Bulletin



Vol. 66 - No. 23 July 13, 2012

Lab Director Aronson on Safety, Operations

As I have previously written to the Lab community, we have had several very serious accidents, near misses, and operational incidents during the past few weeks: a colleague falling 15 feet from a

ladder, graduate students leaning over a radiation boundary, and the NSLS-II Linac beam



misalignment event.

We continue to have far too many safety and operational events. Our colleagues are getting when the hurt or experiencing dangerous near-misses. We have a critical need to evolve our

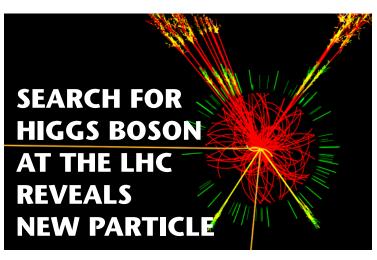
culture to where safety is a core value.

As a community, we've

done a lot of good work during the last several years to make positive improvements in our operational processes.

However, we need to go further. We must engage each other and hold each other accountable. We need to learn better than we have from our mistakes.

Read about my thoughts on improving Sustained Safety and Operational Excellence on page 2.



The following news release was issued jointly by DOE's BNL and Fermi National Accelerator Laboratory on behalf of the U.S. LHC organization (www.uslhc.us/). It describes the latest results from two experiments at the Large Hadron Collider (LHC) at CERN, Switzerland, that are searching for signs of the Higgs boson, a subatomic particle postulated by the Standard Model of particle physics as the source of mass for other particles. For more information about BNL's role in the Higgs search and work on the LHC's ATLAS experiment, see www.bnl.gov/atlas/.

National Research Council Highlights RHIC In Critical Role for Future of Nuclear Physics

New NRC report details breakthroughs at the Relativistic Heavy Ion Collider and its key role in the field during the next decade

The National Research Committee (NRC), the principal operating agency of the National Academy of Sciences and the National Academy of Engineering, released on June 26 its fourth decadal report on nuclear physics: "Exploring the Heart of Matter." The report details significant advances of the past decade, and identifies priorities for driving pure and applied science forward and securing the position of the United States as a global leader in a field that impacts computing, medicine, national security, energy technology, and climate research.

Central to the past decade's experimental milestones and future innovations sits BNL's Relativistic Heavy Ion Collider (RHIC), a 2.4-mile accelerator that produces states of matter unseen since the first moments after the Big Bang.

The study was sponsored by DOE and the National Science Foundation. The National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and NRC make up the National Academies. They are private, nonprofit institutions that provide science, technology, and health policy advice under a congressional charter. For more information, visit the National Academies website: http://national-academies.org.

RHIC Experiments Empower Answers to Questions on Early Universe

As the report states, "Experiments at RHIC allow nuclear scientists (in the United States, at 59 universities and six national laboratories in 29 states) to answer questions about the microsecond-old universe that cannot be answered by any conceivable astronomical observations made with telescopes and satellites."

The leading conclusion of the decadal report recommends that "exploiting strategic investments should be an essential component of the U.S. nuclear science program in the coming decade." The existing infrastructure and expansive versatility of RHIC place Brookhaven's accelerator in an ideal position to fulfill that mission.



See RHIC physicists featured in NRC video, The Heart of Matter: http://bit.ly/NHELel

Upgrade in Luminosity a 'Strategic Investment'

"We are especially encouraged because the recently completed upgrade of RHIC luminosities is one of two 'strategic investments' explicitly called out in the preamble to that conclusion," said physicist Steven Vigdor, Associate Lab Director for Nuclear and Particle Physics at Brookhaven. "We were able to complete that upgrade about five years faster and at one-seventh the cost envisioned in the 2007 Long Range Plan for U.S. Nuclear Science, thanks to advanced R&D on new accelerator technologies at RHIC. We are continually pushing the state-of-the-art to prepare the facility for future upgrades that will dramatically extend RHIC's science reach."

Strong Candidate for Proposed Electron-Ion Collider

In addition to noting the 2011 upgrades that increased collision rates and allowed RHIC to begin colliding a much wider variety of ion species, the report also recognizes RHIC as a strong candidate for a proposed electron-ion collider, which would take "snapshots" of fundamental particles traveling at nearly the speed of light to reveal fundamental forces and crucial details about the "glue" that holds together 99 percent of the visible matter in the universe.

