

Particle Post May 2007

"No gift to your Mother can ever equal her gift to you – Life"

To review previous issues

A Note From Our Chairman



We are now well into the RHIC gold-gold run and the machine is now running smoothly. The average integrated luminosity is now a factor of 2 above Run 4 and a factor 4 above design value. Stochastic cooling has been demonstrated with gold beam at present luminosity and we are beginning to approach an operational system for the first ring. Congratulations to Mike and Mike.

In last months Particle Post I reported that we had to discipline (one termination, one suspension) two C-AD staff for improper use of computers, specifically accessing sexually explicit material and sites. There are still some individuals who have yet to understand my message and the consequences of such behavior. This month I again report to you that another person will be disciplined for a similar offense. This is unacceptable behavior and will incur severe sanctions to those found to have violated Federal and BNL rules regarding misuse of computers.

Congratulations to this year's Environmental Stewardship Award winners, Joe Scaduto, and John DeBoer. The Water Systems Group successfully implemented the effort to reduce the inventory of tritiated water. The Laboratory received the White House Closing the Circle Environmental Stewardship Award. Brian Briscoe, Vinnie LoDestro, Joel Scott, Wally Shaffer and Mel Van Essendelft were acknowledged for their contributions. This was specifically, for C-AD recipients, for the 90% reduction in PCB inventory for BNL which was almost totally from the replacement of PCB capacitors at Linac. In the Monday Memo, Sam Aronson stated that; " These are very significant federal recognitions of our commitment to and performance in environmental stewardship".

Administration



Our funding plan for FY 2007 is in place and DOE has authorized the use of 100% of the funds they will provide this year. The Department's total FY 2007 budget is nearly \$150M and includes DOE Nuclear Physics funding of approximately \$125M.

WEB requisitions, Central Shops RFQ's and work orders have begun to flow through the system and the business of machine operations is well underway.

The financial status for April reflects the steady hum of work in process. RHIC is fully operational and cost for April totaled \$10.1M. Year-to-date income from Tandem users totals more than \$200K and BLIP operations has provided another \$200K in revenue.

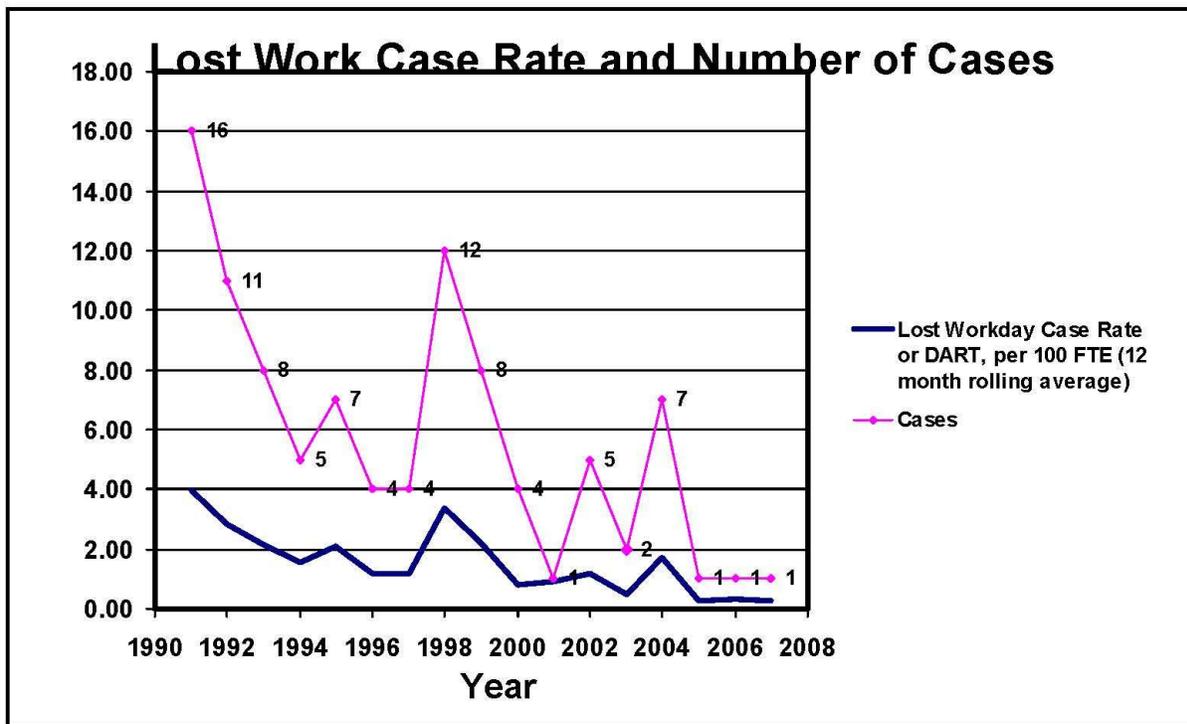
Excluding RHIC Operations, another \$1.2M was costed in April. NSRL, which is in the midst of an extended spring

