BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

1993 Nobel Prize in Physics for AUI Trustee Joseph Taylor

Sometime after spending the summer as a student working at BNL's Cosmotron, Joseph Taylor turned his eyes toward the cosmos. There, in 1974, he and his graduate student Russell Hulse discovered the first known binary pulsar — a finding that verified Einstein's general theory of relativity and now has earned Taylor and Hulse the 1993 Nobel Prize in Physics.

While the two physicists are both associated with Princeton University — Taylor is James S. McDonnell Distinguished University Professor of Physics and Hulse is a principal research physicist at the Princeton Plasma Physics Laboratory — Taylor is also connected with Associated Universities, Inc. (AUI), which manages BNL and the National Radio Astronomy Observatory (NRAO).

Six years ago today, on October 22, 1987, Taylor became an AUI Trustee — a perfect forum for someone who has worked at both BNL and NRAO.

"Much of my professional work has been done at NRAO," said Taylor, following the award announcement on October 13. In 1980, Taylor became a member of the NRAO Visiting Committee, which he chaired in his last year of service, 1983. NRAO in Charlottesville, Virginia, is where Hulse was a postdoctoral fellow in 1975.

Of the newest Nobel laureate on the Board of Trustees, AUI President Robert Hughes said, "We are all very proud of Joe Taylor. For many years, it has been recognized that his pulsar work was worthy of a Nobel Prize — that day has finally come. We all appreciate his dedication and many contributions to AUI affairs."

In Pursuit of Pulsars

When Taylor and Hulse made their award-winning discovery, they were both at the University of Massachusetts at Amherst, where Taylor was an associate professor and Hulse was his graduate student. The first pulsar had been discovered in 1967, so, in 1974, Taylor and Hulse were conducting an extensive search for more pulsars, using the 300-meter radio telescope at Arecibo, Puerto Rico.

Dense, dying stars, pulsars spin with up to hundreds of revolutions per second. In stellar terms, they are quite small, with a radius of only about 10 kilometers, but their mass is somewhat greater than that of the sun.

Like lighthouse beacons, pulsars rotate and emit regular bursts of light. Radio telescopes on earth can observe these light pulses, but, when this new pulsar was picked up in Arecibo, Hulse and Taylor realized that its bursts were not perfectly regular.

The irregularity, the physicists found, revealed that one pulsar is revolving around another — that the two, approximately equally heavy dying stars are orbiting each other. And the companion stars are very close — only a few times the distance of the moon from the earth. This binary pulsar system, the scientists realized, would provide an excellent opportunity to test the general theory of relativity.

Since then, Hulse has changed fields, going from astrophysics to plasma physics. But Taylor's research has been devoted to using the "relativity laboratory" provided by this binary pulsar and many others his group subsequently discovered.

In the 'Relativity Laboratory'

Over the years, this ingenious and painstaking research has indicated that the orbit of the pulsars around each other is decaying slightly. In other words, the two dying stars are rotating faster and faster around each other in an increasingly tight orbit.

Though the change is small — only about 75 millionths of a second per year — the implications for astrophysics and gravitational physics are large: The change is presumed to occur because the system is emitting energy in the form of gravitational waves.

In 1916, Einstein had predicted that this should happen to masses moving relatively to each other. Sixty-two years later, in 1978, Taylor and his coworkers first reported that the theoretically calculated value from the relativity theory agrees with the observed value — providing indirect proof of the existence of gravitational waves and the accuracy of Einstein's theory. By 1992, the experimental accuracy had improved to better than one half of one percent.

Joseph Taylor

Joseph Taylor was a BNL summer student in 1962 as an undergraduate at Haverford College, from which he received his B.A. in physics in 1963. Assigned to the Cosmotron — the world's first proton synchrotron and the first to produce particles at energies in the billion electron volt region — Taylor worked on measuring the temperature coefficient of resistivity of lithium wire for possible use in magnetic lenses for beam-focusing.

In 1968, Taylor earned his Ph.D. in astronomy from Harvard University. He joined the University of Massachusetts faculty as an assistant professor in 1969, and was promoted to associate professor in 1973, then to professor in 1977. He became a professor of physics at Princeton in 1980 and was named to the McDonnell chair in 1986. From 1977 to 1981, Taylor served as associate director of the Five College Radio Astronomy Observatory in Massachusetts.

Taylor's previous honors have included the Dannie Heineman Prize of the American Astronomical Society and American Institute of Physics in 1980, a MacArthur Fellowship in 1981 and the Wolf Prize in Physics in 1992.

Another Nobel Prize winner on the AUI Board of Trustees is Chairman Val Fitch, also of Princeton, who, in 1980 shared the award with James Cronin, now of the University of Chicago, for their 1964 discovery of CP violation, at BNL's Alternating Gradient Synchrotron.

BNL First on Board With New Interagency Agreement

Roger Stoutenburgh

At a meeting to announce the selection of grantees to provide hazardous materials handling courses at BNL are: (from left) Spencer Viner, Laborers AGC; Lou Evers, President, BNL local Oil, Chemical and Atomic Workers Union (OCAW); Patti Bender, Plant Engineering Division; Gerald Kassalow, Office of Environmental Restoration and Waste Management, U.S. Department of Energy (DOE); Deborah Weinstock, Booz, Allen and Hamilton, Washington, D.C.; Bill Fortunato, BNL's Safety & Environmental Protection Division (SEP); Mary White, BNL Training Office, Personnel Division; Frank Crescenzo, DOE Brookhaven Area Office; Ron Reyer, BNL Reactor Division, David Kotelchuck, Hunter-NJ/NY Consortium; Jim Nemeth, SEP, BNL; Randell Foster, OCAW/International Union.

BNL is the first U.S. Department of Energy (DOE) facility to select grantees to provide training under a new interagency agreement.

The agreement, established between DOE and the National Institute of Environmental Health Sciences, will bring courses in hazardous materials handling to selected employees at DOE facilities. The grantees will be funded under the ageement to deliver these courses, required by regulation.

