BROOKHAVEN BULLETIN

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BROOKHAVEN NATIONAL LABORATORY

BNL Lecture: Search for the Lost Quark

A decade ago, a group of BNL scientists became keen participants in a collaborative high energy physics experiment at Fermi National Accelerator Laboratory (Fermilab). Using the D-Zero detector in the Tevatron proton-antiproton collider, they were looking for new, heavy particles.

Gradually, however, more information became available about the top quark — a subatomic particle whose sighting would verify the standard model, the theory of matter as physicists know it today. By about 1989, this sixth, and perhaps the last unobserved quark had still eluded experimentalists. This implied that it was extraordinarily heavy — much heavier than had been previously thought. D-Zero's design would therefore provide a very strong chance of tracking down the top quark. From then on, the experiment could be called a quest — the search for the lost quark.

To give an overview of Brookhaven's past and future role in this venture and its implications for physics, Senior Physicist Howard Gordon, Physics Department, will deliver the 286th Brookhaven Lecture on Wednesday, April 21. Entitled "The Search for the Lost Quark — The D-Zero Experiment," the talk will begin at 4 p.m. in Berkner Hall. Introducing the speaker will be Deputy Physics Chairman Michael Murtagh.

After briefly describing the standard model and the quarks that, with other particles called leptons, are thought to be the truly elementary constituents of all matter, Gordon will explain why finding the top quark is of such interest. He will talk about the three types of detectors — tracker, calorimeter and muon system — that make up D-Zero.

Undertaken in 1983 by a huge, international collaboration that has involved 323 researchers from 34 institutions, the 4,950-metric ton (5,500-ton) detector took almost ten years from conception to data taking.

Part of its unique value was as a complement to the first major Tevatron detector, the Colliding Detector at Fermilab — CDF — experiment, which was installed in 1985. D-Zero's design has certain advantages over that of the CDF. These include its calorimeter, the central part of which was built at Brookhaven by Physics' Omega Group, headed by Gordon. BNL was also heavily involved with the data-acquisition system and off-line analysis for the experiment.

Even before the official start of its first run of data-taking at the end of July 1992, D-Zero began accumulating proof of showers of particles called jets, as well as leptons, from W particles. As Gordon will demonstrate, these W signatures, now being seen among the data, are essential parts of the evidence needed to find the top quark.

Gordon will also discuss D-Zero's potential to reveal other new phenomena at its energy range of two trillion electron volts at the center of mass — the highest in the world. In conclusion, he will relate the D-Zero experience with the physics that should emerge in the yet higher-energy domain available to the Superconducting Super Collider.

Howard Gordon examines signal cables from a calorimeter.

In 1964, 1966 and 1970, respectively, Howard Gordon earned his B.S., M.S. and Ph.D. in physics at the University of Illinois. He joined BNL's Physics Department in September 1970 as a research associate, being promoted to Associate Physicist in 1972 and Physicist in 1975. Five years later, he received tenure, and he was named Senior Physicist in 1984.

Gordon is a Fellow of the American Physical Society, and, among his committee memberships, he was on the U.S. Department of Energy's High Energy Physics Advisory Panel from 1986-90.

After the lecture, all are invited to join the speaker for discussion and refreshments. To accompany him to dinner at a restaurant off site, call Doris Rueger, Ext. 3743.

Laboratory Announces Smoking Ban

Under a new policy to become effective on Monday, June 14, smoking will be prohibited in all Laboratory buildings and vehicles, with two exceptions: Smoking will be permitted in residential units and in the smoking section of the Brookhaven Center Club.

This new policy was announced by BNL Director Nicholas Samios in a memo to all employees last Friday. The revision came about, he explained, "In our continuing commitment to promote better health here at Brookhaven and in light of the recent EPA findings on second-hand smoke. . . .

"We recognize that this change may be difficult for some employees," continued Samios. "The Occupational Medicine Clinic will provide help to those who wish assistance in kicking the smoking habit. Educational literature and self-help brochures are available in the clinic lobby. And no-cost smoking cessation programs are scheduled for early May [see box below]."

To Stop Smoking, Try May 3 Program

Employees who would like to quit smoking before the Lab's new smoking policy takes effect on June 14, may want to take advantage of the free smoking-cessation seminar scheduled for Monday, May 3, in Berkner Hall. Offered by the Health Promotion Program of the Occupational Medicine Clinic, the two-hour program will begin at 4:30 p.m.; attendance during working hours is subject to supervisory concurrence. Employees' spouses are also welcome.

For more information about this seminar or to sign up, call Health Promotion Specialist Mary Wood, Ext. 5923.

Last January 7, the Environmental Protection Agency (EPA) released a 530-page report concluding that secondhand tobacco smoke is a dangerous carcinogen and causes substantial health risks to infants and children. These findings prompted the EPA to classify secondhand smoke as a Class A carcinogen — as are asbestos, arsenic and benzene.

Prepared by an EPA science advisory panel and assessing more than 30 scientific studies, the report indicates that lung cancer caused by secondhand smoke kills about 3,000 nonsmokers annually in the U.S., "twice the number of all the deaths associated with all of the toxic emissions from every industrial facility in the United States," said EPA Administrator William Reilly.

In addition to the 3,000 lung cancer deaths, the American Heart Association estimates that secondhand smoke causes as many as 40,000 U.S. deaths a year from heart disease. Overall, the U.S. Public Health Service says, tobacco kills far more Americans than alcohol, cocaine, crack, heroin, homicide, suicide, fire,

(continued on page 2)

Oil Heat Technology — A Hot Topic

BNL's Department of Applied Science hosted the Oil Heat Technology Conference and Workshop, on March 25-26. The two-day meeting began with an open house in the Combustion Equipment Technology Lab, Bldg. 526, where BNL's Roger McDonald (second from right) and Yusuf Celebi (center) showed a test boiler to conference keynote speaker John Millhone (second from left), Deputy Assistant Secretary for Building Technologies in the U.S. Department of Energy's Office of Conservation and Renewable Energy. Flanking them are two conference attendees, who were among the 180 fuel oil marketers, equipment manufacturers and researchers participating in this highly successful technology transfer meeting. On the agenda were technical presentations on recent oil heating technology advances and discussions on key issues regarding the use of advanced oil heating systems.