run, costed \$522K. April also included the first recorded cost for EBIS Construction and the Rapid Cycling Medical Synchrotron.

In summary, our budget is confirmed and it is sufficient to effectively perform the mission of the Department – that is, “to develop, improve and operate the suite of particle / heavy ion accelerators used to carry out the program of accelerator-based experiments based at BNL.”



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.

NEXT EXCHANGE: Friday, MAY 4, 2007

NEXT EXCHANGE WILL BE JUNE 1

Pete Cirnigliaro



Arrivals

Natalia Prado de Abreu joined the Department on April 23 working with **Wolfram Fischer** in the Accelerator Physics Group.

Damayanti Naik joined the Department on April 12 working with **Ilan Ben-Zvi** in the E-Cooling Group.

Anatoly Sidorin started as a Research Collaborator on April 30 working with **Ilan Ben-Zvi** in the E-Cooling Group until May 26th.

Yi Zhang joined the Department on April 16 working with **Tom Tallerico** in the Cryogenic Systems Group.

WELCOME!!

Transfer

Robert Duffin, Design and Documentation Group, will be transferring to the Physics Department effective May 14.

GOOD LUCK!!



Get To Know Your CoWorker



Mei Bei, Accelerator Physics Division, has been with our department since 1999. Mei works primarily on Polarized Protons. In her down time Mei enjoys scuba diving, going to concerts, movies, and hanging out with friends. Mei also loves to travel and enjoys experiencing all kinds of cultures. She has been to many places in Europe and Asia and is currently planning trips to Africa and Tibet! Mei is very adventurous, in the summer of 1005 Mei had her first Tandem Skydive and in August 2006 she scuba dived in the Cayman Islands to play with stingrays, chase sharks, etc. Mei has two wonderful nieces who are in Nanjing, China, as is the rest of Mei's family.



David Ashby, son of Henry Ashby (Collider Accelerator Support) will be graduating from Riverhead High School this year and will be attending Alfred University in the fall.



John Callegari, son of Paul (Water Systems Group) and Dotty Callegari, is graduating Magna Cum Laude from York College of Pennsylvania and will be receiving a Bachelor of Arts in the fields of Mass Communication and Public Relations, with minors in Visual Communication and Speech Communication. John served as the captain of both York College's Cross Country and Track & Field teams, leading both teams to many victories. After graduation on May 12th, John will start his career as a news reporter for the *Smithtown News*, a weekly local newspaper serving the town of Smithtown.



Janine Zaltsman, daughter of Alex Zaltsman (RF Group) is a senior at Commack High School. She is the President of National History Honor Society, the treasurer of the Future Engineers Club and a member of the National Honor Society, Italian Honor Society, English Honor Society, and Student Council. Janine has been a competitive swimmer for the past 11 years and she is a Sectional and State Qualifier. She was chosen as the "Outstanding Female Athlete of the Year" at Commack high School. Janine will attend Wesleyan University in the fall. She plans on majoring in American Studies.