Complementary Role in Experiments at LHC

"Since operations began in 2000, RHIC has provided spectacular evidence that QGP exists — but it is different than anyone expected," the report states. It goes on to describe the many questions that still need to be answered in heavy ion research, including determining the critical transition point from "normal" matter to QGP and further exploring the striking connections between the behavior of ultra-hot matter at RHIC and that of some of the coldest matter in the universe. Those experiments will need to be done at both LHC and RHIC,

with LHC providing higher energy probes "while the greater flexibility and luminosity at RHIC will give it many advantages in varying the masses and energy of the colliding nuclei to systematically investigate the properties of QGP in various regimes."

Other Contributions

The report also notes the ongoing work at Brookhaven Lab to develop the next generation of accelerators for precise, safe cancer therapy; the Lab's collaboration with Japan's RIKEN Institute to advance supercomputing technology; and RHIC's complementary role with heavy ion research at CERN's Large Hadron Collider (LHC).

In evaluating the past decade, the NRC identifies the "first striking discovery" by the RHIC collaborations as the unexpected nature of quark-gluon plasma (QGP), which was expected to act like a gas but instead forms a nearly perfect liquid of nuclear matter when "melted" into a sea of unbound fundamental particles.

The report also spotlights the high caliber of nuclear physics research and great potential for further advances at institutions including the Thomas Jefferson National Accelerator Facility and Michigan State University.

"RHIC has had an incredibly productive decade by any measure, and we have much left to accomplish," said Vigdor. "The nuclear physics community has a daunting task ahead to maintain a path to the vibrant future outlined in this decadal survey within the very tight budget guidance it has received from the administration and Congress."

DOE's Office of Science is the single largest supporter of basic research in the physical sciences in the United States, including such facilities as RHIC, and is working to address some of the most pressing challenges of our time. For more information, please visit the DOE Office of Science website: http://science.energy.gov/.

— Karen McNulty Walsh

Physicists on experiments at the Large Hadron Collider announced on July 4 that they have observed a new particle. Whether the particle has the properties of the predicted Higgs boson remains to be seen.

Hundreds of scientists and graduate students from American institutions have played important roles in the search for the Higgs at the LHC. More than 1,700 people from U.S. institutions — including 89 American universities and seven DOE national laboratories — helped design, build, and operate the LHC accelerator and its four particle detectors. The U.S., through DOE's Office of Science and the National Science Foundation (NSF), provides support for research and detector operations at the LHC and also supplies computing resources for the ATLAS and CMS experiments.

The results announced on July 4 are labeled preliminary. They are based on data collected in 2011 and 2012, with the 2012 data still under analysis. A more complete picture of the observations will emerge later this year after the LHC provides the experiments with more data.

The new particle is in the mass region around 125-126 GeV. Publication of the analyses is expected around the end of July.

"I congratulate the thousands of scientists around the globe for their outstanding work in searching for the Higgs boson," said U.S. Secretary of Energy Steven Chu. "Today's announcement on the latest results of this search shows the benefits of sustained investments in basic science by governments around the world. Scientists have been looking for the Higgs particle for more than two decades; these results help validate the Standard Model used by scientists to explain the nature of matter."

The CMS and ATLAS experiments in December announced seeing tantalizing hints of a new particle in their hunt for the Higgs, the missing piece in the Standard Model of particle physics. Since resuming data-taking in March 2012, the CMS and ATLAS experiments have more than doubled their collected data. The statistical significance of the earlier hints has grown.

"What has been announced today could not have been

Discovery of the
Higgs — or another
new particle —
represents the
first step into
a new realm of
understanding of
the world
around us.

accomplished without the cooperation of scientists and nations throughout the world in seeking an understanding of the fundamental laws of nature," said Ed Seidel, NSF's Assistant Director for the Mathematical & Physical Sciences. "If the particle announced today at CERN is confirmed to be the Higgs boson, this represents a keystone in our knowledge of the elementary forces and particles that exist in our universe."

Scientists on experiments at the LHC announced their latest results at a seminar at the home of the LHC, the CERN particle physics laboratory on the border of Switzerland and France. Physicists from across the United States gathered at laboratories and universities in the middle of the night to watch a live-stream of the seminar online. The vast majority of U.S. scientists participate in the LHC experiments from their home institutions, accessing and analyzing the data remotely through high-capacity networks and grid computing.

Scientists will give more detailed presentations about the results this week at the biannual International Conference on High Energy Physics, held this year in Melbourne, Australia.

The Standard Model of particle physics has proven to explain correctly the elementary particles and forces of nature through more than four decades of experimental tests. But it cannot, without the Higgs boson, explain how most of these particles acquire their mass, a key ingredient in the formation of our universe.

Scientists proposed in 1964 the existence of a new particle, now known as the Higgs boson, whose coupling with other...