According to Mary White, Manager of BNL's Training Office in the Personnel Division, "The advantage to BNL is that our employees will receive required training at no cost to the Laboratory."

White went on to explain that the Lab chose three organizations to provide training: Laborers AGC; the Oil, Chemical and Atomic Workers Union; and the University of Medicine and Dentistry, New Jersey/New York Consortium. The selection of the grantees was based on an assessment of BNL's training needs conducted on site in August by the grantees. Also participating in the assessment, which was coordinated by the Training Office, were BNL's Safety and Environmental Protection Division, Office of Environmental Restoration and Plant Engineering Division.

Among the courses given priority by the assessment participants were: Hazardous Waste Operations and Emergency Response, Emergency Response (First Responder Operations Level), and Asbestos Operations and Maintenance.

Working closely with the Training Office on the selection of the grantees was Plant Engineering Training Coordinator Patti Bender. "As a result of the grants, more of the courses we need will be readily available and easier to get to, since they will be either on site or conveniently close by," she commented.

Carson Nealy, Manager of DOE's Brookhaven Area Office, said, "This is an excellent example of how government, labor and academic cooperation can be of mutual benefit."

When the first courses become available, employees selected at departmental discretion will be scheduled to attend by their Training Coordinators.

Coming Up

A Book/Information Fair will be held in Berkner Hall on Thursday, November 4, from 10 a.m. to 3 p.m. Sponsored by the Technical Information Division (TID), the fair will feature books on all scientific and technical disciplines, including computer science and management; two speakers on electronic publishing; and demonstrations of TID's new records-management database and of methods for accessing Internet.

Software In the Spotlight

Are you wondering about the latest spreadsheet software? Do you want to check out a new word-processing package? Well, here's your chance. The Software Store in Bldg. 515 will sponsor an Open House next Friday, October 29, from 9:30 a.m. to 4:30 p.m.

"We've recently renovated the store and expanded our stock," said Donna-Ree Rodriguez, a technical specialist in the Computing & Communications Division, who runs the store. "All employees are welcome to come to the Open House to browse. We'll even have a sale table with discounts of at least 50 percent."

The Software Store sells software

Roger Stoutenburgh

Donna-Ree Rodriquez

for all types of computers used at the Lab. The store now sells stock at university prices, which means big savings for BNL users. For example, WordPerfect, which retails for $495, can be purchased at the Software Store for approximately $99; Microsoft Word, with a retail price of $425, is now $129; and Harvard Graphics for Windows sells for $130 instead of $425.

Representatives from various software companies will also be at the Open House to offer hands-on demonstrations upon request. Those invited include representatives from Borland International, Central Point Software, Lotus Corporation, Microsoft Corporation, Shapeware, Symantec Corporation and WordPerfect Corporation.

Software for home use cannot be purchased at the Lab, but BNLers who present their ID cards at the computer store at the State University of New York at Stony Brook will get university discounts on most software.

For more information about software sales, call Donna-Ree Rodriguez at Ext. 4127. — Diane Greenberg

Glynn and Glynn — Feasts to Go, Housing to Stay

"Hi, Pat!" "Hello, Pat!" "Morning, Pat!" Wherever you may be at the Lab, if you are talking to Patrick Glynn of the Staff Services Division, you'll see that most people passing have a greeting and a smile to exchange for the cheerful grin and wave he produces as a matter of course, no matter how busy he is.

And Glynn is always busy — for some 31 years he's been setting up conferences, preparing for parties, bringing coffee for meetings — helping ensure the smooth running of BNL gatherings that range from the almost haphazard to the exceedingly formal.

Right now, Glynn is busy for a somewhat unusual reason — he must be one of the few people at the Lab ever to make all the arrangements for his own farewell party. The party will be held at the Brookhaven Center tonight, October 22, and it's not only for Pat, but also for his wife Mary Glynn, who retired last month after 21 years at BNL — also in Staff Services.

"Although we were both in Staff Services, we rarely worked together," says Mary. "I was always in Housing, so while Pat saw to what people ate, I saw to their sleeping arrangements. We came in separately, because although I'd sometimes want to be early to get a head start during a conference, he would regularly be at the Lab by 6 or 6:30 a.m."

While Mary usually had a later start than Pat, during the day she was equally busy. "In Housing, it's like playing chess," she says. "You are moving people around to try and get the best accommodation possible for

Roger Stoutenburgh

Mary and Patrick Glynn

everyone. We sometimes went crazy, but we were never bored!"

Mary, who started in Housing as an offices services assistant in 1972, became the first Housing Supervisor in 1985, and left as Supervisor of Housing and Special Program Services in September 1993. Pat has had an equally successful career, starting in 1962 as a janitor for nine months, moving into Special Services in 1965, and eventually becoming Special Services Supervisor in 1987, with a sheaf of complimentary letters from BNLers in every department and division.

These letters are studded with thanks for "the last-minute details you handled with care and proficiency" . . ."fine efforts". . ."ensuring the success of the meeting,". . ."your willingness to go the extra bit". . ."enthusiastic, professional and dedicated efforts" — and much more. But if Pat is asked how he ensured such success, he shrugs off the difficulties. "You find out how many there are for food, what arrangement is needed for the tables, is there a cash bar, is it a sit-down or a buffet — thousands of little details," he explains. "Then you do it."

What happens when several events take place at once, all in different buildings? "No problem!" says Pat, "We get it all ready, then take it around."

"No problem!" he'll say, whether he is being asked at 4 p.m. to clear a room of 25 tables by 8 a.m. the next day, when half his crew has the flu; or to deliver coffee and danish for 40 *now*, which someone had forgotten to order earlier; or to see that a ladder will be available in Room B at Berkner Hall on a Saturday when the Art Society hangs a show.