CONGRATULATIONS



Did You Know?

11 Ways to Be an Earth-Friendly Couple info found on msn.com

The goal is to limit carbon dioxide and other greenhouse gases, which are the big offenders in the global-warming crisis.

Strategy 1: Change your light bulbs. We're sure you've heard this before – and we know it's tempting to buy the four-pack of bulbs for \$2 – but compact fluorescent bulbs use two-thirds less energy and last 10 times longer than the standard incandescent bulbs.

The Payoff: If Americans replaced just one bulb in their home, it would save enough energy to light 2.5 million homes in one year and prevent an amount of greenhouse gases equivalent to the emissions of 800,000 cars.

Strategy 2: Bring your own mug to Starbucks. You'll get a .10¢ discount, and it's one less paper cup to end up in a landfill. While you're there, pick up some free bags of spent coffee grounds to use as "green" fertilizer in your garden.

The Payoff: The store won't create more waste when they throw away a cup, and you can start growing carbon dioxide-eating plants au naturale.

Strategy 3: Save water. Run the dishwasher only when it's full, and don't prerinse dishes (a waste of time, water, and energy). But the real water drain is the shower – take shorter ones (and take them together!).

The Payoff: By skipping prerinse, you'll save 200 pounds of carbon dioxide from being released and \$40 a year. Any by taking shorter showers, you'll conserve 350 pounds of CO2 and keep about \$100 in your pocket each year.

[Note] Look into low-flow shower heads. They still have great pressure but conserve gallons of water from each shower.

Strategy 4: Turn off your computer. When in standby mode, your PC is still using energy. In fact, 75% of electricity used in your home comes from electronics that are turned off. Stop this phantom electro rush by plugging your computer into a power strip and shutting down completely at the end of the day. Also, remove your iPod, digital camera, and phone chargers from outlets when not in use.

The Payoff: Turning off a 75-watt monitor for 40 hours a week might only save \$4.38 a month, but it reduces CO2 (greenhouse gas emissions) by 750 pounds, burning 450 fewer pounds of coal each year!

Strategy 5: Cancel catalogs. Many of us have a steady flow of unwanted and unsolicited junk mail, catalogs, and magazines. Let's say everyone in New York City received 10 a month: That would make 240,248 tons of paper waste! Call 888-5-OPTOUT or get off the lists at NewDream.org. Make sure to recycle what you do receive. Find out where to recycle in your area at Earth911.org.

The Payoff: Less energy is spent on creating paper (which kills trees we need) and less trash is created when we can reuse products. The immediate return? Less clutter at home!

Strategy 6: Reuse plastic bags. Instead of chucking 100 billion plastic sacks a year (wow!), try and get a second, third, or tenth use out of them. Tote your lunch to work or your groceries home, or at least use them as garbage bags. Better yet, next time you shop, try a reusable bag. Learn how at ReusableBags.com.

The Payoff: You're reducing pollution. The amount of oil it would take to make just 14 plastic bags would run your car for one mile.

Strategy 7: Green your car. The next time you're in the market for a new car, check out an eco option like a hybrid model – whatever you do, don't get a SUV. In the meantime, take care of your current ride with regular tune-ups and properly inflated tires.

The Payoff: Driving a 13-mile-per-gallon SUV wastes more energy in one year than if you left your refrigerator door open for six years! Getting regular tune-ups, performing maintenance, and having clean air filters will help you burn less gas and therefore pollute the air less. And properly inflated tires could save around 2 billion gallons of gas each year.

Strategy 8: Use recycled paper...in the bathroom. Most of the TP we use is made from virgin trees found in forests previously untouched by humans. Seeing as trees absorb carbon dioxide, we'd get better use from them living than we would as a roll in the powder room.

The Payoff: If every household in America replaced one roll of toilet paper with a recycled postconsumer waste roll, 424,000 trees would still be standing. Look for eco paper towels and napkins too. If every household used recycled napkins, we would spare one million trees.

