

Two Long Island Townships Honor Three BNL Women

During March, which is national Women's History Month, the Long Island Towns of Brookhaven and Islip honored three women of Brookhaven National Laboratory for their scientific and technical accomplishments, and for their contributions to the towns in which they live.

Carol Creutz and C. Ruth Kempf (see profiles below) were among 12 women

honored by Brookhaven Town. Both were guests of honor at the Town-sponsored Women's Recognition Night on Tuesday, March 23.

Denise Monteleone (see profile, page 2) was among eight women honored by Islip Town. Monteleone and the other women, along with a women's association, were honored at an Islip Town Hall ceremony on Thursday, March 25.

Carol Creutz, Chemistry

An inorganic chemist who has done basic research in solar-energy conversion, Carol Creutz is BNL's Chemistry Department Chair. As such, she oversees the work of about 100 employees who perform basic and applied research in chemistry.

Creutz commented, "I have lived in the Town of Brookhaven for more than 25 years and have been part of its namesake — Brookhaven National Laboratory — equally as long, so it is a special honor and pleasure for me to be recognized by the Town. It is especially gratifying to receive community recognition for conducting research which has itself given me such great satisfaction and pleasure."

Creutz earned her B.S. from the University of California, Los Angeles, in 1966 and her Ph.D. from Stanford University in 1971. Before she joined Brookhaven as a research associate in 1972, Creutz was an assistant professor at Georgetown University. She received tenure at BNL in 1980 and rose to Senior Chemist in 1989 before becoming Chemistry Chair in 1995.

Creutz has served as a councilor for the American Chemical Society, Inorganic Division, 1992-95; and she was on the editorial board of the journal *Inorganic Chemistry*, 1988-91. She was also a member of the National Science Foundation panel on research opportunities for women, in 1990, and a member of DOE's women's program review, in 1992. At BNL, she has served on the National Research Council committee on prudent practices for handling, storage, and disposal of chemicals in the laboratory, 1992-95, and she is currently a member of the National Research Council panel on laboratory design.



Roger Stouenburgh

Ruth Kempf, Advanced Technology

C. Ruth Kempf is Acting Chair of BNL's Department of Advanced Technology, whose 160 employees work in such areas as energy generation and use, environmental and waste technology, national security, and novel technology development and applications. An expert in nuclear safeguards and arms control, Kempf is also director of a high-profile, national security program which helps secure weapons-usable nuclear materials throughout Russia.

"It is very gratifying to see Brookhaven Town recognize the contributions made by women to our community," Kempf said. "I am hopeful that my work at Brookhaven Lab supporting nonproliferation and control of nuclear, chemical and biological weapons can benefit our local community, as well as the nation and the world."

Kempf did both undergraduate and graduate work at Rensselaer Polytechnic Institute. She holds bachelor's degrees in chemistry and German, a master's degree in radioanalytical chemistry, and she received a Ph.D. in physical chemistry in 1982. She was an assistant professor of chemistry at Fort Lewis College in Durango, Colorado, during her last year of graduate school, before joining BNL in 1982. At BNL, she was nominated Chemist in 1987, received a continuing appointment in 1989, became DAT Deputy Chair in 1996, and was named to her present position earlier this month.

Kempf also chairs the Institute for Nuclear Materials Management's non-proliferation & arms control technical (continued on page 2)



Roger Stouenburgh

A Half-Century of BNL Physics Highlighted at APS Centennial

As part of its participation in the centennial celebration of the American Physical Society (APS), March 21-26, in Atlanta, Georgia, BNL has been exhibiting a time line of its 50-plus years of accomplishments at the frontier of physics (starting below and continuing through page 4).