Both the Glynns have enjoyed their time at the Lab ". . . every second of every half-hour!" Pat declares. He also remembers that all the parties he has arranged were as good as all the others. But friends of the Glynns are going to make sure that this last party tonight is special — a thank you for all the successful parties of the past.

— Liz Seubert

After Patrick Glynn's retirement at the end of this month, his duties will be assumed by Christine Ronick, Conference Support Supervisor, who can be reached at Ext. 2525 or beeper 0117.

Mixed Paper to Be Added to the Recycling Mix

Abracadabra! BNLers will soon be able to turn old flyers, envelopes, magazines and manuals into paper towels and other products, through the "magic" of recycling.

Starting Monday, November 1, mixed paper will be added to the list of recyclable trash collected by the Lab's Plant Engineering (PE) Division.

Any paper with colored ink, from letterhead to full-color magazines, as well as manila folders, window envelopes, stapled booklets and even copier-paper wrappers, will be accepted. But don't be confused by the name: "Mixed" paper still has to be separated from white paper and computer paper in order to be effectively recycled.

Next week, in preparation for mixed-paper recycling, each employee will receive a plastic collection container and poster detailing exactly what can and cannot be recycled.

Each building will have a green 64-gallon container into which employees can empty their paper, to be collected weekly by the brand-new, white recycling truck, said Site Superintendent Roy McWilliams, PE.

McWilliams said the advent of mixed-paper recycling at BNL is the last stage of an agreement with Brookhaven Town to reduce trash output from the Lab to the town landfill. Recyclable trash already collected includes white and computer paper, cans and bottles, construction waste, tires, metal, batteries and cardboard.

Besides diverting trash from landfill to recycled products, added Oscar Blevins, recycling coordinator in PE, mixed paper recycling will be a good way for employees to rid themselves of excess paper cluttering their offices. However, he cautioned, sensitive documents should still be shredded.

McWilliams and Blevins thanked BNL employees for already making the Lab's recycling program a huge success by correctly separating their trash. They expect mixed paper to become one of the largest segments of BNL's recycled trash program.

Employees with questions or special recycling requests should contact their department or division recycling coordinator or custodial supervisor.

— Kara Villamil

Outreach: Psychology at Work

The Lab and You

As the U.S. Department of Energy and other organizations implement employee-empowerment philosophies such as total quality management, supervisors will be asked to give employees more responsibility for the tasks they perform, thus enabling rather than directing their performance. In turn, employees will be asked to be more responsible not just for their jobs, but for the outcome of their work, both as an individual and as a member of their work group.

The next Outreach workshop, "The Lab and You: Creating an Emotionally Healthy Work Environment," will present a creative approach to both the existing and restructured workplaces, for workers and supervisors alike. Sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic, this two-part workshop, the second in the "Psychology at Work" series, will be presented by communications consultant Barry Berg and organizational psychologist Mark Sirkin, on two Wednesdays, October 26 and November 2, in Room B, Berkner Hall.

Both certified in organizational development, Barry Berg, M.A., teaches speech and communications at the City University of New York, while Mark Sirkin, Ph.D., is on the faculty the Albert Einstein College of Medicine and the Ferkauf Graduate School of Psychology.

Participation is limited to the first 60 registrants who can attend both sessions. To register, return the bottom portion of the Outreach flyer recently mailed to all employees to EAP Staff Psychologist Dianne Polowczyk, Bldg. 490, as soon as possible.

Cut Medical and Day Care Costs With Reimbursement Accounts

Though the Lab offers comprehensive health plans, certain medical expenses such as eyeglasses and physical exams are not covered. And, though the Lab offers complete and competitive on-site day care, the costs of child care — as well as care for an elderly or a mentally disabled dependent — can quickly add up, whether on or off site.

Employees who incur these kinds of costs can get some relief by signing up for one or both of the two kinds of reimbursement accounts offered by Associated Universities, Inc. — The Health Care Reimbursement Account and the Dependent Day Care Reimbursement Account.

Reimbursement accounts allow employees to withdraw tax-free dollars that were set aside through salary reduction to pay for eligible health care and/or dependent day care expenses. Using before-tax dollars to pay these expenses, effectively lowers their actual cost.

Enrollment in these accounts for calendar year 1994 is going on through November 30. Eligible employees — those who work at BNL at least 20 hours a week — may set aside from $300 to $2500 for the Health Care account and/or $300 to $5,000 in the Dependent Day Care account.

All those who wish to sign up for 1994 must fill out new forms. Employees currently enrolled will be sent new forms, but others should contact Personnel Services, Bldg. 185, Ext. 2877, for enrollment forms or more information. Completed forms must be returned to Personnel Services by November 30, for coverage effective January 1, 1994.

Consume at the P.O.

To educate the local mailing public about the services and products offered by the United States Postal Service (USPS), the Upton Branch of the U.S. Post Office is holding a Postal Consumer Affairs Day, during National Consumer Affairs Week, October 24-30.

On Tuesday, October 26, from 10 a.m. to 1 p.m., Upton Postmaster Jeanine Fornsel invites all mail-services consumers to an open house at the Upton P.O., Bldg. 179, where coffee and other refreshments will be served, and all are invited to learn about what the USPS has to offer. And, with the holidays coming up, consumers may want to consider some of the many USPS philatelic products available for purchase and gift giving.

Let's Dance

The BNL Ballroom, Latin & Swing Dance Club invites the dancing Lab community, family and friends to the following events:

Bus-Dance-Bus

Seats are available for the bus trip to New York City — and five hours of ballroom dancing at the legendary Roseland dance hall.

On Sunday, November 7, the bus will leave BNL at 12:30 p.m., to arrive when Roseland opens at 2:30 p.m. By request, pickups can be made at LIE park-and-rides. A Chinese cafe and a bar are available in the dance hall; if you leave Roseland, you must pay another admission fee. The bus will leave Roseland at 7:30 p.m., to return to BNL by 9 p.m.