— Photos on this page by Roger Stoutenburgh

Extra Recognition Of Secretaries All Next Week

Created in 1952 and sponsored annually by Professional Secretaries International (PSI), Professional Secretaries Week will be observed April 19-23 this year, with Professional Secretaries Day next Wednesday, April 21.

Why have a special day and week for secretaries? Explained Sharon Jones, who is an Information Security Specialist in the Safeguards & Security Division and President of PSI's Upton Chapter, "Secretaries need to be recognized as part of the management team. All year they work behind the scenes managing the office and accomplishing important goals for management. Professional Secretaries Week and Day provide the opportunity for secretaries to know that their contributions to the office are appreciated."

Secretaries comprise the single largest segment of the U.S. work force, numbering about 4 million. The Upton Chapter of PSI, which has 30 members, meets on site monthly. For more information on PSI and its local chapter, call Sharon Jones, Ext. 2493.

Egg-statically displaying their creations are these kindergartners at the Child Development Center: (clockwise from bottom left) Parviz Mortazavi, Matthew Watson, Tommy Boucher, Kevin Kahn, Yau Chung Cheng and Eric Sun.

— Photos by Roger Stoutenburgh

Sharing Holiday Joy

All the ingredients have been on site for a while now, but it took an idea from Alex Reben, a video specialist in the Photography & Graphic Arts Division, to blend them into a real treat for young and old alike.

Drawing on his experience with his son's Cub Scout pack, Reben suggested that the youngsters attending BNL's Child Development Center (CDC) might enter into a partnership with the Brookhaven Nutrition Center (BNC), located in Bldg. 490, to brighten the Easter holiday for the area's elderly. Reben's idea was embraced by CDC Coordinator Susan Foster, who enlisted the participation of both groups.

Last week was extra busy at the CDC as children ages 3 to 5 colored 100 each of eggs, placemats and baskets. These were delivered to the Nutrition Center on Thursday.

Sponsored by the American Red Cross, the BNC has been operating since 1985, when BNL offered the use of the kitchens of the former Medical Research Center. Every weekday, the BNC staff prepares almost 700 hot meals for delivery to the homebound and to senior citizens' centers throughout the area.

Last Friday, April 9, the BNC staff assembled the food trays a little differently from usual, adding grass and jelly beans to the children's decorated baskets, along with their colorful Easter eggs. The baskets and the meals were placed on the creative placemats and sent out to delighted senior citizens in Bellport/Patchogue, Center Moriches, Coram, Farmingville, Gordon Heights, Mastic, Mt. Sinai, Rocky Point and Shoreham.

Every weekday, 75-year-old Bunny McDonald (left above and right below) comes to the Brookhaven Nutrition Center to pick up food trays for senior citizens in the Coram area. Among those delighted with the children's eggs and decorations last Friday were (above) 94-year-old Grace Holtzer and (below) Josephine Armstrong, who will be 100 in August.

This "hoppy" group at the Brookhaven Nutrition Center assembled the Easter baskets and trays: (from left) Ruth Kowalski, Jeff Unser, Nancy Garcia, Novella Fergusen, Pearlie Jones, Katie Tarlentino and Lee Brown. Not shown: Ed Gawlowski, Supervisor Joan Kalivas, Nicole Mitchell.

In Memoriam

The following retirees passed away recently:

Richard K. Stoehr died on December 13, at the age of 62. He was hired in March 1956 as a technician with the Cosmotron and retired in October 1989 as a senior technical associate at the Alternating Gradient Synchrotron Department.

•

Anthony Stevens died on December 18, at 92 years of age. He came to BNL in May 1948 as a laborer in the Architectural Planning & Plant Maintenance (PM) Department. At the time of his retirement in December 1965, he was a driver in PM.

•

Ludwig Leicht died on December 20, one day after his 88th birthday. He joined the Lab in August 1954 as an experimental machinist in the general shop and retired in December 1969 as tool & instrument maker in the Central Shops Division.

•

John T. Ballard died on his birthday, December 29, at the age of 48. He was hired in September 1971 as a research associate in the Biology Department. He had become an assistant ecologist by the time he went on long-term disability in January 1976.

•

Robert C. Zigrosser died on January 12, at the age of 65. He joined the Lab in March 1961 as a carpenter in the Plant Maintenance Division, retiring in March 1989 as a locksmith group leader in the Plant Engineering Division.

•

Charles P. Baker died on January 21; he was 82 years old. Hired in the Physics Department in August 1949 as a visiting physicist, he retired from Physics as a physicist, in December 1975.

•

Ruth M. Drew died on January 27, at the age of 81. She was hired in October 1949, as an associate bacteriologist in the Medical Department, from which she retired as a scientist in December 1972.

•

Herbert Banks died on February 11, at 73 years of age. He started at BNL in January 1965, as a buyer in the Purchasing Department, and he retired in May 1982, as a purchasing agent in the Division of Contracts and Procurement.

•

Frederick A. Iseli died on February 16; he was 77 years old. Hired in April 1947, as an electrician in the Architectural Planning & Plant Maintenance Department, he retired from the Department of Applied Science as a technical associate, in October 1980.

•

Fannie Wyche died on February 25, at the age of 72. She joined the Physics Department in January 1962 as a scanner trainee, and was a scanner when she retired from Physics in December 1981. She is survived by her husband William Wyche who retired from the Plant Engineering Division in 1984.

Nursery School Holds Registration

The Upton Nursery School, an on-site, parent-run cooperative, is accepting registrations of three- and four-year-olds for the 1993-94 school year. The school meets three mornings a week in the Recreation Building and is open to children related to BNL employees, visitors and concessionaires. It is not affiliated with the Child Development Center. For more information or to register, call Anna Martin, 878-6760.