Founded in 1899 to advance and disseminate the knowledge of physics worldwide, the APS is now an organization of more than 40,000 physicists,

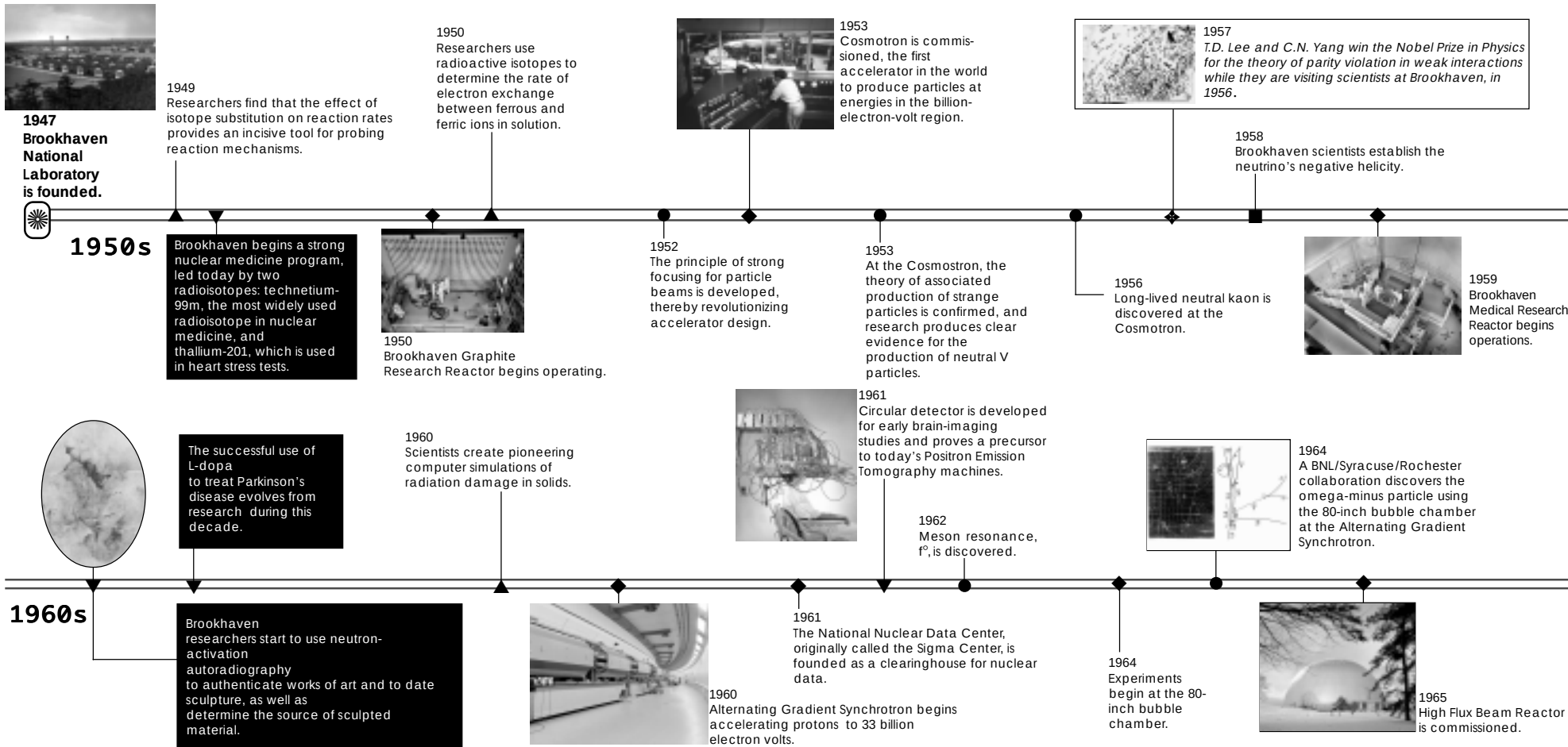
including many BNLeers. To celebrate its first 100 years, APS has been offering nearly a week of physics exhibits and lectures of both technical and general interest, as well as receptions for Nobel laureates in physics and chemistry, APS members, top science students and teachers from each state, and the general public.

As is pointed out in the brochure that accompanies the time line, the Lab was founded in 1947 to establish

scientific facilities — "big machines" — that are larger than can be accommodated at any single university. In every decade since the Lab's founding, Brookhaven has produced a new big machine, and the resulting interaction among BNL staff and guest scientists and those machines has resulted in cutting-edge science.