See New Particle on p. 2

The Bulletin July 13, 2012

CALENDAR

OF LABORATORY EVENTS

• The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873

- REGULARLY -

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make asp for schedule. Jen Lynch, Ext. 4894.

Mon. & Thurs.: Kardio Kickboxing \$5 per class. 12:15-1:15 p.m. in the gym (Bldg. 461). \$5 per class. Ext. 2873.

Mon., Tues., Thurs., & Fri.: Tai Chi Noon–1 p.m., B'haven Cntr (Bldg. 30), N. Rm. Adam Rusek, Ext. 5830, *rusek@bnl.gov*.

Tuesdays: Hospitality Welcome Coffee 10:30 a.m.-noon. Rec Hall (Bldg. 317). Will resume in September.

Tuesdays & Wednesdays: Zumba Tuesdays: Noon-1 p.m., in gym (Bldg 461). Wednesdays: 5:15-6:15 p.m., at the Rec Hall (Bldg. 317). On summer break. Tuesdays: Toastmasters

Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Room 160. Guests and visitors welcome. www.bnl.gov/bera/activi-

Tuesdays & Thursdays: Aerobic Fitness Will resume in September

Tuesday & Thursday: Aqua Aerobics 5:30-6:30 p.m., Pool (Bldg. 478). Will resume in September.

Wednesdays: Ballroom Dance

5:30, 6:30, 7:30 p.m., Brookhaven Center (Bldg. 30). Will resume in September.

Wednesdays: Play Group

ents meet while infants/toddlers play. For Playgroup. On summer break.

Wednesdays: Yoga

Noon–1 p.m., B'haven Center (Bldg. 30). Free. Ila Campbell, Ext. 2206, *ila@bnl.gov*.

1st Wednesday of month: LabVIEW technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379.

Thursdays: BNL Cycletrons Club 5 p.m., Brookhaven Center. First Thurs. of month. Andy Mingino, Ext. 5786.

Thursdays: Reiki Healing Class Noon-1 p.m., Call for location. Nicole Bern-

holc, Ext. 2027. Thursdays: Postdoc Social Night

6:30 p.m. ASAP Lounge (Bldg. 462).

Thursday: Judo Class

7:30 p.m. Gym (Bldg. 461). Tom Bald-

Fridays: Family Swim Night 5–8 p.m. Pool (Bldg. 478). \$5/family. Ext. 2873.

ALL-EMPLOYEE MEETING RESCHEDULED FOR THURSDAY, **AUGUST 2** @ 10 A.M. IN **BERKNER HALL**

New Particle from p. 1

...particles would determine their mass. Experiments at the LEP collider at CERN and the Tevatron collider at DOE's Fermilab have searched for the Higgs boson, but it has eluded discovery. Only now, after decades of developments in accelerator and detector technology and computing - not to mention advancements in the understanding of the rest of the Standard Model — are scientists approaching the moment of knowing whether the Higgs was the right solution to this problem.

Discovery of the Higgs — or another new particle — represents the first step into a new realm of understanding of the world around us.

For more details, see www.bnl. gov/bnlweb/pubaf/pr/PR_display. asp?prID=1432, and follow US LHC on Twitter at http://twitter. com/uslhc.

Our Sustained Excellence Improvement Agenda

By Laboratory Director Sam Aronson

We continue to have far too many safety and operational events here at the Lab. Our coworkers are getting hurt or experiencing dangerous near-misses. I wrote about these in

a note to the Lab community on July 2 and in my message on p. 1 of this *Bulletin*.

It's unfortunate these incidents overshadow a lot of good work we've done over the last several years to make improvements in our operational processes. To be successful, we must have a sustained commitment to excellence across the site, with personal ownership of that commitment, and incorporate the best ideas of an engaged team. We must work harder to make these improvements effective and long lasting, and ensure our commitment to Sustained Safety and Operational Excellence is ingrained in everything that we do.

Sustained Excellence Team

I have created a Sustained Excellence Team, led by Assistant Laboratory Director for Facilities & Operations (F&O) Lanny Bates. It has been meeting regularly for several months. In addition to Lanny, the team members are: Steve Dierker, Associate Lab Director for Photon Science; George Goode, Assistant Lab Director for Environment, Safety & Health (ES&H); Les Hill, Blueprint Project Manager; Roy Lebel, Manager, Quality Management Office; Bob Lincoln, Chief Human Resources Officer; Marge Lynch, Assistant Lab Director for Community, Education, Government & Public Affairs (CEGPA); and Maggie Sullivan, Manager, Learning & Development.