SYBASE Meeting

The next meeting of the Sybase Local Users Group will be Tuesday, April 20, at 2 p.m., in the CCD Seminar Room, Bldg. 515. A Sybase representative will demonstrate the Sybase Report Workbench and the company's SQR, for structured query reportwriter.

An electronic BNL Sybase Bulletin Board has been established. To subscribe, send Email to: listserv@bnl.gov. Include a single-line message: subscribe SYLUG-L Your Name. "Your Name" should be your given name, not your log-in name.

For more information, contact Susan Eng, Ext. 7988, or send Email to sge@bnl.gov.

Smoking Ban (cont'd)

car accidents and AIDS combined. According to Reilly, more than 425,000 people die in the U.S. each year as a result of diseases related to smoking. He estimated that approximately 25 percent of adult Americans 18 years and older still smoke; at BNL that figure is lower — estimated at about 18 percent of regular employees.

The EPA's findings, along with many employees' strong reactions to them, prompted Lab officials to take another look at the smoking policy that had been in effect since 1988, which had prohibited smoking in essentially all but designated smoking areas.

In banning smoking from virtually all buildings on site, Brookhaven will be enacting a policy similar to that now in force at the White House, at U.S. Department of Energy headquarters and a number of its fellow national laboratories.

Actually, the new policy is already old policy for several groups at BNL. For example, the Biology Department declared Bldgs. 463 and 421 smoke-free in February 1991; the Technical Information Division did the same in Bldg. 477 in May 1990. The Instrumentation Division in Bldg. 535B has also had a smoke-free environment since 1990.

Summer Science For Local Students

Again this summer, BNL will conduct a Community Summer Science Program (CSSP) for local students who are currently completing their junior or senior year in high school.

The CSSP offers a six-week morning lecture series by BNL staff, introducing participants to the fascination of forefront science. Afternoon internships are also available, in which students participate in research or special in-depth courses under the direction of Lab staff. Internships carry a stipend and are limited. Teachers may also attend the morning program and/or afternoon activities by special arrangement.

The 1993 CSSP will run July 6 through August 13. For more information or application material, contact the Office of Educational Programs (OEP) at the Science Education Center, Ext. 4503. OEP would especially like to hear from Lab staff members interested in serving as lecturers or student advisors in the 1993 program.

ANS Meeting

Greg Van Tuyle, Deputy Division Head of BNL's Advanced Technology Division (ATD) in the Department of Nuclear Energy, will speak on "Making Neutrons the Hard Way," at a meeting of the Long Island Section of the American Nuclear Society (LIANS), on Wednesday, April 21, at the Radisson Hotel Islandia at 8 p.m. He will be introduced by ATD Head Lew Snead. For dinner reservations, call Roz Goldberg, 929-8300, Ext. 3611, by April 19.

Note to Employees:

Attendance at lectures, meetings and other special progams held during normal working hours is subject to supervisory concurrence.

Cafeteria Menu

Monday, April 19

Soup: Beef & cabbage	.80/1.10
Entree: Spaghetti & meatballs marinara	3.45
Lite Choice: Baked garlic herbed chicken	3.65
Carvery: Hot pastrami sandwich	2.95
Grill: Catch of the day	3.85
Taster's Bar: Egg-roll mania	(oz.) .25

Tuesday, April 20

Soup: New England leek & potato	.80/1.10
Entree: Marinated flank steak	3.65
Lite Choice: Spinach & artichoke cass.	3.65
Carvery: Hot roast beef sandwich	2.95
Grill: Lemon pepper chicken cutlets	3.95
Taster's Bar: Stuffed clams	(ea.) .50

Wednesday, April 21

Soup: Cream of broccoli	.80/1.10
Entree: Breaded pork chops w/applesauce	3.75
Lite Choice: Catch of the day	3.65
Carvery: Hot ham sandwich	2.95
Grill: Steak hoagie	3.25
Taster's Bar: Buffalo wings	(oz.) .25

Thursday, April 22

Soup: Minestrone	.80/1.10
Entree: Baked BBQ chicken	3.65
Lite Choice: Vegetarian platter	3.25
Carvery: Hot corned beef sandwich	2.95
Grill: Reuben platter	2.95
Taster's Bar: Potato bar w/toppings	(ea.) 1.50

Friday, April 23

Soup: New England clam chowder	.80/1.10
Entree: Stir-fried beef & broccoli	3.65
Lite Choice: Catch of the day	3.85
Carvery: Hot turkey sandwich	2.95
Grill: 3-cheese melt platter	2.95
Taster's Bar: Wing dings	(oz.) .25

Movie Night . . . Brookhaven Center
Wednesday, April 21 . . . 8 p.m.
Under Siege . . . free popcorn!

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Get WordPerfect Documents From Technical Publishing Center

During fiscal year 1992, three specialists in the Technical Publishing Center (TPC) of the Photography & Graphic Arts Division processed 31,261 pages of documents for BNL and Associated Universities, Inc. (AUI). Now only halfway into the current fiscal year, Vicki Feldman, Terry Jones and Craig Sirot have already produced more than 14,000 pages, with a projected annual production of more than 33,000 pages.

TPC has expanded its services to become more compatible with the Laboratory's publishing needs. The center can now prepare, edit and print WordPerfect documents from IBM low- or high-density disks, from handwritten documents, or from DOS files. Macintosh software programs are also available for text input and editing.

According to Mary Wigger, TPC Supervisor, the group previously prepared scientific, technical and administrative documents on the Compugraphic Automated Publishing System (CAPS), a proprietary software system not compatible with other computers at the Lab. CAPS is still used for preparing long, complex documents with many equations or tables and has a future when government-mandated Standard Generalized Markup Language (SGML) is implemented. SGML is a coding system that enables any computer program to maintain a document's format.