In addition to having BNL members since 1947, the APS had a special relationship with Brookhaven for 29

years, beginning in 1951 — the year that APS moved the editorial offices of its journal series *The Physical Review (Phys. Rev.)* onto the Lab site (see *Brookhaven Bulletin*, October 20, 1995). Though *Phys. Rev.* relocated to editorial offices across the William Floyd Parkway in Ridge in 1980, BNL's interaction with the editorial staff of APS journals continues, as former BNL Deputy Director Martin Blume became APS Editor-in-Chief in 1997.



BNL Women Win Town Honors

(cont'd)

division. Kempf worked from 1990 to 1992 as special technical advisor to the U.S. Ambassador to the conference on disarmament in Geneva and subsequently participated in numerous delegations dealing with U.S.-Russian nuclear materials security initiatives. In 1995, she served on a panel of the President's Council of Advisors on Science & Technology, which produced a classified report to the President that dealt with U.S.-Russian nuclear security issues and has served as the basis for subsequent U.S. policy developments in this area.

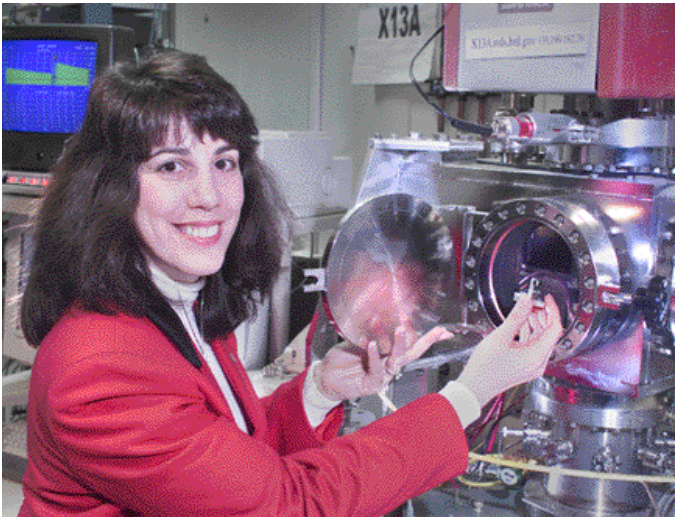
Denise Monteleone, Biology

A computer analyst in BNL's Biology Department, Denise Monteleone graduated from West Islip High School in 1981. She attended C.W. Post College, Long Island University, where she received the Norman P. Marengo Award for outstanding research for an undergraduate. She was the first student in the U.S. to graduate with a B.S. in computational biology. While a student at C.W. Post, Monteleone had a guest appointment at the Lab, 1983-1984. She was hired in 1985 as a biology associate and promoted to her present position in 1997.

At Brookhaven, Monteleone is a member of a team that has won two R&D 100 awards, which are given by *Research & Development* magazine annually for the year's top 100 technological achievements—innovations that have transformed basic science research into useful products.

Monteleone is a part of the team, led by BNL Senior Biophysicist John Sutherland, that garnered the award in 1987 for a device called the IMAGESystem, now widely used as a research tool in molecular biology. In 1997, Sutherland's team again won the award, for a research tool called the fluorescence omnilyzer, used by biochemists, structural biologists and solid-state physicists.

Currently, Monteleone is part of a team of scientists using synchrotron radiation at BNL's National Synchrotron Light Source to study the structure of DNA and proteins. She is involved in an ongoing research project to study the damaging effects of ultraviolet (UV) and ionizing radiation on DNA. These include heavy ion damage that astronauts may encounter during missions to



Roger Stoutenburgh

Mars, and UV damage to skin and plants from overexposure to sunlight.

"I am happy to have received this Islip Town honor," said Monteleone. "I hope that my work at Brookhaven Lab will benefit the local community, as well as the scientific community."