Strategy 9: Buy energy-efficient appliances. The old fridge conked out. Great! Replace it with an Energy Star appliance (EnergyStar.gov) and you'll use at least 15% less energy and water in your home. It might be a little pricier to buy, but you'll be saving money on your utility bills and helping the environment.

The Payoff: If we all installed one Energy Star appliance, it would be like planting 1.7 million acres of new trees.

Strategy 10: Plant a tree. Adding green to your garden is aesthetically – and earth – pleasing.

The Payoff: Just one tree (native to your region) will help make cleaner air and save the environment from 5,000 pounds of hot carbon dioxide each year.

[Editors note: To find out more about native plants in your area, check out the National Wildlife Federation's website at enature.com/native_invasive.]

Strategy 11: Give and voice your support. Contribute or volunteer with the green organization of your choice. And tell a friend to do the same. Some we like: OnePerCentForThePlanet.org, SaveOurEnvironment.org, SierraClub.org, and ConservationFund.org. Sign the "Emissions Petition" at EnvironmentalDefense.org, and send the message to your local government representatives that you want to undo global warming.

The Payoff: Together time. Oh, and feeling like you're doing something about this Earth-destroying epidemic.



Congratulations to John DeBoer, and Joe Scaduto for receiving the 2007 Environmental Stewardship Award for reducing the inventory of tritiated water. [See BNL Bulletin Vol. 16, No. 14 for details.]

Congratulations also to all C-AD 2006 Spotlight Winners [also see above noted Bulletin].



Congratulations to Vincent LoDestro, Brian Briscoe, Walter Shaffer, Joel Scott, and Melvin Van Essendelft who were recipients of Department of Energy P2 Award. Vinnie, Brian, Wally, Joel, and Mel participated specifically through their efforts in helping the Laboratory achieve a 90% reduction in the on-site inventory of PCB's.

The P2 awards are a result of the Laboratory winning the White House Closing the Circle Award for Environmental Stewardship. The award program, managed by the Office of the Federal Environmental Executive, recognizes outstanding achievements of Federal employees and their facilities for efforts which resulted in significant contributions to, or have made a significant impact on, promoting environmental stewardship.

To win the White House Closing the Circle award BNL submitted pollution prevention nomination entitled "Expanding the BNL EMS through Participation in Voluntary Programs". The nomination was submitted to the DOE (where it was awarded the DOE Pollution Prevention Star Award) and DOE forwarded it into the Closing the Circle awards program. The nomination documents how BNL's participation in the voluntary environmental improvement programs such as EPA Performance Track, the EPA National Partnership for Environmental Priorities, and the Federal Electronics Challenge can reduce risk and improve the environment. The direct and quantifiable benefits of our efforts are summarized as follows:

- **40% reduction in the site-wide inventory of mercury.**
- **90% reduction in the onsite inventory of PCBs.**
- **35 ton reduction in Class I Ozone Depleting Substances.**

- **34% reduction in atmospheric emission of radionuclides from production of radiopharmaceuticals.**
- **Recovery of 42 acres for restoration as viable forest.**
- **101,400 pounds of electronics recycled (during 2006).**

Many people had a hand in these achievements but let's give special congratulations and thanks to our C-AD team members for their dedication and efforts to improve the environmental management system at BNL.



Rochester Distinguished Scholar Medal

Commencement

Saturday, May 19, 2007

Ernest Courant '43 (PhD)

Distinguished Scientist Emeritus

Brookhaven National Laboratory

All scientists who work in particle physics today owe a debt to Ernest Courant. His groundbreaking scholarship has changed the way we think about and understand the structure of the universe.

One of the trio of researchers who originated the idea of "strong focusing" accelerators, Professor Courant is one of the founding fathers of modern high-energy particle physics. Thanks to Professor Courant's breakthrough in developing the first high-energy, strong focusing accelerator—and the particle accelerators that have followed since—physicists have been able to peek inside individual atoms to understand the fundamental structure of matter, the forces holding it together, and the origins of the universe.

