

Particle Post February 2007

Peace is not an absence of war, it is a virtue, a state of mind, a disposition for benevolence, confidence, justice.

~Baruch Spinoza

[To review previous issues](#)

A Note From Our Chairman



We are finally starting the FY2007 RHIC run. You have all heard that the House has passed an Omnibus bill that treats us reasonably well, compared to what it could have been. The Senate must act on or before February 15. We have decided to proceed with the machine turn-on before we hear the final budget numbers. This will allow for a 20 week RHIC run this fiscal year, with beam operations ending on June 30. The schedule for turn-on is the following:

Feb 5 Tandem and TTB turn on

Feb 7 Booster turn on

Feb 9 AGS turn on

Feb 12 RHIC systems turn on

We expect to have beam on the following dates:

Beam in Booster Mon 12 Feb

Beam in AGS Thur 15 Feb

Beam in Blue Thur 22 Feb

Beam in Yellow Thur 1 Mar

A day-by-day schedule is available at:

<http://www.rhichome.bnl.gov/AGS/Accel/Maintenance/Schedules/Startup07.htm>

Once BNL has a final FY2007 budget, we should also expect action by the DOE to release the new pay package.

I would like to commend everyone for being fiscally conservative in these difficult times. We will clearly loosen the purchasing purse strings, but we will still have to be selective in our purchases throughout this fiscal year.

Let's assure that FY2007 is an outstanding RHIC performance year.

Administration



Our January financial data is complete and, although the exact numbers may not have much meaning for you, the response to Derek's request to constrain and conserve is clearly evident. RHIC operating expenses for the month totaled only \$6.4M. Overtime and credit card procurements were at historic lows, and expense for trade labor was nearly \$100K less than in December.

Ray Orbach's assurance last week that RHIC will be fully funded is the good news for which we were waiting. Based on that news, we are proceeding with preparations for a 20 week RHIC run. Please keep in mind, however, it may be two to three weeks before our final FY 2007 budget is known, so it is important that we continue to hold off on all but essential purchases.

FY 2008 Presidential Budget guidance is expected this week, at which point planning exercises for the FY 2009 Budget Submission will begin in earnest. The exercises include our response to the President's Budget, as well as various "what if" scenarios for FY 2009 and beyond. We have every reason to believe that the increases in funding for DOE's Office of Science, promised in the President's FY 2007 Budget, will also be reflected in the FY 2008 Presidential Budget.

DOE construction funding for EBIS is still uncertain, although project personnel are prepared to begin spending the moment we receive news of a 2007 appropriation. In the interim, NASA funding has made continued progress on construction possible.

The NSRL run beginning in March is the last on our current contract with NASA. A new 3-year contract with NASA is currently being drafted.

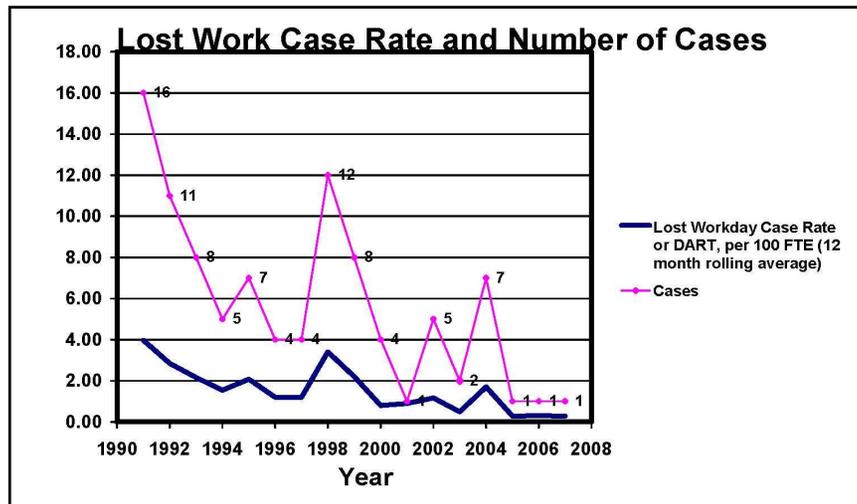
Machine Update



The focus in machine operations has shifted overnight from optimal management of an extended shutdown to busy preparation for the upcoming very likely RHIC run, and the planned BLIP and NSRL runs, all happening in the first half of March. It will hopefully be a very busy spring this year after the federally mandated winter freeze!

