

Helms Takes Over the Helm of On-Site DOE Brookhaven Group

After three months' serving as deputy to John Wagoner, whom Energy Secretary Federico Peña had appointed Executive Manager of the U.S. Department of Energy's (DOE) Brookhaven Group on May 1, Dean Helms assumed the leadership of DOE's on-site office on August 1.

As Wagoner returned to Washington state to resume his duties as Manager of DOE's Richland Operations Office full-time, Helms, who is also the Site Office Manager at the Thomas Jefferson National Accelerator Facility in Newport News, Virginia, said, "I am committed to being at Brookhaven somewhat indefinitely, through the transition to a new contractor. I'll do whatever it takes to ensure a smooth transition."

Peña appointed the Wagoner-Helms team to oversee Lab operations during the transition to a new contractor at the same time that he announced the termination of DOE's contract with Associated Universities, Inc., for the management of BNL.

"We came amid turmoil," Helms observed during a press conference on Wagoner's last day at BNL. "But, in the three months that John and I have been at Brookhaven, there has been remarkable progress on many fronts. I think that the future of the Lab is very bright. I am bullish on Brookhaven for the long-term."

Much of the credit for that, said Helms, goes to Wagoner's interactions

with the community. "He opened up a dialogue with the community in a short time," Helms said, "and I already see a remarkable change in our level of credibility."

As an example, Helms recalled a public meeting about BNL the prior Wednesday evening that was organized by two groups, the Long Island Alliance and Physicians for Social Responsibility. At that meeting, Helms announced that a onetime spike of tritium had been found in the effluent of BNL's sewage treatment plant at levels well above the normal range. The occurrence was reported in *Newsday* the next morning.

"We had a lot of people come up after the meeting and say, 'This is a real breakthrough — learning about this occurrence early,'" Helms said. "It goes a long way to restoring the public's confidence." He resolved to continue providing information to the public quickly and being open to their issues.

Helms said he is equally committed to continuing the "very constructive relationship with the leaders of the Lab and with the staff" that he and Wagoner had established.

Wagoner called Interim BNL Director Peter Bond and Interim Deputy Director Mike Bebon "excellent managers who have worked here for many years, doing the best they can under obviously difficult circumstances."

Helms plans to carry on Wagoner's



Roger Stoutenburgh

Dean Helms

practice of meeting with Bond and Bebon every morning to discuss current issues and coordinate their agendas.

Dean Helms earned a bachelor's degree in psychology from Duke University in 1965, then went on to the University of North Carolina at Chapel Hill, where he studied business and management. He was subsequently recruited by the Atomic Energy Com-

mission, a DOE predecessor, for a management internship program. That opportunity led Helms to a 31-year career with DOE.

Though Brookhaven is commanding his immediate attention, Helms is still very much involved with Jefferson Lab. During its construction period, that laboratory was known as the Continuous Electron Beam Accelerator (continued on page 3)

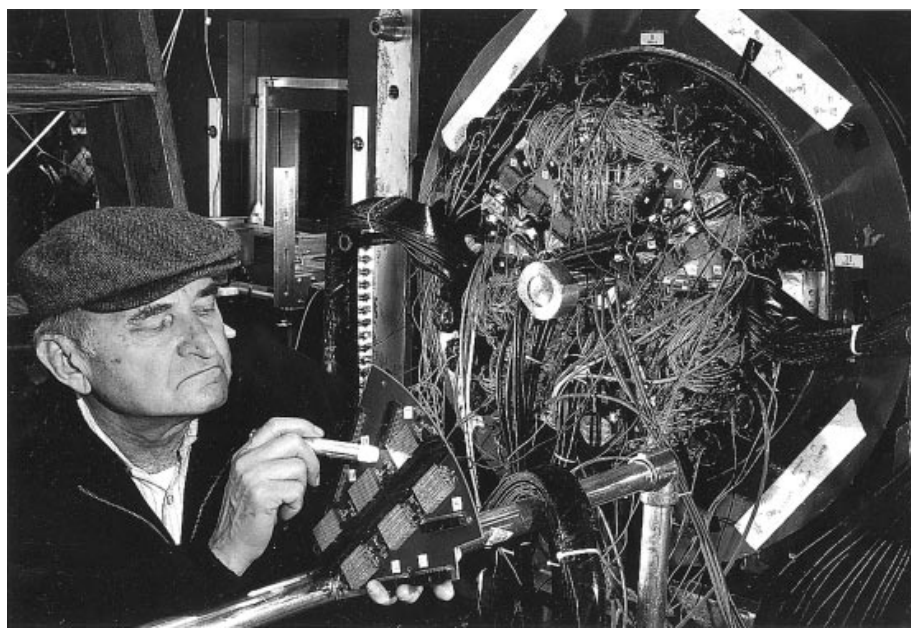
Strange Interactions May Reveal Perfect Symmetry at the AGS