Around BNL, however, WordPerfect has become the favored program for preparing most documents. Wigger explained that in the early 1980s, when computers replaced most typewriters at BNL, a large variety of word processing programs were in use. "Now," she said, "the Lab is more standardized, and the majority seems to use WordPerfect for word processing.

"With this new service," she added, "we can offer some relief for overloaded secretaries and enable scientists to concentrate on science."

At 300 or 600 dots per inch (dpi) on plain paper, 1,200 dpi on Linotronic paper, or, as appropriate, 2,400 dpi on paper or negative film from the high-resolution image setter, TPC's output is publishing quality and ready for reproduction.

While turnaround time depends on the complexity as well as the size of the document, Wigger said most small jobs — up to 20 pages — can be done in one day, through the use of two shifts. For further information, call Mary Wigger at Ext. 2926. — Diane Greenberg

Equipment Demo

On Thursday, April 22, DC Associates will exhibit its complete line of vacuum equipment and systems in Berkner Hall from 10 a.m. to 3 p.m. This will include ceramic to metal hardware, oil-free pumps, turbo pumps, cryo-pumps, oils and residual gas analyzers.

Arrivals & Departures

Arrivals

Richard C. Anderson . . . . . RHIC

Departures

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

Michael Huskey . . . . . Sfgrds. & Sec.

Atlantic City Trip

A few seats remain for the next BERA-sponsored one-day trip to Trump Castle Hotel and Casino on the Marina in Atlantic City, on Saturday, May 1. The initial cost is $20, but the hotel/casino will give a $7.50 coin return, a choice of either $5 towards food or an additional $2.50 in coin, and a $5 deferred-return voucher.

Tickets are on sale now at the BERA Sales Office in Berkner Hall weekdays from 9 a.m. to 1:30 p.m. For more information, call Carolann Zebrowski, Ext. 3347; Rosalie Piccione, Ext. 3160; or Kay Dellimore, Ext. 2873.

Outreach Workshop

Alcohol Use, Abuse & Recovery

Though alcohol is largely a legally sanctioned and socially accepted drug, it is addictive, and some people are more susceptible to its influence than others. However, distinguishing between heavy use and abuse of alcohol is not that simple, both for drinkers and those around them.

The fine line between heavy social drinking and alcohol abuse will be explored in the next Outreach workshop. Sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic, "Alcohol Use, Abuse and Recovery" will be discussed by clinical psychologist Robert Quilty, on Tuesday, April 20, from noon to 1 p.m. in Berkner Hall.

As Quilty will discuss, obsessive thoughts anticipating the next drink and a compulsion to drink whether or not it is appropriate mark a drinking problem — whether or not a person abstains from alcohol, drinks every night, becomes drunk on weekends or during social gatherings, or binges every once in awhile.

Quilty will also talk about such social phenomena as peer pressure that cause certain groups of people — such as young, male college students — to drink heavily, as if it were a rite of passage at certain points in their lives, but then outgrow that behavior. He will conclude by comparing the traditional abstinence-based approach to recovery, which includes Alcoholics Anonymous, with other therapeutic methods.

Robert Quilty earned his Ph.D. in clinical psychology from Columbia University during his 22 years as a New York City firefighter. He retired in 1982 as a fire lieutenant and staff psychologist with the department's Counseling Services Unit, for which he helped establish stress management and alcohol counseling programs for firefighters and their families. In addition to doing alcohol-counseling consulting work for Long Island corporate EAPs, Quilty is now in private practice in Stony Brook Village.

To register for this workshop, complete and return the Outreach flyer recently sent to all employees to EAP Staff Psychologist Diane Polowczyk, Bldg. 490. For more information about the EAP and its Outreach workshop series, call Ext. 4567.

Coming Up

Calliope, a Renaissance quartet, will appear in concert in Berkner Hall on Tuesday, April 27, at 8 p.m. In addition to music from the time of Christopher Columbus, c. 1410-1521, such as *Settings of L'homme armé* and other pieces from composers in German lands, Burgundy, Italy and Spain, the program will include the group's 1989 composition, *Improvisation.*

Tickets can be purchased at the door for $12, general admission; $9, students and people over 65; and $5, youths under 18.

Let's Dance

Singles and couples may still register for beginners' tango and Texas two-step lessons, with the BNL Ballroom, Latin & Swing Dance Club.

Classes are held Wednesdays from 5:15 to 6:30 p.m., in the North Ballroom of the Brookhaven Center. The cost is $15 per person for the series of seven more lessons, or $3 at the door. Late registrations will be accepted before the next class, on Wednesday, April 21.

Advance tickets at $20 per person remain available for the club's Swing Into Spring dinner-dance, on Friday, April 23, 6-11 p.m. For tickets, contact: Violet Bezler, Ext. 3771, Bldg. 510; Connie Economos, Ext. 2594, Bldg. 130; Jack Guthy, Ext. 4411, Bldg. 750; Ron Ondrovic, Ext. 4553, Bldg. 355; Susie Perino, Ext. 2477, Bldg. 134; Nedy Santiago, Ext. 3402, Bldg. 701; or Liz Seubert, Ext. 2346, Bldg. 134.

Date Change on Trip To *Les Miserables*

The date has been changed for the BERA-sponsored bus trip to New York City to see the Broadway show *Les Miserables*; the new date is Saturday, June 5.

The cost of $119 per person includes: round-trip bus transportation, brief tour of South Street Seaport, an orchestra seat to the matinee performance of *Les Miserables*, full-course dinner at Cafe 44 Restaurant, and all taxes and tips.

Review a sample menu and/or make reservations now with a $50 deposit at the BERA Sales Office in Berkner Hall, weekdays, 9 a.m. to 1:30 p.m. The balance is due by May 21.

For more information, call Carolann Zebrowski, Ext. 3347, or M. Kay Dellimore, Ext. 2873.