We worked out a detailed schedule for the start-up of RHIC and injectors (see <http://www.rhichome.bnl.gov/AGS/Accel/Maintenance/Schedules/Startup07.htm>) that is consistent with the ultimate goal of having beam in both RHIC rings by March 1st. The order for the liquid helium has been sent and the first delivery should be at the lab by February 12 if not earlier, consistent with the beginning of the 4K cool-down by mid of February. Activities related to the run, such as the Time Meetings, Users Meetings and APEX Meetings will all resume this week. A RHIC dry-run is planned for February 15-16. Last, but absolutely not least, we are looking forward in operations to the 'commissioning' of several new operators, ready to enjoy the unique experience of the Main Control Room!

Safety Stats



C-AD Occupational Injury Statistics

	For Year* 2006	For Year* 2007
First Aid Cases	1	0
Recordable Cases	5	0
Lost Work Cases	1	0

* Calendar Year

REMINDER: TLD exchange is done the **FIRST FRIDAY** of the Month.

Friday, February 2, 2007

NEXT EXCHANGE: Friday, MARCH 2, 2007

Pete Cirnigliaro



Arrivals

Dawood Aized, joined the Department on January 8 working with Joe Tuozzolo in the Cryogenic Systems Group.

Guillaume Robert-Demolaize joined the Department on January 5 working with Wolfram Fischer in the Accelerator Division.

WELCOME!!

Departures

James Alduino, Design & Documentation Group retired on Wednesday, January 31st.



CONGRATULATIONS!

Transfer

Cynthia Longo, Design & Documentation Group transferred to NSLS II, February 1st, although she will be part time with us for the next 2 weeks.

GOOD LUCK!



Get To Know Your CoWorker

David Phillips has worked at BNL for about 18 years, he works in the Facilities & Experimental Support Group working on NASA Space Radiation Laboratory (NSRL) and Energy Recovery Linac (ERL). When David is not working he enjoys speed skating, skiing, bicycling, hiking, running, tai chi, reading, chickens, cats and the beach. David has a son, Matthias, 8 years old, who likes all of his Dads hobbies plus more...



DAVID B. PHILLIPS





Did You Know?

Michael O'Donnell (Cryogenic Systems Group) passed away last week due to an illness. Beloved husband of Noreen O'Donnell (Research Library) and adoring father of Rachel and James O'Donnell. Arrangements have been entrusted to the Ruland Funeral Home, Inc. (South of LIE, Exit 63) 500 North Ocean Ave., Patchogue, NY. Family to receive friends Sunday and Monday 2-4pm and 7-9pm. Funeral mass Tuesday, 10:45am at Good Shepherd RC Church in Holbrook, NY. Interment to follow in Washington Memorial Park in Mt. Sinai, NY.

From: Heimerle, Marion V
Sent: Tuesday, January 23, 2007 3:37 PM
To: CAD Personnel List
Subject: C-AD Design Room Supervisor

This message is sent on behalf of Jon Sandberg and Joe Tuozzolo:

Jim Alduino will be leaving the Laboratory on January 31, to move to Florida. Jim has been our design room supervisor for more than 15 years and has done an excellent job maintaining the state of the art while the Design and Documentation Group completed the Booster project, the RHIC project, NSRL, the SNS, many accelerator upgrade projects, and support for other groups throughout the Laboratory. We all wish him well.

Tony Arno has taken over as the technical supervisor for both the electrical and mechanical design rooms. Steve Bellavia will be taking over as the group leader for Jon Sandberg and Joe Tuozzolo.

The Diversity Office is now publishing a newsletter "Diversity Management News" that highlights BNL workforce demographics, senior management's support of diversity and employee cultural sharing. This newsletter will be published 3 times during the fiscal year and is accessible on the Diversity Office home page <http://www.bnl.gov/diversity/>.