If anything's strange about E906 at the Alternating Gradient Synchrotron (AGS), then the researchers hope the strangeness may be double.

But that's not strange because these experimenters are studying interactions between particles containing strange quarks, looking for the H-dibaryon and other particles containing two units of the quality physicists call strangeness.

Quarks, thought to be the fundamental constituents making up the particles in the nucleus of an atom, come in six "flavors": In addition to the strange quark, there are the up, down, charm, bottom and top quarks. A baryon is a particle containing three quarks, and the H-dibaryon, predicted by theorists to be formed of a symmetrical arrangement of two strange, two up and two down quarks, could be an example of matter in its most stable state.

Armed with the AGS kaon beam — the world's most powerful beam of kaon particles — at the D6 beam line, and a new detector system, the E906 collaboration of scientists from Japan, Germany, Russia and the U.S., in-



Roger Stoutenburgh

Robert Chrien is shown beside the Cylindrical Detector System designed for AGS Experiment 906 by Joe Nakano, INS-Tokyo.

cluding BNL, hopes to obtain new information on strange baryons, which may also lead to evidence of the existence of the six-quark H-dibaryon.

"To do the experiment, we use the kaon beam at beam line D6 to create

nuclei that contain two strange hyperons," said Robert Chrien, a senior physicist in the Physics Department and cospokesman for the experiment. "Hyperons are what we call baryons that have at least one of their three

quarks in a flavor other than up or down. The AGS D6 kaon beam is exactly suited to creating the lightest hyperon, the lambda, which consists of an up, a down and a strange quark. Once you have two lambdas in a nucleus, interactions between these strange baryons may occur. One outcome may be H-dibaryon formation."

Chrien explained that the way to observe the doubly strange lambda-lambda interactions is to watch for a sequence of two pions appearing at the same time. In E906, the pions would appear in the interactions after the kaon beam hits a beryllium target, if a nucleus containing two lambda hyperons decays to an ordinary, non-strange nucleus.

If no sequence of two pions appears, it means that the lambdas could have fused together to form the H-dibaryon. If, on the other hand, the pions ap-

(continued on page 3)

Contract Ratified

On Thursday, July 31, members of the International Brotherhood of Electrical Workers (IBEW), Local 2230, ratified a three-year contract with Associated Universities, Inc., effective August 1. Among its provisions, the new contract calls for 3.5-percent wage increases in the first and second years and a 3-percent increase in the third year.

IBEW represents about 470 bargaining unit employees in six BNL divisions: Administrative Support, Central Shops, Computing & Communications (telephone operators), Information Services, Plant Engineering and Safety & Environmental Protection (fire fighters).