Bowling

Red/Green League

R. Mulderig bowled a 245/625 scratch series, K. Asselta 228, S. DiMaiuta 225, K. Koebel 225, H. Arnesen 217/204/200/621 scratch, R. Jones 217, R. Wiseman 216, A. Warkentien 215, E. Sperry IV 214/208/616 scratch, R. Larsen 211/211/603 scratch, M. Palumbo 211/207/204/622 scratch, F. Hohmann 207, R. Eggert 201, T. Prach 200.

Purple League

Jim Goode had a 221, Bob Geib 214, Vito Manzella 204/517 scratch, Denise Monteleone 202, Betty Jellett 201, Pat Manzella 193, Elaine Zukowski 185, Sharon Smith 181, Georgia Irving 171. Denise Monteleone converted the 2-6-7 split.

White League

Rich Larsen bowled a 257, Jim Meier 242/607 scratch series, Andy Warkentien 229/588 scratch, Ben Belligan 221/205/594 scratch, Maryann Reynolds 190/170/527 scratch, Nancy Mayeski 170.

Volleyball

Standings as of April 7

Open League — Playoffs

GTeam vs. Penetrating Vollies
The Roofing Company vs. Farside
Penetrating Vollies beat Me & the Boys in the first round of playoffs.

League I — Final		League II — Final	
Network News	55-14	Monday Nite Live	56-7
VolleyBallAholics	47-22	Safe Sets	47-16
Rude Dogs	43-23	Nuts & Bolts	34-29
Upfagrabs	42-24	Fossils	29-34
Underdogs	16-50	Net Wits	29-34
Fornossing	13-53	Night Court	27-36
		Just Up	16-47
		Sourcerers	14-49

League III — Final

Jolly Vollies	45-18	Silver Bullets	30-33
High Volley'em	41-21	Volley of the Dolls	28-35
Upton Ups	36-27	Mis-Fits	22-41
Nutcrackers	31-32	Hairballs	17-46

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position. Consideration is given to candidates 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, handicap or veteran status.

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and, second, for general recruiting under 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, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

SCIENTIFIC RECRUITMENT - Candidates may apply directly to the department representative named.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in electrochemistry, to conduct research involving both the fundamental and applied aspects of the behavior of metal hydride electrodes. Experience in x-ray diffraction techniques, physical chemistry and metallurgical measurements is desirable. Contact: James Reilly, Department of Applied Science.

ASSISTANT SCIENTIST - With Ph.D. in biosciences or chemistry, trained in DNA sequencing techniques, capillary electrophoresis and fluorescence detection, to develop instrumentation for DNA sequencing. Will join an interactive team that includes biochemists and computer scientists to implement a new strategy for high-throughput DNA sequencing for the Human Genome Project. Contact: F. William Studier, Biology Department.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in synthetic organic chemistry, to join the Cyclotron-PET Program. Will participate in the development of rapid organic synthetic methods for incorporating the short-lived positron emitters, carbon-11 and fluorine-18 (half-life: 20.4 and 110 minutes, respectively), into organic molecules. A broad knowledge of modern synthetic organic chemistry is important, along with experience in high-performance purification and analytical methods. Contact: Joanna Fowler, Chemistry Department.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in experimental condensed matter physics/materials science, with emphasis on measurements describing microscopic interactions in solids. Experience in diffraction techniques such as neutron, x-ray or light scattering is desirable. Contact: Stephen Shapiro, Physics Department.

SCIENTIFIC POSITIONS - At various levels, for individuals with Ph.D. in physics and experience in nuclear or high energy experimental research, to conduct relativistic heavy-ion research in experiments at the AGS and plan for experiments at RHIC. Experience in relativistic heavy-ion research is desirable. Contact: Peter Bond, Physics Department.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

DD 2408. OFFICE SERVICES POSITION - Requires AAS in secretarial science or equivalent and WordPerfect 5.1 experience. Will provide varied clerical support to the administrative staff of the Office of Technology Transfer. Knowledge of Office of Technology Transfer matters such as Laboratory's users facilities, license agreements and patent-related work is highly desirable. Duties will include typing, telephones and filing. Director's Office.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

DD 0416. MEDICAL ASSOCIATE - (term appointment) Requires BS in biology or related field and a minimum five years' laboratory experience in tissue culture, animal experimentation and radioisotope handling. Responsibilities will include identification of gene changes during the development of radiation-induced murine myeloid leukemia. Medical Department.

DD 2001. DESIGN POSITION - (term appointment) Requires AAS or equivalent and a minimum 10 years' experience in the design of machinery and mechanical equipment. A thorough knowledge of design fundamentals is also required including: strength of materials, materials application, use of stress/strain formulas, machining and assembly procedures, drawing portrayal, and dimensioning and tolerancing. Extensive computer drawing experience is also required; AutoCAD Release 12 preferred. (reposting) Physics Department.

DD 0500. TECHNICAL POSITION - (term appointment) Requires AAS in mechanical technology or equivalent experience and demonstrated mechanical fabrication, assembly and machine shop skills. Experience with large detector systems, especially wire chamber systems, is required. Supervisory experience and computer-based detector testing systems experience are highly desirable. Duties include the preparation of fixtures, test beds and lab space for large wire-chamber production. (reposting) Physics Department.

NS 8172. ENGINEERING POSITION - Requires BS in an appropriate field, and approximately three years' professional experience in health physics, industrial hygiene or safety engineering. Responsibilities include radiation exposure and contamination control, industrial hygiene monitoring, safety engineering, and program audit and oversight. Safety & Environmental Protection Division.

NS 2003. ENGINEERING POSITION - (term appointment) Requires BS in engineering and complete familiarity of the GEM calorimetry, including the structural and cryogenic issues, as well as fabrication, assembly and installation. Will coordinate the engineering team for the liquid argon/krypton calorimeter and all work done at various institutions in the collaboration. A record of success in large projects is essential. Physics Department.

