the two high-energy accelerators. Requires a high school diploma and a knowledge of electronic fundamentals. Alternating Gradient Synchrotron Department.