Congressman Forbes's Aide Visits Lab, Tours High Flux Beam



Roger Stoutenburgh

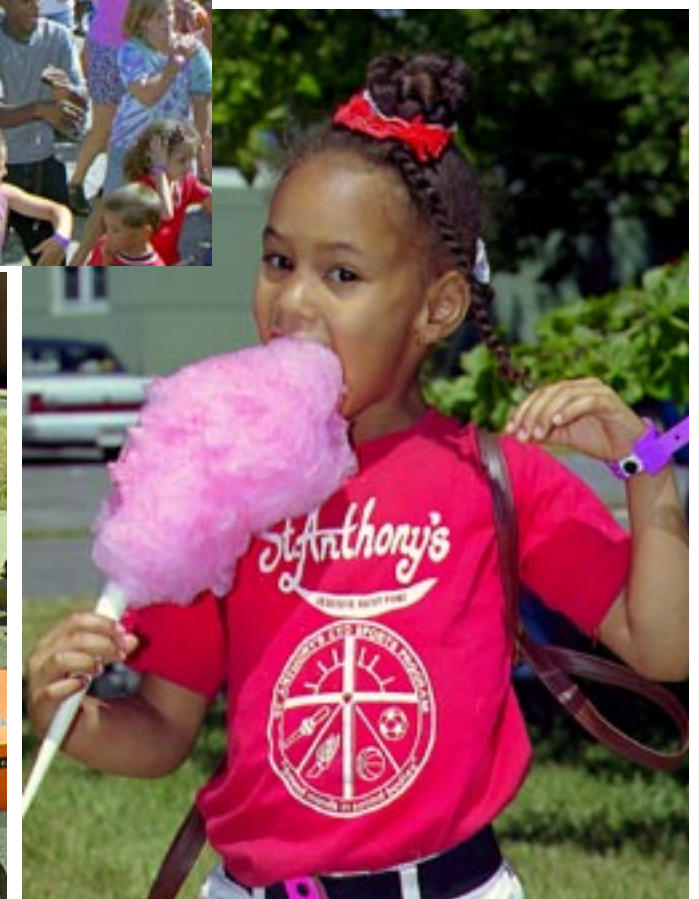
The spent-fuel pool of the High Flux Beam Reactor (HFBR) was one area visited last Tuesday, August 5, by Fred Dombo (right), who recently joined the staff of U.S. Representative Michael Forbes. Dombo, who will be dealing with environmental issues in the First Congressional District, including those at BNL, was accompanied at the HFBR by: (from left) Bob Gordon, U.S. Department of Energy Brookhaven Group (BHG); Bob Casey, BNL Safety & Environmental Protection Division; Robert Howe, BNL Office of Environmental Restoration (OER); Mark Parsons, BHG; John Carter, OER; and Albert Queirolo, Reactor Division. Dombo also met with Interim Laboratory Director Peter Bond for a BNL overview and visited several other facilities.

BNL's 50th Anniversary Picnic — Something to Celebrate!



Golden sunshine and a blustery breeze swept the 1,800 or so BNLers who spent Saturday, July 19, at the Lab's 50th Anniversary Picnic into a holiday mood. The traditional parade opened with blaring fire engines and a lively band of drummers from Little Flower Children's Services; continued with Parade Grand Marshal Bernie Manowitz, the only Lab employee celebrating his 50th year with BNL, who waved from a 1965 Dodge Coronet 440 convertible heading the BERA Antique & Classic Motoring Club's line of gleaming autos; and peaked in a unique acoustical event: the BNL Marching Band. After that, who could ask for anything more? But much more was available — to eat, to drink, to laugh about. Special appreciation is due to the Picnic's organizers, BERA Special Events Committee members Bob Brown, Michelle Cummings, Renée Flack, Liz Mogavero, Betty Pergan, Liz Seubert, Ken Sutter and Doris Terry, and Chair Rosalie Piccione, who expresses warm thanks to all others whose efforts contributed to the Picnic's success.

— photos by Michael Herbert



In Memoriam: Lee Farr, Robert Phillips, Richard Stoner

Lee Farr, the first Chairman of BNL's Medical Department, died on July 16. He was 89.

Farr earned both his B.S. in chemistry and his M.D. from Yale



Lee Farr

University, then did postgraduate medical research studies at the Hospital of the Rockefeller Center for Medical Research, 1934-40, under the directorship of Donald Van Slyke. Farr then directed research at the Alfred I. duPont Institute until 1948.

Then, invited by Van Slyke, who directed the new Lab's life sciences research, Farr became BNL's first Medical Department Chairman, in 1949. Van Slyke cited Farr as one of his "top grade men" and said that "if you start with top grade men you can keep it up; you set your standard."

As a skilled pediatrician, Farr's first research at BNL was the study of children with nephrosis. Also, under his leadership, by 1950, the department was operating the Medical Research Center — the first hospital ever devoted to nuclear medicine. Originally housed in the old Camp Upton Hospital, the Center had been moved by 1958 to a new, 48-bed facility, where patients were treated for conditions ranging from pulmonary diseases to leukemia to obesity.

Also commissioned under Farr were the Brookhaven Medical Research Reactor and the medical facility at the Brookhaven Graphite Research Reactor. Farr and colleagues were the first to demonstrate that the new boron neutron capture therapy (BNCT) eliminated tumors in mice. Until 1961, the first BNCT clinical trials took place at these research reactors.