Professor Courant's many honors include the Enrico Fermi Award from the Department of Energy, the Robert R. Wilson Prize of the American Physical Society, and the Boris Pregel Prize of the New York Academy of Sciences. A member of the National Academy of Sciences, he continues to consult at Brookhaven National Laboratory, where he holds the position of distinguished scientist emeritus.

An innovative scholar and researcher, Ernest Courant has an exemplary record of scientific exploration and discovery. For his many contributions to physics and for his dedication to the ideals of scholarship and teaching, we are proud to present to him Rochester's Distinguished Scholar Medal.

CONGRATULATIONS TO ALL!!

[RHIC Newsletter](#). Please click on link to the left to view the latest web publication of RHIC News.

The Power Supply Group's tech shop has been bugged!! (Yes, "Agreeable" really is part of its common name.) [Submitted by James Osterlund]



Agreeable Tiger Moth (*Spilosoma congrua*)

BNL Bldg. 911, Rom 141



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



C-AD Service Awards April

| | |
|-----------------|--|
| 30 years | Dick Hseuh Dean McDonald |
| 25 years | Henry Ashby |
| 20 years | Jonathan Reich Victor Usack |
| 10 years | Alan Weston |

Congratulations to ALL!



Fun Time

The object of the game is to move the red block around without getting hit by the blue blocks or touching the black walls. If you can go longer than 18 seconds you're phenomenal. Give it a try, but be careful... it is addictive?? Please click [here](#).

WHEN: Thursday, June 14, 2007

12 Noon - RAIN OR SHINE

WHERE: BNL Gazebo

**All C-AD Employees (past and present),
Friends and Families, all welcome!**

\$8.00 per person (advance sales)

\$10.00 at the door

No Refunds!

Door Prizes, Lots of Food, Fun, Music and More

Come and Join Us!

TICKET SALES:

John Benante x2745

Frank Dusek X2022

Pamela Manning X4072

Anna Petway X4776

Rippie Bowman X4672

Marion Heimerle X4619

Bob Marascia

Ann Pham X4547

Rich Conte X5741

Gary Hubbard X2023

Jim Meier X2022

Rich Savage X4640

Lynanne DiFilippo X7918

Stacey Kuczewski X4853

John Nicolellis X4631

Paul Sparrow X4689

Ray Zaharatos X7205



NAYYARSONS
AT
BNL – BERKNER HALL CAFETERIA

BREAKFAST

Monday to Friday: Specials starting at \$2.99 – includes a two egg sandwich with Ham, Bacon, or Sausage on a Kaiser Roll and a 12 oz cup of coffee.

Saturday, Sunday & Holidays: Specials starting at \$3.50.

Also, **any day of the week** enjoy our Continental Breakfast Special for only \$2.75 – includes Danish or Muffin or Donut and 12 oz coffee.

LUNCH

Monday to Friday: Enjoy a lunch special for only \$4.95

Half a sandwich plus 12 oz medium size soup & 16 oz Fountain Soda w/ Chips or Pretzels or Pickle.

- OR -

Small Salad plus 12 oz medium soup and 16 oz Fountain Soda.

Our Grill features a **Made to Order** special for \$6.50 – includes French Fries and a 16 oz Soda.

Deli Specials – Sandwich on specialty breads or Wraps - \$5.00 includes chips or pretzels or pickle and a 16 oz Fountain Soda

Open Salad Bar - \$0.40 an ounce – Home made Soups starting at \$2.10.

Monday to Thursday: Entrée includes two side dishes - \$5.99.

Action Station from \$5.99

Chef Entrée Specials w/ two side dishes-plus 16 oz Fountain Soda - \$6.50 to \$7.50

Friday/Specials: Fresh Pizza or Nathan’s Hot Dogs or Hero by the Inch from \$1.85.