Birthday Biography: Susan B. Anthony from Newcomer's Almanac

In a month when we celebrate Presidents whose faces are on our money, it is perhaps a good time to remember one of the leaders of the women's movement in the US, Susan B. Anthony, who was born on February 15, 1820. Susan B. Anthony was a Quaker, raised and schooled by her activist father to work for moral issues. She was active in the "temperance" movement (which sought to make drinking of alcohol illegal). (The 18th Amendment to the US Constitution did so, in 1917, 11 years after her death; it was repealed by the 21st Amendment in 1933.)

Anthony was frustrated by not being allowed to speak at temperance rallies because of her sex and soon shifted her attention to women's rights. She, along with another woman's advocate, Elizabeth Cady Stanton, worked for decades to secure the rights of women to own property, have control over their wages, and care for their children in case of divorce.

Anthony worked closely with abolitionists (who sought to make slavery illegal), in an early coalition between African Americans and women. However, after the Civil War, when the 15th Amendment was passed that ensured the rights of all races (but only men) to vote, Anthony and Stanton set off on their own to continue their work for women's rights. She was not to see success in her lifetime.- she died in 1906 and women did not get the right to vote in this country until 1920. A one-dollar coin was released in her honor in 1979; unfortunately, it was easily confused with a quarter and was therefore quite unpopular. We're grateful for your work, in any case - Happy Birthday, Ms. Anthony.

History of Black Civil Rights Struggle from Biography.com

The Slave Trade - Though blacks first stepped foot in the Americas in the late 1400s, they didn't arrive in earnest until after 1518 when King Charles I of Spain sanctioned the African slave trade. From then until abolition in 1870, at least 10 million Africans were forcibly brought to the Americas. In the American colonies, England became extensively engaged in trading slaves after setting up the Royal African Co. in 1663.

Early Collective Resistance - As white workers improved their status in the colonies, both free and bonded blacks were subjected to new laws ensuring that the political rights and economic opportunities granted whites would not be extended to Africans or their descendants. However, literacy and Christianity both proved vehicles for individual and collective resistance, both to brutal treatment and to enslavement itself. After the Revolutionary War, many freed blacks migrated to cities, where a more liberal climate enabled them to establish their own social institutions and to begin efforts to improve conditions. Increased discrimination, combined with growth of black literacy, institutional strength, and economic resources, encouraged a trend toward greater militancy after 1830. One such example was the Underground Railroad, through which such abolitionists as Harriet Tubman and Sojourner Truth helped slaves escape.

Abolition and the Civil War - Though the Civil War was not initially waged to abolish slavery, President Lincoln issued the Emancipation Declaration in 1863, freeing all slaves held by southerners who remained rebellion. The declaration eventually led to the 13th Amendment, a constitutional prohibition of slavery. After winning their freedom, many blacks found it nearly impossible to gain independence. Most former slaves became sharecroppers, leaving them under the domination of white creditors. They also faced growing terrorism from such groups as the Ku Klux Klan. In cities, they continued to encounter institutionalized racism.

World Wars I and II - World War I marked a turning point for African Americans, hastening the long-term process of black urbanization and institutional development, including a cultural movement called the Harlem Renaissance. World War II also provided a great stimulus for changes in national racial policies, increasing the need for black labor and heightening the sensitivity of whites to the dangers of racist ideas.

Equal Rights Legislation - In 1954, a unanimous Court ruled in *Brown vs. Board of Education* that "separate educational facilities are inherently unequal." The successful case was argued by lawyer Thurgood Marshall who later became the first African American appointed to the Supreme Court. The *Brown* decision inspired southern blacks to launch a sustained movement to integrate all public facilities, led by such leaders as Rev. Martin Luther King, Jr. and Ralph Abernathy. Activists like Stokely Carmichael organized "freedom rides." The South erupted into violence that shocked the nation, including the brutal murder of Medgar Evers. Most protests took legal and nonviolent forms, such as the successful enrollment of James Meredith at the University of Mississippi, the Montgomery, Alabama bus boycott instigated by Rosa Parks, and the famous March on Washington in 1963, which was directed by labor lawyer and civil rights activist A. Philip Randolph. In 1965, one such protest in Selma, Alabama, prompted President Lyndon B. Johnson to introduce a new voting-rights legislation.