— Diane Greenberg

Women in Computing, Engineering: Brookhaven Women in the News

BNL's **Juanita McKinney**, an advanced business programmer in the Business Information Systems (BIS) Group of the Financial Services Division, is featured in the people section of the June/July 1998 issue of *Diversity/Careers in Engineering & Information Technology*.

As is noted in the article, McKinney is a part of BIS's software quality-assurance team, testing business software and working with users to ensure that BIS computer programs do their job. Coming to the Lab in 1976, McKinney worked her way up the career ladder and into business computing while earning her associate's and bachelor's degrees in business administration with the help of BNL's tuition reimbursement program.

Another Lab benefit which McKinney explained to the trade publication's readers that she appreciates is BNL's Child Development Center (see story, page 3), where her two-year-old son Terrence McKinney (pictured) is cared for during the workday.



Roger Stoutenburgh

Electrical engineer **Loralie Smart**, a staff engineer within the vacuum system section of BNL's Relativistic Heavy Ion Collider, is profiled on pages 28 and 29 of the winter 1998/1999 issue of *Woman Engineer*.

As was reported in the trade journal, Smart majored in electrical engineering at the State University of New York at Stony Brook (USB), where she learned about BNL at a career fair. Upon graduation, Smart completed a two-year internship at the Lab, then joined Brookhaven's staff in 1993. As a working engineer, she continues her association with USB, by mentoring female students enrolled in USB's women in science & engineering (WISE) program.

Smart, too, has taken advantage of the Lab's tuition reimbursement program, for graduate-level classes in engineering. — Marsha Belford



Roger Stoutenburgh

Women's Portraits

Through next Wednesday, March 31, "A Portrait Gallery of Great American Women," presented by the National Women's Hall of Fame, will be on display in Berkner Hall. Also, weekly drawings will be held for the book *And Then She Said*, a compilation by J. D. Zahniser of quotes from women worldwide. Free raffle tickets are available in the Berkner lobby.

'Take Our Daughters To Work' Day 4/22

The Lab will this year again be offering a "Take Our Daughters to Work" day, on Thursday, April 22. To help make the day memorable for BNLers' daughters, volunteers with fresh ideas are needed for an organizing committee. To join, contact the event's coordinator, Susan Foster, Human Resources Division, at Ext. 2888 or e-mail foster2@bnl.gov.

Scharff-Goldhaber Prize in Physics, 3/31

On Wednesday, March 31, at 3 p.m., in the Physics Department seminar room, Bldg. 510, Angelika Osanna will be awarded the 1999 Gertrude Scharff-Goldhaber Prize in Physics. All are invited.

A graduate student in physics at the State University of New York at Stony Brook, Osanna is also a guest research associate at BNL's National Synchrotron Light Source. Immediately following the ceremony, she will present a seminar on her work, entitled "Soft X-Ray Spectromicroscopy With a Cryo Scanning Transmission X-Ray Microscope." Refreshments will follow the seminar.

Administered by Brookhaven Women in Science (BWIS), this \$1,000 annual prize was established in 1992 to honor the late nuclear physicist, Gertrude Scharff-Goldhaber, who, in 1950, was the first woman Ph.D. to be hired to BNL's scientific staff and who was a founding member of BWIS.

March Into May Continues for Ten Weeks

The employee physical-fitness program called March Into May started at BNL last Monday, March 22, and will continue for ten weeks (see Brookhaven Bulletin, March 19, 1999).

Participants must return their registration forms to their captains by next Thursday, April 1, so they can be eligible for the first of three drawings. Those who signed up for this program through Health Promotion Specialist Mary Wood, but who have not received their forms from their captains may contact Wood, Ext. 5923 or wood2@bnl.gov.

TV Super Heros

On Thursday, March 11, a dozen BNLers volunteered their evening at Long Island's public TV station, WLIW Channel 21, to take pledge calls and been seen on air volunteering for a good cause.

The BNL employee, retiree and family-member volunteers were: Sue Cataldo, Ruth Fernow, Pat Fox, Jean Matkovich, Sue Monteleone, Florence O'Brien, Laurie Pearl, JoAnn Reed, Susan Sears, Nancy Siemon, Mary Tobacco, and Tara Tobacco.