NS 0498. ENGINEERING POSITIONS - (term appointments) Requires a minimum of a BSME and approximately ten years' experience in the design and fabrication of mechanical or experimental equipment, including stress analysis. The ability to carry designs from inception through drawings, shops and assembly is required. Comprehensive knowledge of design engineering fundamentals and analytical techniques for application in one or more of these specific areas required: vacuum systems, gas handling and storage, structures, pressure vessels, optical systems or lifting/handling equipment. AutoCAD and FEA experience preferred. (reposting) Physics Department.

Motor Vehicles & Supplies

87 CAMARO - ac, a/t, alarm, stereo, blue/black int., gar., orig. owner, excel., $3,900. 874-3796.

84 MERCURY TOPAZ - 5-spd , runs well, $650 neg. Mike, 929-8443.

78 CHEVY MONTE CARLO - 350 motor, clean, asking $1,400. Steve, Ext. 3849 or 929-0586.

92 MERCURY TRACER LTS - 9k mi., 4-dr., a/t, ac, '92 *Road and Track* 10 best, $9,500; '89 Plymouth Sundance RS, 18k mi., $5,775. Eric, Ext. 5875.

91 PLYMOUTH LASER - red, 5-spd., p/s, p/b, ac, am/fm, 7-70 warr., 30k mi., $9,200. 467-4975 after 6 p.m. Mike, Ext. 3082.

90 NISSAN 300ZX - gold pearl, a/t, electronic pkg., leather, ABS, T-top, Bose stereo, loaded, 31k mi., clean, like new. Amy, 924-7552.

89 PONTIAC LEMANS - p/s, p/b, a/t, alarm, excel., $5,500; '84 Pontiac Trans Am, p/s, p/b, a/t, good cond., $1,500 neg. 277-2671 after 6 p.m.

89 HYUNDAI EXCEL - 2-dr. hardtop, sunroof, 5-spd., orig. owner, 37k mi., excel. cond., $2,650. Gene, Ext. 2793 or 744-7324.

89 DODGE GRAND CARAVAN - 7-pass., V-6, a/t, ac, p/s, p/b, removeable seat, clean, v.g. cond., $7,300 neg. 399-6698.

89 MITSUBISHI MIRAGE - 34k mi., 4-dr., showroom cond., $4,300. 325-2707, leave message.

88 JEEP WRANGLER - red, hardtop, 5-spd., low mi., $6,500; '87 Suzuki Samurai, black, 2 tops, loaded, low mi., $3,500. 924-6019.

88 NISSAN 4x4 - p/s, p/b, good cond., many extras, $7,500 neg. Fran McKenna, 369-9062.

88 CHRYSLER LEBARON - coupe, 81k mi., loaded, excel. cond., $5,100. Ed, Ext. 7943.

88 HONDA ACCORD - coupe, 5-spd., ac, 63k mi., very clean, $7,000. Don, Ext. 7494 or 361-8853.

87 JEEP CHEROKEE LAREDO 4x4 - 4-dr., 4.0L, sunroof, many extras, excel. cond., $5,000 firm. Jeanne, Ext. 2614 or 286-1290 eves.

87 DODGE COLT - 78k mi., 4-cyl., a/t, am/fm cass., excel. cond., $1,800 neg. Angie, 821-3149.

87 NISSAN STANZA GXE - all power, ac, sunroof, loaded, am/fm cass., good cond., asking $3,900. Tim, Ext. 5277 or 744-1090.

87 HONDA CIVIC CRX - 5-spd., 85k mi, V-4, ac, runs well, must sell, $3,300. Wei, 345-5248.

87 MAZDA B2000 - 50k mi., recent factory major service, cap, liner, 5-spd., recent tires, *Consumers* best buy, $3,200. Dave, Ext. 7268.

86 JEEP COMMANCHE 4x4 - reg. cab, stereo cass., bedliner, sunroof, good cond., $5,000 neg. Mike, 929-4716.

85 SUBARU XT - coupe, sunroof, am/fm cass., 5-spd., 35 mpg, 96k mi., $1,900. 588-9325.

84 BMW 318I - 2-dr., 5-spd., ac, p/mirrors, sunroof, no rust. 821-1206, leave message.

84 CAMARO - T-top, high mi., needs tranny work, runs well, $1,200 neg. Maryann, Ext. 5241.

84 NISSAN SENTRA WAGON - a/t, ac, p/w, 99k mi., needs carb., excel. cond. Vinnie, 928-1632.

81 CHEVY CAMARO 350 - dark blue, 650 Holly intake, 350 tranny, needs exhaust, $1,500. Mike, Ext. 2499.

81 DODGE CUSTOM VAN - new paint, brakes, motor, tires, must see, asking $3,500. Bob, Ext. 4672 or 929-4753.

78 CHEVY SUBURBAN - 4wd, mech. very good, 50k mi. on new engine, body rust, $1,000. Mark, Ext. 2599.

78 DODGE DIPLOMAT - 318 V-8, 4-dr., a/t, 100+k mi., reblt. trans., new rad., needs rear end, $200 neg. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

78 CHEVY MONTE CARLO - 350 motor, clean, asking $1,400. Steve, Ext. 3849 or 929-0586.

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste.

77 WINNEBAGO MOTOR HOME - 25', Chevy chassis, 350 V-8, very clean, excel. cond., asking $8,000. Tony, 727-3863.

75 BLAZER - a/t, new rebuilt eng., excel., body needs work, $900 or best offer. Russ, 325-0563.

70 PONTIAC CATALINA - 350 engine, a/t, p/s, p/b, 135k mi., all orig., mint cond. Dave, Ext. 4660.

66 MUSTANG - white, 8-cyl. rebuilt engine., a/t, v.g. cond. asking $5,000. 286-0384.

66 PONTIAC CATALINA - conv., 53k orig. mi., v.g. cond., $3,900. Roger, Ext. 7518 or 878-8847.

RIM - regular, new tire, to fit Ford Tempo, $60. 924-6751.