Recent Strides - During the 1970s, the best-known advocate of black nationalism was Malcolm X, whose ideas became increasingly popular after his assassination in 1965. Toward the end of the 20th century, blacks made great strides in the areas of culture, education and politics. In the 1980s, many African Americans were elected to local and state offices. The country and the world has recognized the contributions of American blacks, with Toni Morrison winning Pulitzer and Nobel literature prizes and General Colin Powell appointed the first African American to serve as chairman of the joint Chiefs of Staff. In 2005, Condoleezza Rice became the first African American woman to serve as Secretary of State. But even as blacks have become enmeshed in middle-class society, poverty and alienation continue to shield segments of the black populace from complete cultural absorption.

Employee Awards Ceremony was held on January 10 in Berkner Hall and the following staff from our Department were presented with awards:

Michael Blaskiewicz - Science and Technology Award

Gary McIntyre and Al Pendzick - Engineering Award

Stephanie LaMontagne - Brookhaven Award

CONGRATULATIONS

Brookhaven Women In Science (BWIS)

number: 07-09
For release: January 22, 2007
Contact Diane Greenberg, 631 344-2347, greenb@bnl.gov, or
Mona S. Rowe, 631 344-5056, mrowe@bnl.gov

Brookhaven Women in Science Offers Scholarship for Women Science Students Deadline for Applications is April 2, 2007

Applications are now being accepted for the Renate W. Chasman Scholarship for Women. This scholarship was established in 1986 to encourage women who have taken a break from formal education to resume their studies in natural sciences, engineering or mathematics. The winner will receive a one-time award of \$2,000 from Brookhaven National Laboratory's Brookhaven Women in Science, a not-for-profit organization whose aim is to promote the advancement of women.

Candidates for the scholarship must be U.S. citizens or resident aliens who live in Nassau or Suffolk County, or in the boroughs of Brooklyn or Queens. They must be accepted for credit in a degree-oriented program at an accredited institution. Their program of study for 2007-2008 must be either at the junior or senior undergraduate level or at the first-year graduate level, to be pursued on a half time or greater basis.

A committee of Brookhaven Lab scientists will choose the winner. The award will be made directly to the recipient, who will be expected to complete at least two consecutive school terms in good academic standing.

Application forms and further information can be obtained by writing to: Chasman Scholarship Fund, P. O. Box 183, Upton, NY 11973, or send an e-mail request to bwisawards@bnl.gov. Applications may also be downloaded from this website: <http://www.bnl.gov/BWIS/scholarships.asp>. The deadline for applications is April 2, 2007. Please include a stamped, self-addressed envelope when requesting an application by mail.

Renate W. Chasman (1932-1977) was a noted physicist at Brookhaven Lab. Her work influenced the design of particle accelerators around the world, including the National Synchrotron Light Source at Brookhaven. The Renate W. Chasman Scholarship Fund is supported by fund-raising events and tax-deductible contributions from individuals and organizations, including Brookhaven Science Associates, the company that manages Brookhaven Lab.



*We wish all of you born in **FEBRUARY**
a happy and healthy year ahead.
Birthday people **ONLY** click on cake*