BERA Toy & Book Fair

BERA will sponsor a Discovery toy and book fair at Berkner Hall on Wednesday, March 31, 10 a.m.-3 p.m. A range of educational toys, books, games, and software will be offered for children of all ages.

Charge cards will be accepted, For more information, call Andrea Dehler, Ext. 3347, or Kay Dellimore, Ext. 2873.



1967 Initial results released from Brookhaven experiments to measure solar neutrinos eventually lead to data showing fewer neutrinos than had been predicted by theory.



1968 Brookhaven researchers Gordon Danby and James Powell patent Maglev, the principle of superfast magnetically levitated transportation.



1970s Researchers measure very rapid reaction rates using a newly developed laser temperature-jump technique.

1970 Researchers begin neutron studies of critical phenomena in magnetic & structural phase transitions.

1973 Liquid argon calorimetry is developed.



1973 Brookhaven Linac Isotope Producer starts generating radioisotopes for biomedical and industrial applications.

1973 Protein Data Bank is established.

1974 Experiments begin at the 7-foot bubble chamber.

1974 Experiments establish the static and dynamic properties of incommensurate systems. Spin and charge separation in one-dimensional conductors is proposed.



1975 Research measure phonon superconductor

Candidates for the 1999 BERA Executive Board Election

After the ballots are counted in the election to be held next week, from March 29 to April 2, two of the four BERA members featured below will have been elected to the BERA Executive Board to represent the members of the Brookhaven Employees Recreations Association (BERA). All employees of BNL, BSA and DOE and

employees of permanent on-site contractors are considered BERA members. During their four-year terms, beginning on May 1, the winners will have the opportunity to affect BERA recreation policies. So, read the campaign statements below to help you make an informed choice when you cast your vote (see box).

Tom Dilgen



Tom Dilgen, a technical project supervisor with the Relativistic Heavy Ion Collider Project, joined the Lab in 1978.

He immediately became involved in BERA sports: playing in the Bowling, Volleyball, Softball and Basketball Leagues; golfing with the BERA Golf Association; and working out with the BERA Exercise & Bodybuilding Club, though that was some time ago, he says. Just a year ago, he became vice president of the Bowling League.

“For 20 years, I’ve enjoyed the benefits of having so many BERA leagues to join,” Dilgen says.

He continued, “Without them, I never would have met so many friends at the Lab. BERA activities are an important way of making BNL a more cohesive unit. I am interested in joining the BERA Board because I feel that now it’s my turn to be there for others — to help keep BERA activities running and perhaps start some new ones.”

Classified Advertisements

Placement Notices

The Lab’s placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882; call the JOBLINE, Ext. 7744 (344-7744), for a complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at <http://www.bnl.gov/JOBS/jobs.html>.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

DD7555. SECRETARIAL POSITION - (part time) Requires an AAS in secretarial science or equivalent, excellent oral and written communication skills, and experience with Word. Familiarity with BNL systems desired. Will act as secretary for the Institutional Animal Care & Use Committee. Will prepare agendas, process protocols, take minutes at meetings, and maintain files. Director’s Office.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

MK8271. SCIENTIST - for position as Deputy Head of the National Nuclear Data Center (NNDC). Requires a Ph.D. or equivalent in nuclear physics or nuclear chemistry, with substantial experience, a track record of leadership, and an outstanding reputation among international peers in the nuclear data field. Experience in managing a user-oriented information center, preferably in the nuclear data field, is highly desirable. Will be responsible for leading the NNDC’s nuclear data-evaluation activities and for the future development of this work. Under the direction of C. Dunford, Department of Advanced Technology.

Luis Nieves

Luis Nieves has been working at the Lab since 1981 for GTE, Fujitsu Business Communication Systems, and Interworks, providing the telephone service on site. Now a service foreman,

he has been a keen participant of the Softball, Volleyball and Football Leagues ever since he came, including captaining his volleyball teams for ten years and serving on the BERA Board 1994-98, as well as representing BERA in Lab activities, such as the 50th-anniversary time-capsule project and the annual Healthfest.