The cost is $21, which includes transportation via deluxe coach with bathroom and discount admission to Roseland. To reserve, call Liz Seubert, Ext. 2346; or Marsha Belford, Ext. 5053. Seats may be available for those who just wish to take the bus to the city, so please inquire.

TGIF Social

Thank Goodness It's Friday (TGIF) — so celebrate at the club's first monthly informal dance.

On Friday, October 29, in the North Ballroom of the Brookhaven Center, all are invited to tango, waltz, cha-cha, foxtrot, mambo, swing, hustle and rhumba to taped music. Or, bring your own CDs. The dance music will play from 5:30 to 11 p.m. Refreshments are available at the Center Club.

The club will use the suggested donation of $1 to buy more dance music. For more information, contact Brenda Bryant, Ext. 4524; or John Millener, Ext. 3853.

Amateur Radio Club

The next meeting of the Amateur Radio Club will take place in Berkner Hall, Room D, on Thursday, October 28, at noon. The agenda includes nominations for officers. All Lab employees, guests and licensed amateur radio operators are invited to attend.

For more information, contact Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

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Aeolian Chamber Players Bring Music to Berkner

The Aeolian Chamber Players will perform the second concert of the 1993-94 BERA series in Berkner Hall on Wednesday, October 27, at 8 p.m.

Founded in 1961, the Aeolian Chamber Players was the first permanent ensemble consisting of a piano trio and clarinet. This combination of instruments has enabled the group to develop a large and varied repertoire of both traditional and contemporary works. Over 100 pieces have been written for the ensemble, many of them by renowned composers such as George Crumb, William Bolcom and Ralph Shapey.

The Aeolians have won international praise for their performances in the U.S. and Europe. Since 1964, they have been the resident ensemble at the Bowdoin Summer Music Festival, where they perform with many of the world's most prominent artists.

The program for the Aeolian concert at Berkner Hall will include Darius Milhaud's Suite for Violin, Clarinet and Piano; Bela Bartok's Contrasts for Violin, Clarinet and Piano; and Johannes Brahms' Trio in A minor, Opus 114, for Clarinet, Cello and Piano. It will also feature the New York premiere of *Elegy* (1993), written for the group by Bruce MacCombie.

Tickets for the concert can be purchased at the door for $14, general admission; $9, students and people over 65; and $5, youths under 18.

Block tickets, honored at any concert in the series, can also be bought at the door on the evening of the Aeolian concert, or at the BERA Sales Office in Berkner Hall, weekdays from 9 a.m. to 1:30 p.m. Block tickets are $10 each for a minimum purchase of four.

Aeolian Chamber Players

Healthfest '93 — Fun, Festive, Informative

BNLers along the 2-mile Fitness Walk course.

Joseph Gisondo, Employee Assistance Program, hands out "stress dots" at the Health, Safety & Fitness Fair.

Photos by Roger Stoutenburgh

Judging by employee attendance and enthusiasm, *Healthfest* '93 was successful in reinforcing the importance of individual health, fitness and safety.

"We hope that everyone will keep up the enthusiasm and use the information to make themselves healthier and fitter, and their day-to-day lives safer," says Mary Wood, chair of the *Healthfest* committee that organized the event.

Adds co-chair Gary Kazmarczyk, "Keeping Laboratory support and employee involvement teamed beyond *Healthfest* is crucial not only for increasing employees' health, fitness and safety, but also for reducing injuries and illnesses in the workplace."

The four-day celebration began on Monday, October 11, with some 215 BNLers taking a lunchtime walk in the autumn sunshine and their *Healthfest* T-shirts. The 2-mile walk was coordinated by Marilyn Gibbons and the rest of the BNL Walking Club.

The dark sky and rain the next day did not dampen the spirits of some 89 runners, who assembled during a noon clearing for a "run by the Big Machines," coordinated by Skip Medeiros, Frank Marotta and others in the BNL Running Club. The 5-kilometer course took the participants past every major facility at the Lab. While they ran, one person sported the slogan "keep ahead of the walkers."

Almost a minute ahead of his nearest competitor, Trevor Sears crossed the finish line in an impressive 16 minutes 11 seconds. He was followed by Brian Boyer and Dave Phillips. Finishing 31st overall, Maj Britt Hansen was the first woman finisher, in 22 minutes 25 seconds. The second and third women to finish were Elke Brauer and Michi Miura. (See Runners' Corner for complete results.)

In addition, some 35 *Healthfest* runners and walkers also swam in the BNL pool that week, earning themselves the designation of *Healthfest* biathlete and a memento.

Health and safety joined fitness center stage October 13-14 during the BNL Health, Safety & Fitness Fair. Set up in the Berkner Hall lobby under the coordination of Don Farnam, the fair's 20 exhibitors offered educational information and informal discussions to hundreds of BNLers on a range of topics — including workstation ergonomics, heart-disease prevention and home safety.

Some 70 people attended the noon lecture on back fitness and 85 listened to the talk on fats and cholesterol. Many stopped to have their blood pressure screened, and all 75 appointments for foot evaluation were taken.

Among the mementos contributed by Associated Universities, Inc., fitness equipment was given as door prizes to: Gerry Blackford, Pat Carr, Terry Coombs, Marilyn Harned, Bruce Itchkowitz, Lew Jacobson, Ken Kentoffio, Ann Marie Luhrs, Mitzi McKenna, Oscar Morjah, Joe Modjeska, Alma Tomesch, and Chan Weng.

Sponsored by the Director's Office, *Healthfest* '93 was organized by the Central Shops Division, Occupational Medicine Clinic, Plant Engineering Division, Safeguards & Security Division, Safety & Environmental Protection Division, and the BNL Aerobic Dance, Exercise & Bodybuilding, Running, Swim and Walking Clubs.