C-AD Service Awards January

30 years

Willem Dejong
Ronald Zapasek

10 years

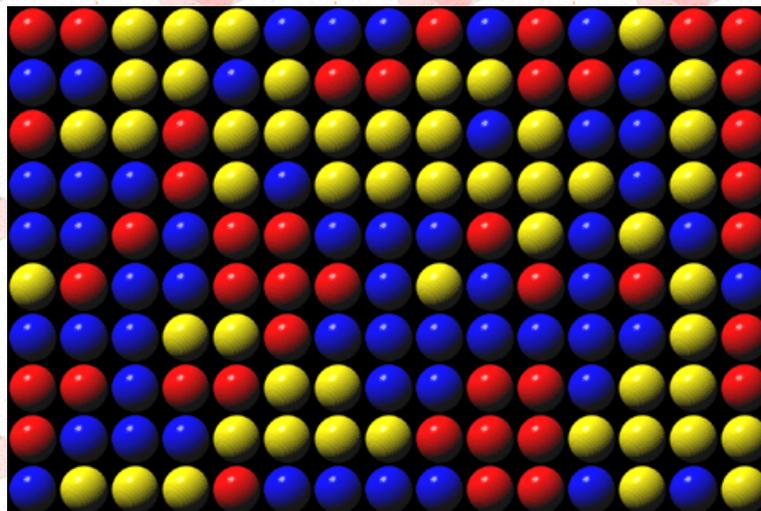
Jeffrey Wilke

Congratulations to ALL!



Fun Time

Same Game: Match the adjacent spheres of the same color to clear the board. The more you clear at once, the higher your score. Addicting!



Total Score:

Click Score:

Free JavaScripts provided
by [The JavaScript Source](#)

UPCOMING BERA EVENTS FOR 2007!!!!

FOR ALL TRIPS LISTED BELOW YOU MUST HAVE PREPAID RESERVATIONS WHICH CAN BE MADE AT THE BERA STORE in Berkner (MON-FRI, 9:00A-3:00P)

Atlantic City & Boardwalk

Saturday, March 3, 2007

Bus departs from Brookhaven Center at 8:00am sharp! Casino to be determined. You must be 21 & over to participate. Cost is \$25pp and you receive \$15 in coins back from the Casino.

NY Knicks vs Dallas game

Tuesday, March 20, 2007

Bus leaves from Brookhaven Center at 4:00pm and will leave Madison Square Garden at approx. 11:00pm. \$36pp includes Section 315 tickets, coach bus and a Knicks jersey.

Ringling Bros and Barnum & Bailey Circus

Sunday, April 15, 2007 - 11:00am show

Madison Square Garden tickets are \$33pp for Row 107 purple section. The bus leaves from Brookhaven Center at 8:30am and will leave New York City at 5:00pm.

NYC Museum Mile

Sunday, April 22, 2007

\$10pp for coach bus and you pay for museums of your choice to visit. Go to www.bnl.gov/bera/ for details. Bus departs from Brookhaven Center at 9:00am and leaves from Metropolitan Museum of Art at 5:00pm.

Brooklyn Botanical Garden

Saturday, April 28, 2007

Cost is \$10pp and admission to Garden is free. Bus departs from Brookhaven Center at 9:00am and leaves BBG at 4:30pm.

Romeo and Juliet @ NYC Ballet

Sunday, May 6, 2007

\$69pp for orchestra seats and coach bus transportation to the NYC Ballet at Lincoln Center. Bus leaves Brookhaven Center at 10:00am and leaves NYC at 5:30pm.

CALLING ALL VOLUNTEERS

All volunteers who have completed 100 hours or more of volunteer service within a 12- month period are eligible to receive the Presidential Volunteer Service Award



As an award recipient you will receive a personalized certificate of achievement; a congratulatory letter from the President of the United States; a congratulatory letter from the President's Council on Service and Civic Participation; and an official President's Award pin (Bronze, Silver or Gold, depending on the level of service).

The Department of Energy and Brookhaven National Laboratory are encouraging all eligible volunteers to apply for this recognition.

If you or someone you know qualifies for this award, please nominate them (or yourself) by filling out and submitting the application located at the following web site: <http://www.bnl.gov/community/volunteers.asp>. The nominee does not have to be a BNL employee.

For more information or to submit an application, please contact Barbara Blenn, Bldg. 130, ext. 4458 or April Gray, Bldg. 134A, ext. 2459.