Farr left the Lab in 1962 to organize a nuclear medicine section at the University of Texas at Houston. He later worked for the State of California, retiring in 1973 as Chief of the Bureau of Emergency Health Services. In 1990, he lectured at BNL on BNCT.

A resident of Walnut Creek, California, Farr is survived by his second wife, Miriam Kirk Farr; a son, Charles Edward; two daughters, Susan Armstrong and Frances Torrey; seven grandchildren; and one great-grandchild. Farr's first wife, Anne, had died in 1984.

Robert Phillips, who had retired from BNL as a physicist in 1976, died on June 16, at age 86.

Phillips received his B.S. degree from Yale University in 1934 and his Ph.D. in physics from the University of California, Berkeley, in 1952, having returned to science after attaining the rank of Major in the U.S. Army Air Force during World War II.

He joined the Lab in 1953, and, for the next 23 years, with the exception of a year at the Stanford Linear Accelerator Center, 1969-70, he remained at BNL on the scientific staff of the then Accelerator Department (AD), the Physics Department and the Director's Office (DO).

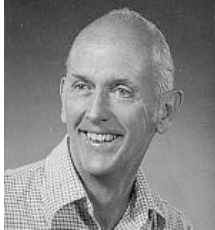
At the Lab, Phillips's first task was to help in building the Alternating Gradient Synchrotron (AGS) accelerator. He became a leading member of the Magnetic Measurements Group, responsible for developing and modeling the AGS magnets.

Friends and colleagues such as Gordon Danby, AGS, recall vividly Phillips's dedication and concern for others, "which fostered a climate of comradeship, plus a very strong work ethic."

Ronald Rau, formerly Associate Director for High Energy Physics, wrote: "Bob took on many responsibilities, but his valuable and unique contribution was his working liaison with members of the user community of the AGS High Energy Physics Program. No request was too small: Bob unstintingly gave of his time and energy to solve users' problems of all kinds. He was a rare, caring person, devoted to his work, the Lab and his friends, all richer for his friendship."

After his retirement, Phillips worked on special projects for AD and DO. He also ran, completing in good time a five-mile BNL Runners Club race when he was 75, was still surfing at age 84 and started weight lifting at age 85.

A resident of Brookhaven Hamlet, Phillips is survived by his nephews, John McCandlish Phillips, New York City, and Ralph Burt Phillips, Truckee, California; and two nieces, Cady Lou Phillips, Reno, Nevada, and Pamela Lovtang, Sonora, California.



Robert Phillips

Richard Stoner, a senior scientist whose career at BNL spanned 30 years, died on July 2. He was 77.

Stoner earned his B.A. in zoology at the State University of Iowa (SUI), in 1940, served in the U.S. Naval Reserve and the U.S. Army during World War II, then returned to SUI for his 1950 Ph.D. in zoology and bacteriology. Later in 1950, he joined BNL's Medical Department to do research as an experimental immunologist.

In the then Division of Microbiology, Stoner's specialized interests included: pioneering work on effects of heavy water on hematopoieses, radiation effects on immune mechanisms, and effects of benzene on immune responses and leukemogenesis. He was also responsible for diagnostic parasitology for the BNL Clinical Laboratory.

Stoner is remembered by Daniel Slatkin, a former colleague in Medical, as "an outstanding experimentalist." Jointly, Stoner developed the large, Hale-Stoner strain of mouse, used at BNL not only in fundamental boron neutron capture therapy (BNCT) research, but also in many immunopathological and metabolic investigations bearing on the uses of radiation and radioisotopes in the biomedical sciences. His knowledge of mouse genetics was particularly valuable.

Slatkin described Stoner as "reserved, courteous, and extremely considerate and generous in helping others — a very fine person whose influence in the Medical Department was subtle and far-reaching."



Richard Stoner

While at BNL, Stoner was a consultant for the Office of the U.S. Surgeon General and Deputy Director of the U.S. Commission on Radiation & Infection, Armed Forces Epidemiological Board. After retiring, he worked as a BNL research collaborator and consulted both in the U.S. and abroad.

A resident of Brookhaven, Stoner is survived by his wife Francesca, daughter Bettina, son Scott, sister Jeannette Duke and half-sister Mary Moore. A celebration of Stoner's life will be held at the Post-Morrow Foundation's Annex, Brookhaven Hamlet, at 2 p.m., Sunday, October 12.