Runners' Corner

The following are the finishers and their times for the 5-kilometer Fitness Run held on Tuesday, October 12, during Healthfest '93:

Trevor Sears	16:11	James Kos	20:29	Dave Johnson	23:08
Brian Boyer	17:03	Michael Fulkerson	20:44	John Vandenkieboom	23:18
Dave Phillips	17:04	John Skonieczny	21:00	Tom Oversluizen	23:34
Donald MacKay	17:09	Ed Gallagher	21:05	Bob Bari	23:45
Ed Meier	17:49	Jean-Michel Escoubas	21:11	Richard Wall	23:52
Richard Ferrieri	17:51	Ondrej Prasil	21:14	Richard Conte	23:53
Paul Geiger	18:03	Don Litcher	21:19	Patrick Moylan	24:06
Uwe Bergman	18:17	Peter Cameron	21:23	Kevin Fox	24:26
Mike Brennan	18:50	Mike Seidman	21:29	Barry Karlin	24:28
Bill Forster	19:08	Tom Butcher	21:30	Mike Paquette	24:36
Al Pendzick	19:20	Mike O'Connor	21:38	Chris Saxen	24:37
John Millener	19:33	Bob Litzke	22:07	Tom Burke	24:44
Ian Davison	20:26	John Dabrowski	22:10	Michi Miura	25:14
		Robert Retundi	22:12	Al Borrelli	26:01
		Don MacKenzie	22:13	Jeff Coderre	26:20
		George Meinken	22:14	Joan Congemi	26:40
		Malry Tardd Jr.	22:24	Peter Palamidis	26:44
		Maj Britt Hansen	22:25	Sheryl Carey	26:47
		John Pagano	22:46	Joe Woicik	26:50
		Elke Brauer	22:47	Steve Southworth	26:51
		Leonard Butera	22:49	John Giarratano	26:57
		Kevin Hester	22:55	Vinnie LoDestro	27:21
		Dan Wilkins	22:56	Yong Lee	27:22
		Ken Baumeister	23:07	Pat Rogers	27:27

Bob Lombardo	27:28
Bob Hoogsteden	27:35
Kyra Carbone	28:14
Charles Gardner	28:36
Frank Trapani	28:47
Swapna Mukherji	28:55
Mow Shiah Lin	28:56
Nicole Bernholc	28:58
Bob Sabatini	29:40
Keith Radich	30:22
Wei-Quing Zhou	30:34
Carissima Vitus	31:03
Sheila Bubka	31:10
Raj Shah	31:13
David Alburger	32:06
Michele Rabatin	32:39
Beth Yu Lin	33:17
Doan Hansen	34:59
Rich Savoy	37:19
Marilyn McKeown	37:27
Ronnie Evans	37:54
Donna-Ree Rodriquez	38:24
Sharon Spark	38:29
Nancy Fallon	38:30

IBEW Meeting

Local 2230, IBEW, will hold its regular meeting on Monday, October 25, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. On the agenda will be regular business, committee reports and the president's report.

Software Seminars

Sun Microsystems Inc. will present a series of seminars in the CCD Seminar Room in Bldg. 515 at 10 a.m. on three consecutive Wednesdays. The new product offerings and related technologies to be featured include:

• 10/27 — Sparc futures and hardware offerings, 60 minutes; Sparc Roadmap, Sun hardware products.

• 11/3 — Software development, 90 minutes; Fortran, C,C++, ADA, TeamWorks, Case, DevGuide, Motif, COSE DOE, CORBA.

• 11/10 — Graphics technology at Sun, 120 minutes; Solaris Live, Show Me, XGL, Third Party presentation from AVS.

Rifle & Pistol Club

Rifle & Pistol Club meetings are held on the second Wednesday of each month, with the next meeting scheduled for November 10, in Bldg. 911B, Room 202, starting at noon. Anyone interested in club activities should call Otto Jacobi, Ext. 3471.

Arrivals & Departures

Arrivals

Lee S. Michel ..... Saf. & Env. Prot.
Ira J. Rosenberg ..... Physics
Kathryn E. Villamil ..... Director's Office

Departures

None

Bowling

Red/Green League

K. Riker bowled a 258, E. Beadle 244/200/631 scratch series, R. Larsen 233/210/619 scratch, N. Parrinello 224, K. Asselta 217, E. Larsen 211, J. Goode 210, C. Bohnenblusch 209, E. Sperry IV 209, H. Arnesen 203, F. Griswold 203, P. Ouvrard 202, T. Prach 200.

Purple League

Manny Dador 211, Ed Sperry IV 207, Ben Belligan 201/200, Kay Conkling 199/183, Mary Addessi 189, Ray Raynis 188, Suzanne Agnetti 174.

White League

Mike Meier bowled a 229/227, Kevin Carney 213/211, Kenny Riker 206, Jim Meier 206, John Niemczyk 200, Elaine Zukowski 194/173, Caryl MacDougall 185/176, Jeanne Penoyar 178, Gerrie Riker 175, Mary Grace Meier 173.

Cafeteria Menu

Monday, October 25

Soup: Minestrone	.80/1.10
A la Carte: Flank steak w/mushrooms	3.65
Fitness Fare: Broccoli quiche	3.35
Deli: Pastrami sandwich	2.95
Grill: Reuben platter	2.95
Fitness Salad: Tuna flake bowl	

Tuesday, October 26

Soup: Chicken rice	.80/1.10
A la Carte: Omelet display cooking	
Fitness Fare: Baked sole w/red onion	3.75
Deli: Hot roast beef sandwich au jus	2.95
Grill: BBQ pork sandwich	2.95
Fitness Salad: Chef's bowl	

Wednesday, October 27

Soup: Tomato bouillon	.80/1.10
A la Carte: Baked manicotti w/veg.	3.35
Fitness Fare: Mushroom Dijon chicken	3.65
Deli: Virginia ham sandwich	2.95
Grill: Monte Cristo platter	2.95
Fitness Salad: Fresh fruit entree	

Thursday, October 28

Soup: Cream of celery	.80/1.10
A la Carte: Chicken Kiev w/rice	3.65
Fitness Fare: Flounder Florentine	3.75
Deli: Corned beef sandwich	2.95
Grill: Chicken & Swiss on croissant	3.15
Fitness Salad: Oriental chicken	

Friday, October 29

Soup: New England clam chowder	.80/1.10
A la Carte: Chicken piccata w/rice pilaf	3.65
Fitness Fare: Exhibition cooking	
Deli: Hot turkey sandwich w/gravy	2.95
Grill: Pacific Mahimahi	3.85
Fitness Salad: Cantaloupe bowl	

Burger, Deli & Taster's Bar specials daily.