BNL Celebrates Women's Health Month



- Preventive Health for Women
Tuesday, February 6th, 12-1pm
Berkner Room B
Patricia Edwards, ANP & Jai Subramani, MD
- "The Hungry Heart: Women, Food and Relationships"
Thursday, February 15th, 12-1pm
Berkner Room B
Nancy Losinno, LCSW, CASAC
- Tuesday, February 20th
"Go Red for Women Day"
Everyone is encouraged to wear red to raise awareness of heart disease and stroke!
- Women & Heart Disease
Tuesday, February 20th, 12-1pm
Berkner Hall
Jai Subramani, MD & Patricia Edwards, ANP
- Menopause
Wednesday, February, 28th, 12-1pm
Berkner Hall
Doris R. Weissman, NP, MS
SUNY Stony Brook School of Medicine and School of Nursing
- Women & Nutrition
Thursday, March 8th, 12-1pm
Berkner Room B
Amy Shapiro, RD

Please register me for

BNL Celebrates Women's Health Month

- Preventive Health for Women
Tuesday, February 6th
- "The Hungry Heart: Women, Food and Relationships"
Thursday, February 15th,
- Women & Heart Disease
Tuesday, February 20th,
- Menopause
Wednesday, February, 28th
- Women & Nutrition
Thursday, March 8th



Name (please print clearly) _____

e-mail Address _____

Please return completed form to Michael Thorn, Bldg. 490/OMC or mthorn@bnl.gov



ALUMNI NEWS: AGS/RHC/C-AD RETIRED CROWD - We'd enjoy hearing from you and what you have been up to. Please send your notes to pmanning@bnl.gov

For release on November 13, 2006, 11:40:00 AM

Contacts: Diane Greenberg, greenb@bnl.gov, (631)344-2347 or
Mona Rowe, mrowe@bnl.gov, (631) 344-5056

Brookhaven Lab's Eric Forsyth Honored by the Institute of Electrical and Electronics Engineers, Inc.

UPTON, NY - The Institute of Electrical and Electronics Engineers, Inc., (IEEE) has chosen Eric Forsyth, a retired electrical engineer and former chair of the Accelerator Development Department at the U.S. Department of

Energy's Brookhaven National Laboratory, to receive the 2007 Herman Halperin Electric Transmission and Distribution Award.

The \$5,000 award is funded by Herman and Edna Halperin and administered by the IEEE Foundation, Inc. Herman Halperin, an award-winning IEEE member who had a 40-year career with Commonwealth Edison Company, was noted for his pioneering contributions to the design and operation of electric plant facilities and power cable systems.

"I am pleased to be recognized for this award," Forsyth said. "More than 20 years ago, my team and I at Brookhaven designed and built the most advanced, high-powered superconducting power transmission cables that have ever been developed to this day. I am glad to see the technology developed at BNL has found commercial application."

From 1972 to 1986, Eric Forsyth was in charge of Brookhaven Lab's Power Transmission Project, a program to develop a viable and cost-effective means of transmitting large amounts of electrical power underground. Brookhaven researchers fabricated a thousand feet of underground superconducting power transmission cable. Brookhaven's cables are made primarily of niobium-tin, a superconducting compound that has almost no electrical resistance when cooled to almost absolute zero – minus 459 degrees F. Cooling of the cable was accomplished with a helium refrigerator. Brookhaven's superconducting cable was able to carry about five times more current than conventional cable.

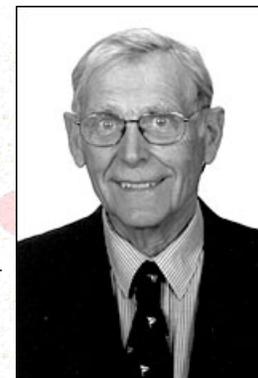
In eight test runs, the prototype superconducting cable proved to be extremely rugged and durable. Each 100-meter-long cable was capable of carrying over 600 megavolt amperes: the power output of a medium-sized nuclear reactor. No other project employing superconductors for power transmission has ever operated at the high power levels or for the length of time achieved in the Brookhaven project.

The Laboratory's pioneering project demonstrated that superconducting cable is a viable technology. Several comprehensive studies in cooperation with electric utility companies refined the technical design to optimize costs. A landmark study conducted by the Philadelphia Electric Company concluded that the Brookhaven design was the most cost-effective among sixteen options.