“In my job, I meet people all around the site, but that’s not the case for many Lab employees,” says Nieves. “BERA clubs are great for finding friends who share your interests. You also get to know other points of view around the Lab, which can help you in work situations. I know that being on the BERA Board takes time and effort, but it’s important to keep things organized. If I am elected, I’ll be happy to help.”



Rosalie Piccione

Rosalie Piccione, Credit Card Administrator with the Division of Contracts & Procurement (DCP), joined BNL’s Fiscal Division in 1961 and moved to DCP in 1974.

Over the years, in addition to bowling and playing softball, she has worked as chair of the BERA Special Events Committee since 1981 to enable people to have a good time at family picnics, dinner/theater events, and the Lab’s 35th and 40th anniversary picnics.

In addition, she has helped organize the Atlantic City bus trips and has served the BERA Board three times: 1980-84, 1986-90 and 1991-95.

“I’d like the BERA Board to brainstorm new ways to put the Special Events Committee to good use,” said Piccione.

She explained, “So many people have joined BNL recently that we have new talent to add to the mix. I would like to work on some interesting, Lab-wide events that will encourage people’s community spirit.”



Edward Sperry IV

Edward Sperry IV, a technical specialist with the Relativistic Heavy Ion Collider Project, has been a BERA participant since he came to BNL 20 years ago. He first joined the Bowling League, later serving eight years as its president.

He also enjoys playing in the Softball and Volleyball Leagues and the BERA Golf Association. As a member of the BERA Board, 1994-98, Sperry represented BERA on the Lab’s Healthfest organizing committee; helped organize BERA bus trips to Atlantic City, New York City, Yankee games and the U.S. Open tennis tournament; and attended BERA casual parties.

“While I was on the Board, I got to know some of the most effective ways of making things happen,” Sperry said. “BERA sports are good, but there’s always room for new ideas. I’d still like to see BERA sponsor more events of interest to a broader section of the Lab community.” — Liz Seubert



photos by Roger Stouenburgh

Vote Next Week

date	place	time
Mon., 3/29	Berkner	11:30 a.m.-1:30 p.m.
Tue., 3/30	Berkner	11:30 a.m.-1:30 p.m.
Wed., 3/31	TFCU	10 a.m.-noon
	Berkner	noon - 1:30 p.m.
Thu., 4/1	Berkner	11:30 a.m.-1:30 p.m.
Fri., 4/2	TFCU	10 a.m. - 2 p.m.

Time line designed by Theresa Esposito

1988

Jack Steinberger, Mel Schwartz and Leon Lederman win the Nobel Prize in Physics for discovering the muon-neutrino at the Alternating Gradient Synchrotron in 1963, when they were visiting researchers.

1992
Gold nuclei are first accelerated in the Alternating Gradient Synchrotron.

1993
Spin-polarized quantum well states are discovered.

1995
Scientists predict and discover stripes in high-temperature superconductors.

1995
Highest baryon density is achieved, in gold-gold collisions, at the Alternating Gradient Synchrotron.

1997
At the Alternating Gradient Synchrotron, an exotic meson is discovered. The rare kaon decay, $K^+ \rightarrow \pi^+ \nu \bar{\nu}$, is observed.

1998
The world’s fastest noncommercial supercomputer makes its debut for the Relativistic Heavy Ion Collider, at the Japanese RIKEN BNL Research Center.

1998
BNL is part of the Super-Kamiokande Collaboration in Japan that finds neutrinos have mass.

1999
Relativistic Heavy Ion Collider (RHIC) will begin operations.

1999
Aerial view of Brookhaven’s 5,300-acre site, in which the RHIC ring - 2.4 miles in circumference - is dominant.

1990s



1992
Accelerator Test Facility is commissioned.



1998
Laser-Electron Accelerator Facility begins operations.