Service Awards

The following employees celebrated BNL service anniversaries during September 1993:

30 Years

Edward Byrne ..... Budget Office
Arjun D. Chanana ..... Medical
Helen M. Kalbach ..... SEP
Mary A. Kelley ..... Instrum.
Said F. Mughabghab ..... Adv. Tech.
Erich H. Willen ..... RHIC
Madeline P. Windsor ..... Tech. Info.

25 Years

Gary E. Jayne ..... Reactor
Lance L. Junker ..... Reactor
Wenzel J. Rowan ..... Sup. & Mat.
Richard B. Schonberg ..... Personnel

20 Years

Peter D. Horton ..... Ph. & Gr. Arts
Joseph P. Indusi ..... Adv. Tech.
Robert Jeffries ..... Plant Eng.
Samuel Krinsky ..... NSLS
Francis J. Lepera ..... CCD
Derek I. Lowenstein ..... AGS
Iuliu Stumer ..... Physics
William C. Thomlinson ..... NSLS
Christopher N. Willms ..... CCD

10 Years

Kimberly J. Boomer ..... Medical
Gordon F. Corbin ..... Physics
Joseph A. DeVoe ..... Plant Eng.
Robert G. Fitzpatrick ..... Adv. Tech.
Vale P. Myles ..... Director's Office
Douglas F. Ports ..... Reactor
Christopher Weilandics ..... SEP
George N. Westwater ..... Physics

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 - Doctorate normally required. Candidates may apply directly to the department representative named.

SCIENTIST - Experienced in the investigation of the atomic structures of solid/solid and other buried interfaces, with emphasis on the understanding of the microscopic structure of buried interfaces. Experience with transmission electron microscopy or x-ray techniques is preferable. Contact: Kelvin Lynn, Department of Applied Science.

PHYSICIST - To lead the scientific group associated with the STAR experiment at RHIC. Applicants should have extensive experience in nuclear or high energy experimental physics, and management experience in large experiments. Contact: Peter Bond, Physics Department .

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in physical chemistry or chemical physics, to work in the area of gas-phase spectroscopy and dynamics of molecular free radicals and other short-lived species. Experience in laser spectroscopy or experimental gas-phase molecular dynamics is required. Contact: Trevor Sears, Chemistry Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

DD 0885. CHEMISTRY ASSOCIATE POSITION - (term appointment) Requires a BS in chemistry or equivalent relevant experience. Familiarity with Protein Data Bank processing programs and the use of UNIX graphics workstations highly desirable. Responsibilities will include the processing of data contributed to the PDB for structures to be added to the database. Additional duties will include preparation of releases for public distribution. Chemistry Department.

MK 2961. HEAD, REACTOR DIVISION - Requires a BS in engineering or related science and a minimum of six years' nuclear experience, which should include management responsibility at an operating nuclear reactor facility. It is also required that the individual be certified at the SRO level at the HFBR or an equivalent facility, or be currently classified as a senior staff member in the Reactor Division. Will be responsible for the management and operation of the Reactor Division, including all changes in design, procedures and limits, and the safe and effective operation of the Laboratory's reactors in accordance with DOE-approved specifications and BNL nuclear safety policies. Must be able to obtain and maintain a security clearance. Director's Office.

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

Motor Vehicles & Supplies

90 TOYOTA COROLLA DX - 4-dr., 5-spd., white, ac, stereo,, new tires, $6,190; 84 Olds Delta 88, V-8, a/t, a/c, all power, tape, am/fm, $1,240. Tom, 744-8338.

89 ESCORT LX - 2-dr., h/b, p/s, p/b, 5-spd., runs well, am/fm cass., $4,200; 89 Mercury Grand Marquis LX, 2-dr., full loaded, runs well, $2,200. Bob, 821-0695.

87 BRONCO II TRUCK - V-6, a/c, p/s, p/b, needs work, blue, $4,500 neg. Craig, 4028.

86 LE BARON GTS - 4-dr. turbo sport premium, h/b, leather int., loaded, Clarion audio system, new brakes, tires, low mi., must sell. Ann, Ext. 5740 or 744-8386.

86 VW GOLF - a/c, new tires, shocks, muffler, excel. body, good mech., 125k hgwy mi., $1,975. 821-0686.

85 OLDS CUTLASS SUPREME - 2-dr., V-6, 102k mi., good cond., $2,200. Horst, Ext. 7179 or 286-4234.

85 PONTIAC FIERO - red, gray int., new clutch, 86k mi., $2,000 neg.; 81 Chrysler LeBaron, needs engine, you pick up, ask. $100. John, Ext. 4867 or 928-8389.

84 BUICK CENTURY - 4-dr., 3.0 V-6, $1,750, leave message. 331-1841.

84 OLDS CUTLASS CIERA - a/c, p/b, p/s, white, blue velour int., reliable, asking $750. Phil, 286-1348.

83 CAVALIER - 4-spd., new tires, clutch, struts, shocks, springs, brakes, shifter cables, $1,100 neg.; 81 Dodge custom van, new tires. Brett, 929-4753.