— Liz Seubert

PA Manager to Talk On Navigating Crises

Marge Lynch, Manager of BNL's Public Affairs Office, will speak about "Navigating Through Public Affairs Crises," at the next Brookhaven Women in Science meeting, on Wednesday, August 20, at noon, in Room A, Berkner Hall. All are invited to this talk; bring your lunch.

Lynch joined BNL in mid-April of this year, at a time of unprecedented crisis for the Laboratory. She will discuss the situations that she and other Lab management have been dealing with since then — the progress that has been made and what still needs to be done.

Her BNL appointment is the latest in a series of high-profile positions that Lynch has undertaken. For instance, at Northville Industries in Melville, she helped the company deal with the environmental crisis resulting from a major gasoline leak in East Setauket, and, at Boston's Browning-Ferris Industries, one of the largest publicly held waste-management companies in the U.S. As the Public Affairs/Community Relations Practice Leader for an environmental consulting firm, Lynch also handled issues for utility, telecommunications, pharmaceutical and other major industrial clients.

Dean Helms

(cont'd.)

Facility, but it was officially dedicated and renamed after the third U.S. President in May 1996, as its era of experimentation began.

Before being assigned to Jefferson Lab in 1988, Helms held a number of positions in DOE Headquarters, including Chief of Staff to the Under Secretary of Energy, 1987-88. In earlier assignments, he had served as Deputy Director of Administration and Director of Organization & Management Systems. Early in his career, he held positions in the Savannah River and Albuquerque Operations Offices.

Special DOE assignments for Helms have included being Tiger Team Leader for the Environment, Safety & Health Assessment at Savannah River, 1990, and serving as Special Assistant to the Deputy Director of the Office of Energy Research for the Superconducting Super Collider Project, 1993.

Helms, who has been recognized for his contributions to DOE's mission on numerous occasions, received the Presidential Rank Award in 1984.

— Anita Cohen

Arrivals & Departures

Arrivals

Maureen I. Fazio.....Financial Services
Deepak D. Poondi.....Chemistry

Departures

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

Crystal Y. Allen.....Admin. Support

Coming Up

The acclaimed Raphael Trio — violinist Charles Castleman, cellist Susan Salm and pianist Daniel Epstein — will perform music by Franz Schubert, Ranier Bischof and Ludwig van Beethoven on Tuesday, August 26, at 8:30 p.m. in Berkner Hall.

Purchase tickets at the door for \$15 each, or \$10 for seniors and students.

Fest Time! India, BNL Both 50 This Year!

The BERA Indo-American Association invites BNLers and their families to celebrate the 50th year of India's independence and the Lab's 50th anniversary at a free "India Fest" of Asian-Indian culture on Saturday, August 16, at 3 p.m. in Berkner Hall. Indian classical music and dances will be performed in the auditorium from 3 to 4:30 p.m., while musical instruments, embroidered saris, jewels, ornaments and other artifacts will be displayed in the lobby.

As part of the special exhibit of bridal costumes from different regions of India, you can even have your face and hands decorated with the traditional designs used by Indian brides. Then, from 4:30 to 5:15 p.m., the free festival will continue at the Recreation Hall, where you can sample a variety of delicious Indian dishes.

For more information, call Piyush Joshi, Ext. 3847.

Strange Interactions (cont'd.)

pear, that would be decisive evidence against the existence of the H. "Either way, the results will be interesting," Chrien said.

To detect the pions, Joe Nakano of INS-Tokyo, a student of E906's cospokesman, Tom Fukuda, designed and engineered the Cylindrical Detector System (CDS), an extremely compact set of particle detectors. Other experimenters playing a major role in the experiment include Adam Rusek of BNL's Physics Department and Toru Tamagawa, University of Tokyo, who

is developing the analysis codes used for the particle tracking in the CDS.

The CDS has been designed to provide the maximum amount of information on the hyperons that decay in the experiment, Chrien explained. "The entire device, with all its associated electronics and phototubes, fits into a magnet of overall dimensions 110 by 110 by 130 centimeters, with a 20-centimeter beam hole. The compact, cylindrical design maximizes the efficiency with which kaon-induced reactions can be studied."