With funding from the U.S. Department of Energy, the Long Island Power Authority (LIPA), AMSC – American Superconductor Corporation, and two European companies – Nexans and Air Liquide – have developed superconducting cable using a type of high-temperature superconductor discovered after the Brookhaven project was terminated, permitting the use of nitrogen as a refrigerant. Using this new technology, one of the world's first high-temperature superconductor power cables is now under construction in part of the LIPA transmission grid located in Holbrook, Long Island. The underground cable will be capable of powering 300,000 homes, and its commissioning is expected in 2007.

Eric Forsyth received bachelor's and master's degrees in electrical engineering from Manchester University, England, and the University of Toronto, Canada, respectively. He joined Brookhaven Lab in 1960 as an assistant engineer, was promoted to electrical engineer in 1969, and was appointed manager of the Power Transmission Project in 1972. In 1986, he became chair of the newly formed Accelerator Development Department, which was responsible for various accelerator projects, including the pre-construction design and planning of the Laboratory's largest accelerator, the Relativistic Heavy Ion Collider (RHIC).

Forsyth took a leave of absence from Brookhaven in 1990 and returned on a part-time basis in 1992, working on RHIC design. After retiring in 1995, he has sailed extensively, including two circumnavigations around the world and cruises to the Arctic, Antarctic, and the Baltic. At present, he is in the middle of another cruise to Antarctica, which he plans to reach in January 2007.



You can catch up on all of **Eric Forsyth's** travels by clicking on his sailing yacht below





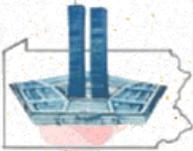
February 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2 C-AD AP Seminar "The Q0 scheme in the framework of LHC luminosity upgrade", Emanuele Laface, CERN, 4pm, 911B LCR Groundhog's Day	3
4	5	6 BSA Distinguished Lecture "Before the Big Bang? A Novel Resolution of a Profound Cosmological Puzzle", Roger Penrose, U. of Oxford, 4:00pm Berkner Hall	7 Health Promotion Program Lecture "Dentistry in the 21 st Century", Mitchell Shapiro, The Center for Cosmetic Dentistry, 12:00pm Berkner Hall	8 Health Promotion Program Lecture "Alternative Therapies for Diabetes", Amy Shapiro, 12:00pm Berkner Rm B	9 C-AD AP Seminar "Measurements of Photocathode Operational Lifetime at Beam Currents up to 10 mA using an Improved DC High Voltage GaAs Photogun", Joe Grames, JLab, 4pm, 911A Snyder Seminar	10 Science Bowl, 9am to 4:30pm, Berkner Hall
11	12 Lincoln's Birthday	13 Physics Colloquium "Color Superconductivity in Dense Quark Matter", Mark Alford, Washington U., 3:30pm Bldg. 510 Large Seminar	14  Blood Drive	15 OHSAS 18001 Celebration, 3pm, Berkner Upper Lobby	16	17
18 Chinese New Year "Year of the Pig" - 4705	19  Holiday	20 Physics Colloquium "New Era in UHE Astro Particle Physics", Angela Olinto, U. of Chicago&APC, 3:30pm Bldg. 510 Large Seminar	21 422 nd Brookhaven Lecture "Aerosols, Clouds and Climate - From Micro to Macro" Yangang Liu, ESD, 4pm, Berkner	22 Washington's Birthday	23	24
25	26	27 Physics Colloquium "A Blur of Biology, How Motion and Shape are Produced by Living Cells", Joshua Shaevitz, UC, Berkeley, 3:30pm Bldg. 510 Large Seminar	28			



March 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1	2	3
4	5	6 Physics Colloquium "Excited Electronic States in Carbon Nanotubes", Louis Brus, Columbia U., 3:30pm Bldg. 510 Large Seminar	7	8	9	10
11 Daylight Savings Time Begins	12	13	14	15	16 	17  Saint Patrick's
18	19	20	21 Spring Begins 423 rd Brookhaven Lecture "RHIC: the World's First High- Energy, Polarized-Proton Collider" Mei Bai, C-AD, 4pm, Berkner	22	23	24
25	26	27	28	29	30	31



We Remember
Sept. 11, 2001

Editor: Pamela Manning x4072