Chef’s Fresh Catch of the Day – from \$5.99.

ALL PRICES SUBJECT TO NY SALES TAX

FOR COMPLETE WEEKLY MENU OFFERING, PLEASE SEE OUR LINK ON THE BNL HOME PAGE OR THE INFO HOT LINE, TOUCH 4636.

CATERING

Complete Catering Menu available – Touch 3541



BERA Sponsored Trips for May and June 2007

*****Tickets for items listed below may be purchased now at the BERA Store, M-F 9:00am-3:00pm, and are NON-REFUNDABLE*****

~**Yankees Game, Friday May 4.** \$44 per ticket Vs. Seattle-Tier Box 664. Bus leaves Brookhaven Center at 4pm, returning around midnight.

~**Yankees Game, Friday June 29.** \$44 per ticket Vs. Oakland-Tier Box 669. Bus leaves Brookhaven Center at 4pm, returning around midnight.

~**METS Game, Wed June 6** vs. Philly section 25 Loge Reserved \$44pp Leaves Brookhaven Center at 4:00pm, returning around midnight.

~**Romeo & Juliet Ballet, Sunday May 6** at NYC Ballet, Lincoln Center. Cost is \$69pp for orchestra seats and coach bus transportation. The bus will leave Brookhaven Center at 10:00am and leave NYC at 5:30pm.

~**NASCAR, Sunday June 3** Dover, Delaware. Tickets are limited - \$110 pp.

~**Fishing, Sat. June 9** in Mattituck with Captain Bob. \$ 50pp 7:45am-3:00pm, includes bait/tackle & initial tip (no transportation provided) Go to website for directions: www.captbobfishingfleet.com/boats1/cfm

~**NYC bus trip, Sunday June 10** - Do as you please! Drop off in the Bryant Park area of Midtown. \$10pp - Bus leaves Brookhaven Center at 9:00am and departs NYC at 6:00pm. (Only 55 seats)