TIRE - 1, 33-12x50 BF Goodrich sport radial truck T/A, like new, 2 Centerline rims for Ford pickup. Wayne, Ext. 3082.

TIRES - all-season Bridgestone SF406, steel, P205/65R15. Ext. 2077.

CLUTCH - '80 Toyota Tercel, 5-spd., $25 neg. Bob, Ext. 7238.

Boats & Marine Supplies

28' CARVER - F/B, Loran, VHF, DF, twin FWC, glass hull, gen., galley, sleeps 6, H/C, FW, trim. Henry, 821-5245.

20' RENKEN 86 - 140 OMC i/o, trailer, v.g. cond., $4,700. 929-4369 after 6 p.m.

20' RENKEN - 1981, cuddy cabin, 145-h.p. Volvo i/o, full canvas, trailer, p/winch. Ernie, Ext. 5327 or 567-8179.

19' BOAT HULL - fiberglass, steering w/cables, needs new floor, $50. Paul, 727-4859.

16' CHRYSLER BOAT - & trailer, 105-h.p. Chrysler ob., does not run, boat & trailer in good cond., $50. Mark, Ext. 2599.

14' HOBIE CAT - roller reefing jib, trailer, $1,200. Ext. 7657 or 298-9560.

14' HOBIE CAT - roller reefing jib, good cond., fast & fun, $900; '87 Jet Ski 300, excel. cond., $1,100. 878-1178.

Furnishings & Appliances

CEILING FAN - 4-blade white, no light, great cond. Kathy, Ext. 2267 or 395-6520.

ENTERTAINMENT CENTER - 6'x3'x2', radio, phono, space for TV, storage, speakers, maple, $150; pine hutch, new cond., $350. 744-3842.

RANGE - Caloric, 4-burner, nat. gas, $50; Norge washer, Westinghouse dryer, $100/ea., or $160/both. Frank, Ext. 7519 or Vita, 277-0464.

SOFA BED - blue/grey, great cond., $285; ping-pong table, $65. Mary, 924-6235.

BEDROOM SET - Colonial, queen size, triple dresser w/tri-view mirror, chest, headbaord, footboard, 2 night tables, $450. Rich, 475-0373.

BEDROOM SET - oak bunk bed, desk w/hutch, night table, $350; 6' drafting table, $150. Terry, 499-8377.

BEDROOM SET - black lacquer, w/full size matrress, boxspring; dinette set, table, 60"x36", wood grain Formica top, 8 chairs. Ext. 4109.

COLLECTIBLES - some antiques; big variety; water bed; air conditioners, $50 - $75; love seat, $60. Kathy, 929-8443.

COUCH - sleeper, queen size, two-tone tan, mattress new, $150. Helen, 281-6263.

COUCH & CHAIR - gold/green, good cond., $100; swivel rocker, $25. Paul, 727-4859.

DRYER - Kenmore, 2½ yrs. old, white; patio furniture, gray, 4 chairs, umbrella; water bed, super twin; shower doors, more. 924-2864.

HUTCH - country pine, new cond., orig. $3,000, sell $350. S. Saxon, 744-3842.

LIVING ROOM FURN. - w/3 side tables, $350; TV stand, $25; crib, $50; 19" color TV, $110; food processor, $50; much more. Haleem, Ext. 7482.

RATTAN SWIVEL ROCKER - w/tan pad, new cond., $50 firm. Jerry, Ext. 7427 before 4 p.m. or 475-5591 after 5 p.m.

REFRIGERATOR - side-by-side, 35½"W, white, self-defrost, ice maker, $250. Steve, Ext. 3100 or 878-4880.

REFRIGERATOR - 18 cu. ft., GE, harvest gold, approx. 10 yrs. old, works great, clean, $75. G. Rackett, 477-8699.

SLEEP SOFA - Sealy Posturepedic, dbl. bed, excel., $200; Whirlpool air cond., 8,000 Btu, EER 9.0, 110V, 1 yr. old, $250. Culwick, Ext. 4930.

SECTIONAL SOFA - like new, neutral color, 2 reclining ends, $375; oak chairs, new, assorted pairs, $35/ea. Anne, 361-6835.

STOVE - Kenmore, gas, almond, double oven, top & bottom, $150 neg. Ext. 7238.

WATER BED - king size, headboard, w/am/fm radio, alarm clock, wrapped in brown leather, heater, $175. Donna, Ext. 5136.

VANITY - wood w/glass top, trifold mirror. Sharon, Ext. 3995.

WATER BED - king size, solid pine, 4-poster, mattress, liner, heater, excel. cond., $250. Sheila, 246-5070.

Tools, House & Garden

SPRUCE TREES - Norway, white, blue, Douglas fir, 4-6', balled, burlapped, 35 avail., avg. $40/ea. Tom, Ext. 4507 or 878-1060.

ANNUALS/FLOWERS - $11/flat, $6/half-flat; vegetables, $1/pack, large selection. Ray, 727-6818 after 4 p.m.

BATHROOM VANITY - oak cabinet, 25"Wx 22"Dx30½"H, cultured marble sink, Delta faucet, excel. cond., $90/neg. 475-8658 after 3 p.m.

CHAIN SAW - electric, 15", 2.25-hp, splitting maul, wedge, 100' extension cord, like new, $90/all. Sheila, 246-5070.

FOLDING DOOR - 7 sections, new, still in box, make offer. Al, Ext. 7699 or 821-1435.

LAWN MOWER - Toro, 21", self-propelled, rear bag, mulches, excel. cond., $250. J.Washburne, 589-3608.

LAWN MOWER - Briggs & Stratton, 3.5-h.p., gasoline powered, self-propelled, 22", $50. G. Friedlander, 724-5131.

MAPLE TREES - Japanese red, $10-$45+; Sears riding tractor, 12-h.p., 4' deck, snow blower, battery start, trailer. Mauro, 265-6542 after 6 p.m.

PUMP - deep well, ½-h.p., excel. cond., $125. 744-2060.