82 CAMARO - 350 eng., new trans. & heads, $1,500. Bob, 924-6018.

82 BUICK PARK AVENUE - am/fm cass., blue/blue, p/s, p/b, p/w, ac, $1,500 neg. 732-2570 after 6 p.m.

81 CADILLAC SEDAN DEVILLE - v.g. running cond., full power, new exhaust, good tires, $1,450 neg. 475-8242.

76 DODGE VAN - runs but needs work, best offer. Rich, Ext. 5284.

75 FORD F100 PICKUP - good cond., runs well. Charlie, Ext. 5319.

73 YAHAMA TX750 - excel. cond., garaged, 6k mi., stock, $750. Harry, Ext. 5976.

70 MALIBU - 71k orig. mi., 350 V-8, a/t, new brakes, factory air, orig. equip., am/fm cass., 2-dr., $2,500. Brian, 473-6291.

68 CAMARO SUPER SPORT - worked 350, 12-bolt posi, 4-spd., body needs work, street/track, very strong, $3,000. Howard, 331-5912.

68 MUSTANG - 8-cyl., classic seafoam green, many new parts, $2,000 or best offer. 473-1456.

67 INTERNATIONAL SCOUT - w/plow, 8-cyl., 4wd, 3-spd. tranny, 4 excel. rims & tires. Joe, Ext. 3120 or 929-0668.

BATTERY - Die Hard, used 3 mo., Sears lifetime warranty, $30; spare tire for GM car, $10. Ext. 1020.

TRAILER HITCHES - class III, bolt-on, head & ball, $50; 2 class I hitches, w/ ball. Ed, Ext. 4561.

RIMS - 4, Chevy classic 78II, steel-belted, P195/75B14, never used, $200. 878-1617.

Miscellaneous

AIRLINE TICKET - TWA, leaving from JFK to anywhere in U.S., round-trip, good until 1/15/94, $200. Dorothy, 286-0641.

CAR SEAT - Evenflo, infant's, up to 20 lbs., $25; Fisher-Price bathtub, $8; Sesame St. playgym, $8. Chris, 744-6874.

CAR SEAT - Century, $25; recliner chair, $15; child carrier for bike, $7. Mary, 924-6235.

CRIB - Childcraft, virtually new, light wood, $75; matching changing table, $35. Dave, Ext. 7277 or 736-8010.

DIAMOND - 1 carat 21 pt., high-quality stone, round cut, written appraisal $3,600, ask. $1,700 firm. Ann, Ext. 5345.

STROLLER - Graco, $15; baby's bathtub, $5. Ext. 1020.

Free

AIR CONDITIONERS - 2, old but still running. Bob, Ext. 4656.

BEAGLE - male, excel. temperament, good w/dogs, cats, kids, needs loving home. Ext. 7125 or 929-5716.

CAT - lost, lonely & loving Socks lookalike. Ext. 5054.

FRAME - twin bed. Bill, 281-6498.

PEGBOARD - 4'x9' sheets, 3/8" wire baskets approx. 12"x18"x8", lunch trays, 8-person tent, you pick up, other stuff. 582-6241.

Lost & Found

LOST - right hand to my mannequin, in Berkner Hall lobby, return to Bulletin office, no questions asked.

Car Pools

LIE EXIT 36 - fourth for car pool. John, Ext. 5181.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, creed, sex or national original of the applicant.

For Rent

CALVERTON - 2-bdrm. townhouse, 5 appl., carpeted, cac, fp, patio, upper deck, assumable mortgage. Ext. 3558.

CENTER MORICHES - second-floor apt., 2 rms., full bath, priv. ent., w/w, single or couple only, no pets, close to transportation, $500/mo. incl. all, 1 mo. sec. Ext. 3315 or 929-4753 eves.

FARMINGVILLE - upstairs apt., modern, skylights, cable, priv. ent., deck, all new, single preferred, no pets, ask. $550/mo. for all. Nick, 732-7499.

PATCHOGUE - 1-bdrm. apt., eik, l/r, priv. ent., single working preferred, $650/mo. incl. util., security. 289-0967.

PORT JEFFERSON STATION - lg. 3-bdrm. ranch, l/r, d/r, den, eik, 2 baths, w/d, dbl. gar., 3VSD, $1,200/mo. Jim, Ext. 4368 or 928-3371 eves.

RIDGE - furn. studio apt., 3 mi. from Lab, kit., bath, fenced yard, $465/mo. Ext. 2673 or 744-8632.

ROCKY POINT - new, furn., l/r-bdrm. combo, full eik, full bath, free cable, own thermostat, parking, no pets, $500/mo. includes all. 744-2259.

ROCKY POINT - 3-bdrm. Cape, 1 story, newly redecorated, landscaped, eik, lg. l/r, w/d, $850/mo. Donald, 473-6570.

ROCKY POINT - 2-bdrm. apt., l/r, d/r, full bath, priv. ent., $600/mo. all, 1 mo. sec., no pets, avail. 11/1, Ext. 3749 or 744-7996.

SHIRLEY - 4-bdrm. house, unfurn., avail. immed., $875/mo. + util., nice yard. Pat, 727-0547.

SHOREHAM - new, partially furn. 1-rm. apt., full bath, kit., priv. ent., immed. occup. 821-4318.

SOUND BEACH - 3-bdrm. ranch, recreation rm. downstairs, MPSD, ½ mi. to beach, 20 min. to Lab, 2-car gar., fenced, treed, landscaped ⅓ corner acre, immed. occup., $1,100/mo. Dan/Mara, 765-5405.

KEY WEST, FL -4/9-23, condo, sleeps 2-6, on water, kit., pool, priv. beach, gym, marina, boat rentals, hot tub, w/d, tiki bar, walk to town. Sheryl, Ext. 7716.

KISSIMMEE, FL - 2-bdrm. condo, 2 baths, mint cond., all amenities and appl., sleeps 6, close to Disney, tennis courts, pool, priv. patio,$499/wk. Nov.-April 94. Vinny, 582-6241.

ST. PETERSBURG BEACH, FL - furn., 4-bdrm. house, water view from all rooms, dock, pool, walk to Gulf, avail. 12/24-1/1, $900 + sec. Keith, Ext. 5355.