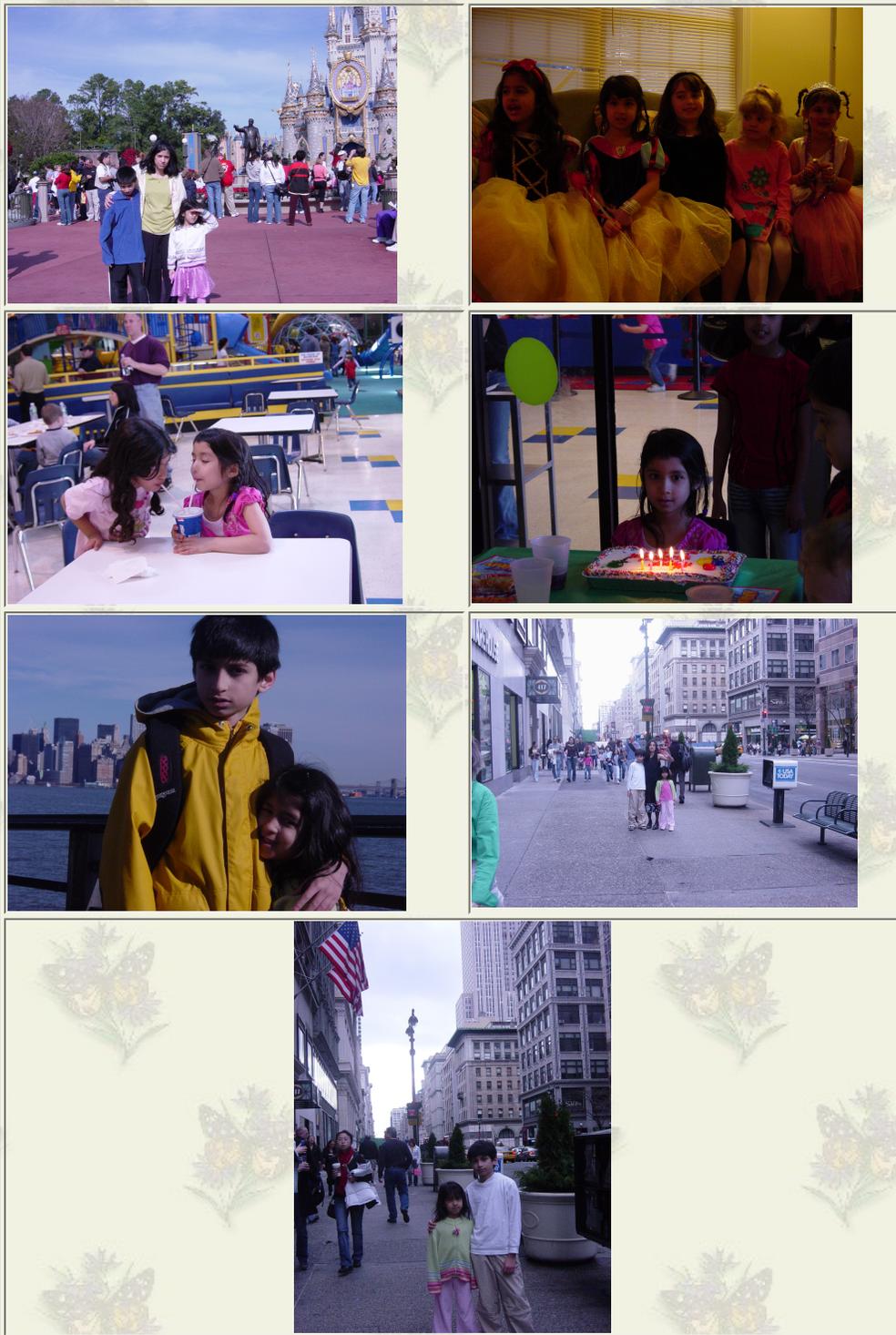
~**Atlantic City, June 23** - \$25pp. Exact Casino and bonus offers to be determined. Leaves Brookhaven Center 8:00am and departs AC at 7:00pm

~**Book Fair, June 13-14** in Berkner Lobby from 10:00am-3:00pm
Great bargains on best sellers and gifts!

~**Ducks tickets go on sale on Wednesday 4/11/07 at 9:30am at the BERA Store. NO PHONE CALLS!** There will be a 2 game per person maximum during this first week of sales. There are 72 regular season home games with 8 excellent seats per game located in section 205, Rows J & K, on the 3rd base side. Tickets are \$10 each and payment must be made at the time of purchase. **NO PHONE CALLS!**



Some pictures taken by Sateesh Mane of his family



ALUMNI NEWS: AGS/RHIC/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

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



May 2007

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|--------|---|-----------|--|--------|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | | Nuclear Physics Seminar "Unusual Features of Hard Diffraction", Boris Kopeliovich, UTFSM, 11am, Bldg. 510 | | The Health Promotion Program presents: Diabetes & Portion Control, Amy Shapiro, 12-1pm, Berkner Room B | | 2007 Elementary School Science Fair, 9am to 4pm, Berkner Hall |