WHITE PINES - nursery grown, up to 3', $3/foot; potted hydrangeas, French, 1 yr. old, $3/ea. John, Ext. 744-5867.

Sports, Hobbies & Pets

ANIMAL CAGE - 10 gal., small, w/cover, water bottle, running wheel, outside exerciser, ball, $30; Jerry, Ext. 7427 till 4 p.m. or 475-5591 after 5 p.m.

BORDER COLLIE MIX - female, free to loving family, loves children, 2 yrs. old, all shots, neutured. Ron, Ext. 2525 opr 286-0353 after 6 p.m.

CHILD'S BIKE - 16", w/training wheels, new, $50. Z.Zhao, Ext. 4331.

CHILDREN'S BIKES - $35. Harleem, Ext. 7482.

DRUM SET - $60; Ping-Pong table, $35; karate sparring equipment, new, never used, $110. Terry, 499-8377.

HEALTH CLUB MEMBERSHIP - Jack LaLanne Gold, Lake Grove, dues $84/yr., payable each June, no transfer fees, ask. $300. Susan, Ext. 7318.

PING-PONG TABLE - on wheels, collapsible, $75. Charlie, Ext. 2804.

POOL TABLE - bumper, good cond. Dave, Ext. 2109.

ROTTWEILER PUPPIES - certified pedigree, AKC champion lines, parents OFA certified, excel. temperament. Kevin or Liz, 698-0162 after 6 p.m.

SKIS - 140cm, Tyrolia bindings, Atomic, hot pink, $50; ski boots, men's, size 9½, $20; ski jacket, kid's size 16, $20. Sue, Ext. 3492.

TELESCOPE - w/tripod, 2.4" refractor, 60mm, F12, needs eyepiece. Sharon, Ext. 3995.

Audio, Video & Computer

COMPUTER - DEC Pro 350, w/keyboard, monitor, printer, LA50 Hayes modem, software, Fortran, terminal, whole or parts; make offer. Ext, 7699.

COMPUTER - HP86, exp. mem., graphics inter., plotter ROM, monitor, 5" disc drives, software, Okidata printer, best offer. Steve, Ext. 3018.

COMPUTER - 486 SX/SLC, 25Mhz, mini-tower, keyboard, MSDOS 5.0, 14" mon., 200W supply, unused, in boxes, $525. Ext. 2679 or 472-6922.

NINTENDO - basic unit, Super Mario 3, $60. Alex, Ext. 3723 or 341-1018.

TV - RCA, 25", color, console, old, works well, not cable ready. Don, Ext. 2249.

TV - b&w, 19", good cond., $10. Frank, Ext. 3120.

TV - Sharp, 25", color, excel. cond., $170. Sheila, 246-5070.

VIDEO CAMCORDER - Sony F46, 1 yr. old, like new, $350. 744-2060.

Miscellaneous

BABY'S HIGHCHAIR - chrome, old, v.g. cond., $15. 281-7844 eves.

BRIDESMAIDS' GOWNS - petite, peach w/bow, size 9; pink, size 9, black satin, size 7, both w/white lace, $50/ea. Lisa, 698-4882 after 6 p.m.

CHILD'S CAR SEAT - Evenflo, one-step, good cond., $30. Ext. 7518 or 878-8847.

ENGAGEMENT RING - diamond, 14k, gold, $550 or best offer. Shawn, Ext. 5740.

PLATE GLASS - bronze, ¼"x26"x89½", 5 pieces, $35/ea. Ernie, 588-4987.

TICKETS - 2 for BERA-sponsored trip to *Miss Saigon*, Sat., 4/24, $11/ea., matinee, dinner at Cafe 44, transportation. Stas, Ext. 7849.

TICKETS - NY Mets, 2 box seats, avail. for various games, loge, Sect. 15. Bill, Ext. 2171.

Free

CINDER BLOCKS - come and take. 289-0253.

COMMODORE 64 - free w/disk drive. Brian, Ext. 3102.

COUCH - good cond., you pick up. Bill, Ext. 7961.

WINDOW - double-hung, six panes on top. Janet, Ext. 2345 or 929-3910.

Yard & Garage Sales

SHOREHAM - 4/24-25, 9 a.m., household items, tools, lumber, misc., 32 Circle Drive.

Lost & Found

LOST - Eastport, dog, male, black Lab w/white star on chest, neutered, 35 lbs., red collar, answers to Bear. Any information, call 325-1207.

Wanted

ANCHOR - 300 lbs., mushroom; 8-10' dinghy, rowboat or inflatable. Fred, Ext. 5032 or 744-2655.

APT. OR HOUSE - 2 or 3 bdrm., to rent, from 6/14-7/4. Ext. 3857.

BRIDGE PLAYERS - to start a BERA club. Willem, Ext. 7778 or 924-6129.

CAMPER - travel trailer, hard shell, 20-24', working cond., older models okay. Don, Ext. 7237 or 744-2921 after 5:30 p.m.

FRIENDS OF NATE CARTER - to celebrate his retirement 4/29, 5 p.m., Brookhaven Center, $23/person. Mark, Ext. 7267.

HOST FAMILIES - for foreign exchange students for summer and year programs w/the American Intercultural Student Exchange. Lori, 369-7809.

JUNK - cars, trucks, machinery, removed free. Rich, Ext. 4986 or 589-9103.

LUGGAGE - Thule carrier. Keith, Ext. 7772.

OLD FOUNTAIN PENS - cash paid. Catherine, 744-3383.

RECORDS - 33⅓ or 45 rpm, polkas, any year, rock & roll, 55-65. Frank, Ext. 3120 or 727-5096.

RIDER - to share driving expenses, round-trip from BNL-Pittsburgh, on weekends and holidays. Bill, Ext. 3698.

In Appreciation

Many thanks to all who supported me during my recovery from my illness. — Om V. Singh

Classified Ad deadline is 4:30 p.m. Friday for publication Friday of the next week.