SINGER ISLAND, FL - 2-bdrm. condo on ocean, 2 baths, pool, rent, 1 mo. min., avail. Jan.-April 94, furn., cac. Paul or Joyce, 289-5770 after 6 p.m.

WEST PALM BEACH, FL - Century Village, fully furn., 1 bdrm., 1 bath, golf, tennis, sailing, clubhouse, pools, 55 or over, min. rental 4 mos., $850/mo., no dogs. Peggy, 286-8849.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, fully furn., 2 baths, tennis, beach, golf nearby, Oct.-Dec., $350/wk. for BNL employees and family members. Guy, Ext. 3147 or 689-5378.

For Sale

BAYPORT - 3-bdrm. 2-story Col. on 1.2 acres, OHWH, d/r, 2 baths, lg. country kit., BPBPSD, near schools, $130,000. 472-3332.

BELLPORT VILLAGE - Cape. 286-8552.

CALVERTON - 2-bdrm. townhouse, 5 appl., carpet, cac, fp, patio, upper deck, assum. mortg. Ext. 3558.

CENTEREACH - 4-bdrm. ranch, 1½ baths, lg. kit., gar. w/work bench, prof. landscaping, new roof/skylight, new deck, fence, driveway, bath, alarm system, $129,900. Ann, Ext. 5740 or Koula, 981-6376.

CENTRAL ISLIP - 2-bdrm., laundry rm., new l/r, kit., d/r, new carpet, skylights, 2-person whirlpool, grape vines and peach tree on 75'x100', $2,500 down, assume mortgage. Vinny, 582-6241.

CORAM - 3-bdrm. house w/cathedral ceiling, bath, d/r, bsmt. apt. Janice, 924-2213.

MANOR PARK - 3-bdrm. ranch, bath, Manor Park schools, 10 min. to Lab, freestanding fp, fd/r, moving, $80,000 partial owner financing or rent. 582-6241.

MANORVILLE - 2¼ wooded acres w/pond, good investment, $45,000. 345-3490 after 6 p.m.

MEDFORD - Blue Ridge condo, 5 rms., 1½ baths, cac, golf, tennis, billiards, in/out pools, whirlpool, sauna, clubhouse, restaurant, low taxes, sacrifice, $89,900. 736-8742.

MIDDLE ISLAND - 3-bdrm. ranch, l/r, d/r, eik, gar., full bsmt., wood-burning stove, oak floors, appl., lg. yard, pool, dead-end street, 10 min. to Lab, $114,900. Mary, 924-6235.

NORTH SHIRLEY - settle estate, older 3-bdrm. ranch, 1½ baths, new vinyl siding w/insulation, OHWH, new cesspools, 50'x218', Wm. Floyd SD, low taxes, $65,000 w/fp or wood stove. 281-7683.

RIDGE - 3-bdrm. townhouse, 1½ baths, lg. l/r, 5 min. to Lab, $69,900. 924-4734.

RIDGE - 3-bdrm. townhouse, 1½ baths, cac, w/w, all appl., new w/d, hot water heater, attic, patio, storage rm., low monthly maint./taxes, 5 min. to Lab, move-in cond., $68,000. 924-4328.

ROCKY POINT - 3-bdrm. custom Cape, lg. l/r, eik, laundry, landscaped, corner lot, redecorated, $91,200. Donald, 473-6570.

SETAUKET - Strong's Neck, custom, 4-bdrm. ranch, ⅔ acres d/r, l/r, updated eik, 2 fps, wood floors, 2-car gar., bsmt. rm., brick patio, one lot from deeded mooring, alarm, $315,000. Ext. 3616 or 941-9034.

S. SETAUKET - 4-bdrm. Eaton Col., fl/r, fd/r, fam., eik, 2½ baths, 3VSD, $164,000. Ext. 2344 or 751-4254.

SOUTHAVEN/SHIRLEY - 3-bdrm. Calif. ranch, cathedral ceilings, 2 baths, fieldstone fp, 2-car gar., deck, landscaped, fenced, close to BNL and beach, sacrifice, $104,900. Keith, 924-5062.

YAPHANK - 4-bdrm. country Cape, oak floors, full bsmt., bath, ⅓ acre, new roof, low taxes, sacrifice, $112,000. Steven, Ext. 4095.

WADING RIVER - 3+ bdrm. Cape, new kit., freshly painted, sunporch, bath, new furnace, wood floors, brick patio, near playground and tennis, wooded 1+ acre, beach rights, RHSD, ask. $139,900. 929-5797.

WEST PALM BEACH, FL - Century Village, full furn., 1 bdrm., bath, screened porch, clubhouse, in/out pools, golf, tennis, sailing, 55 or over, no dogs, $17,500. Reggy, 286-8849.

OTIS, ME - 20 miles, Bar Harbour, Acadia Park, 5½ acres, 250 ft. from 3 mi. lake, driveway installed, elec. avail., septic, blueprints, taxes $153, $17,000. Vic, Ext. 5318.

Wanted

APT./HOUSE - furn., visiting scientist from LBL working on Star Detector at RHIC. L. Schroeder, (510) 486-7308.

BABY-SITTER - German speaking. Stas, Ext. 7849 or 821-0459 eves. & wknds.

BASSINET - for newborn and car seat/carrier, must be in very good condition. Ext. 1020.

BOOK - *Evaluation of Diagnostic Systems* by Swets & Pickett, checked out of Medical Library. Bill, Ext. 7230.

CHRISTIAN PEOPLE TO FELLOWSHIP - at Recreation Bldg., Thu., 11/4, 5-7:30 p.m., refreshments will be served. Frank, Ext. 7515.

ENCYCLOPEDIA BRITANNICA - used. Horst, Ext. 7179 or 286-4234.

NORDIC TRACK - Peder, Ext. 4591.

PIANO BENCH - willing to refinish if needed. Frank, Ext. 7200, or Edy, Ext. 7813, or 473-9379.

TRAINS - Lionel & American Flyer, priv. collection, pays top $. Bruce, 924-4097.

Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.