| | | | | | | |
|--------------------|---|---|--|--|--|---|
| 6 | 7 The Health Promotion Program presents: Cancer, HPV & You, Doris Weismann, (SUNY-Stony Brook), 12-1pm, Berkner Room B | 8 Physics Colloquium "Searches for Magnetic Monopoles" G. Giacomelli, U. of Bologna & INFN, 3:30pm, Bldg. 510 LCR | 9 The EPA and BERA "VA Health Care, Entitlements & Disability Benefits", Joe Sledge, Northport, 12-1pm, Berkner Room B | 10 C-AD AP Seminar "Strong-strong Beam-beam Effects in the LHC" Tatiana Pieloni, CERN, 4pm, Bldg. 911A Snyder | 11 C-AD AP Seminar "Manipulation of the electronic density in the longitudinal phase space in synchrotron light sources" Natalia Prado de Abreu, 4pm, Bldg. 911B LC | 12 |
| 13 Mother's Day | 14 | 15 Physics Colloquium "Colliding 5nm Electron Positron Beams at the International Linear Collider" William Morse, PO, 3:30pm, Bldg. 510 LCR | 16 The EPA and BERA "Suffolk County Entitlements for Veterans", Tom Ronayne, SC Vets Service, 12-1pm, Berkner Room B 425 th Brookhaven Lecture, "A Hydrogen Economy: Opportunities & Challenges", Paul Friley, ES&T, 4pm, Berkner | 17 | 18 | 19 Armed Forces Day  |
| 20 | 21 | 22 Physics Colloquium "High-Energy Neutrino Astronomy: Towards a Kilometer-Scale Neutrino Observatory" Francis Halzen, U. of WI-Madison, 3:30pm, Bldg. 510 LCR | 23 | 24 Memorial Lecture, "2nd Vernon W. Hughes Memorial Lecture", William Marciano, BNL, 3pm, Bldg. 510 | 25 The Health Promotion Program presents: Core Strength Clinic, Jennifer Gatz, 12-1pm, Brookhaven Center, South Room C-AD AP Seminar "Grenoble FFAG 2007" A. G. Ruggiero & D. Trbojevic, 4pm, Bldg. 911B LCR | 26 |

| | | | | | | |
|------------------|---|--|--|------------------|--|--|
| <p>27</p> | <p>28</p> <p>Memorial Day</p>  <p>Holiday</p> | <p>29</p> <p>Physics Colloquium "Approaches to Cosmic Acceleration" Mark Trodden, Syracuse U., 3:30pm, Bldg. 510 LCR</p> | <p>30</p> <p>BSA Distinguished Lecture, "Einstein's Biggest Blunder? A Cosmic Mystery Story", Lawrence Krauss, Case-Western U., 7pm, Berkner</p> | <p>31</p> | | |
|------------------|---|--|--|------------------|--|--|



June 2007

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|--------|---|---------|--|---|--------|----------|
| | | | | | 1 | 2 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| | <p>C-AD AP Seminar "MINHA: Model of an Intense Nonscaling Hadron Accelerator" Salime Max Boucher, Radia Beam Technologies, 4pm, Bldg. 911B LCR</p> | | <p>The EPA and BERA "The Invisible Wounds of War", Lawrence Brown, Babylon Vet Center of US Veterans Administration, 12-1pm, Berkner Room B</p> | | | |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| | | | |  <p>Flag Day</p> <p>C-AD BBQ, Noon Gazebo</p> | | |

| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|--------------|--|---|---|--|---|----|
| Father's Day | 2007 RHIC & AGS Annual Users' Meeting Workshop 1 "Longitudinal polarization results at RHIC and RHIC-II" | 2007 RHIC & AGS Annual Users' Meeting Workshop 2 "Bulk and medium properties in heavy ion collisions at RHIC and RHIC-II" Workshop 3 "Transverse polarization results at RHIC and RHIC-II" Workshop 4 "Energy loss in heavy ion collisions at RHIC and RHIC-II" BNL Blood Drive | 2007 RHIC & AGS Annual Users' Meeting Workshop 5 "The future of RHIC spin and the physics of eRHIC" Workshop 6 "Heavy Flavor and Quarkonia Production" Workshop 7 "Non-RHIC related physics at BNL" Workshop 8 "Outreach Workshop" BNL Blood Drive | Summer Begins 2007 RHIC & AGS Annual Users' Meeting Plenary Session Day 1 2007 RHIC & AGS Annual Users' Meeting Open Forum | 2007 RHIC & AGS Annual Users' Meeting Plenary Session Day 2 | |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| | | | 426 th Brookhaven Lecture "The Pesky Neutrino", David Jaffee, PO, 4pm, Berkner | | | |



We Remember
Sept. 11, 2001

Editor: Pamela Manning x4072