The experiment will run until 1998. "E906 is one among many experiments

that can best be done at the AGS," emphasized Chrien. "The AGS program is of special interest to our Japanese collaborators, who are considering the construction of a 50-billion-electron-volt [GeV] version of the AGS, which operates at 33 GeV for protons. The new device, the Japanese Hadron Facility, will enable them to continue the research we pioneered at the AGS into the 21st century. The AGS is now serving as a vital bridge to the next generation of experiments, so it is important to our Japanese colleagues as they prepare for the future."

— Liz Seubert

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Equipment Demo

On Tuesday, August 19, from 9 a.m. to 2 p.m. in Berkner Hall, MSC Industrial Supply Co., an industrial distributor, will display: UVEX safety glasses, 3M dust masks, FLA orthopedics, Eagle liftall slings, Howard light earplugs and Andsell Edmont gloves. Stop by to sign up for a paper or CD-ROM catalog to be released this fall.

Nursery Enrollment

The Upton Nursery School, an on-site, parent-run cooperative, is accepting registrations for three- and four-year-olds for the 1997-98 school year, which runs from September 8 to mid-June, at the Recreation Building in the apartment area. Classes are taught by Laura Williams and Rooshi Khalid on Mondays, Tuesdays and Thursdays, from 8:30 to 11:30 a.m.

BNL employees, concessionaires and visitors may enroll their children for \$100/month, for a minimum of three months. For registration information, call Jennifer Greene, 345-5194, or Michelle Hilton, 744-9443. Children may be registered from now until school begins, but the program fills quickly, so sign up as soon as possible.

Farmers' Market

Blueberries and peaches for pies, shitake mushrooms and miniature corn for stir-fry, colorful flowers for the table, and lots of other fresh produce — all are available at the Farmers' Market held in the parking lot behind the Science Education Center, Bldg. 438, every Wednesday, 11:30 a.m.-1:30 p.m., rain or shine.

The three stalls of local farmers or market gardeners may soon be joined by a fourth, and one vendor will soon be selling pies.

Softball

Results reported as of August 8

League E1		League M1	
Phoubars	12-3	Stingrays	8-1
Magnuts	10-5	Happy Hour	7-2
Blue Jays	8-7	Gour-Mets	7-3
System	7-8	Hit 'n Run	2-7
Cleen Sweep	5-10	OER Wellheads	2-7
Hammerheads	3-12	Good Timers	2-8
League E2		League M2	
Scram	10-3	Varmints	6-1
Contaminators	9-3	Skeleton Crew	4-2
Phytinphytos	9-4	Mixed Nuts	2-4
CCD	8-5	What's on 2nd	2-4
Lights Out	6-7	No Names	2-5
Phase Out	6-7	League E3	
Hy Tech	5-7	Sure Fire	9-3
Gas House Gorillas	5-8	Sultans of Swat	8-4
Feds	3-10	Bombers	4-8
Mesocyclones	3-10	Medical	3-9

Cooking Exchange

Get to know your neighbors from around the world while enjoying delicious food at the next Cooking Exchange meeting — during a picnic at Shoreham Beach, on Thursday, August 21, at 5:30 p.m. The raindate is Friday, August 22. Bring a favorite dish to share to the beach. For information or to arrange a ride, call Ext. 1036. The group will leave the Lab for the beach at 5 p.m.

Call for Bowlers

Summer may not yet be over, but it's time to "think bowling" again!

Applications for the Tuesday night men's league in Port Jefferson and the Thursday night mixed league in Rocky Point are *only* available through Debbie Botts, Bldg. 355.

All BNL employees and their immediate family members can join, and all team registrations are due by August 26. A captains' meeting will be held on Tuesday, August 26, at noon in the South Room of the Brookhaven Center, Bldg. 30.

So join up for a night of fun each week — you don't have to be a great bowler, just a willing one! For information, call Debbie Botts, Ext. 3888, or Tracy Blydenburgh, Ext. 4422.

RR Avenue Closure

For approximately one hour, 6-7 a.m., on Tuesday, August 19, Railroad Avenue will be closed between Rutherford Drive and Ring Road, to allow trailers to be moved.

MIX Meeting

All are welcome at the next Monthly Information eXchange (MIX) meeting, to be held at 11 a.m. on Wednesday, August 20, in Room B, Berkner Hall. Topics for discussion will include the Labwide network (BNLnet) today, future directions, design strategies and remote access.