The way I see the Sustained Excellence Team's mission is to ensure that the many organizational and operational changes we made as part of the Blueprint continuously improve and become part of the Lab's way of doing business in the future. The team has developed and implemented a plan that focuses on listening to your feedback including information gathered from the quarterly safety culture surveys, directorate meetings, and forthcoming supervisor sessions — and taking tangible actions to address the issues raised by staff.

Early Impacts

Every directorate has established teams to solve specific problems

Select an **Undergraduate** Intern by 7/31

Applications for the Fall 2012 Science Undergraduate Laboratory Internship (SULI) program are now available. This is a 16-week program that runs from September 5 through December 21. Please contact Mel Morris in the Office of Educational Programs at mmorris@bnl.gov or Cindi Biancarosa at biancarosa@ bnl.gov for the link to access the applicant pool. The SULI students must be placed by July 31.



and we've organized Laboratory-level teams to tackle those problems that are across more than a single n directorate. It's critical to the success of these teams that you be part of this process: Contribute your ideas and

participate in the teams that are developing the solutions.

Already the Sustained Excellence Team has noted early successes from around the Lab. where managers, supervisors, and their teams are improving operational excellence and safety. Here's a sampling:

Stand-downs across the directorates and divisions have opened up dialogue about safety and operational excellence

Researchers in the Environment & Life Sciences directorate attend cross-department Experimental Safety Reviews to discuss hazards and how to minimize

The Nuclear & Particle Physics directorate has improved communication and delineation of responsibilities among organizations with which it works closely, such as formal procedures and self assessments between the Collider-Accelerator Department and F&O's Integrated Facility Management program.

During a plan-of-the-day meeting, F&O employees questioned a new SBMS definition for electrical troubleshooting, specifically their ability to do the work and confusion on applicability and requirements. As a result, a team was formed to review it and draft a new definition, which was approved and implemented. This all occurred with impressive speed — the employees first expressed the concern on March 22 and a new definition was issued on March 30.

All across the Lab, employees have stepped up their surveillance of possible hazards, including cracked and crumbling sidewalks, which F&O crews have been repairing and replacing in many areas across the site this summer.

The CEGPA directorate increased safety observations at the Science Learning Center, since thousands of elementary school students and their teachers pass through there.

The ES&H directorate is reviewing the hazards associated with remote on-site and off-site field sampling, including ques- As employees of a DOE contractioning the need to sample in tor, we're expected to operate to difficult remote areas and elimithe high performance standards

nating locations where possible.

Institutional Teams

To tackle cross-directorate problems, the Sustained Excellence Team is creating three institutional teams. The goal is to identify improvements that are quick, meaningful, and sustained. One team is ready to deploy, and the other two are in development:

Construction Safety: The team has been defined and leadership meetings are under way to define process. As the team matures, it will serve as a model for broader applications beyond construction.

Complex Procedures and Requirements: This team will focus on high-risk management systems, such as electrical lockout-tag-out (LOTO) procedures.

Investing in Your Health and Safety: The team's goal is general safety and health-related improvements across the Lab, such as with infrastructure work.

The Complex Procedures and Requirements and Investing in Your Health and Safety teams are in the process of being formed and the members will define their charters.

All three topics were selected from suggestions that came from stand-downs across the directorates. Creating these teams is both a win and an example of listening by senior management.

Our Future Depends On Sustained Operational Excellence

We operate in a fiercely competitive environment, where budget decisions on the national level directly affect programs here. To be sure our science programs receive sufficient funding to prosper and grow, we must make certain Brookhaven Lab performs exceptionally well in operations as well as in science and technology. If we're not viewed as a safe and operationally sound environment in which to invest, we'll lose funding and programs to competitors.

It may seem like old news, but it's important to remember that our record for fiscal year (FY) 2011 did not demonstrate safety and operational excellence. We received a 'B-minus' grade from DOE in this area — the lowest grade for any lab in the DOE system. We should all be able to agree that we have put ourselves in a precarious position, and in FY 2012 and beyond, our performance must be outstanding.

defined in our prime contract. And we should expect no less from ourselves and each other.

Right now, DOE is very concerned about our ability to do our jobs well and operate this facility in the way it needs to be managed in order to pursue our science goals. We must take action to regain DOE's trust — and to ensure we don't hurt ourselves or one another.

You Can Shape Our Future

During our April all-employee meeting and in subsequent Monday Memos, I introduced the concepts of engagement, accountability, and role modeling for our sustainable excellence agenda. Each one of us can model these attributes to drive to our collective and sustained success. You can make a powerful difference.

Engagement is simple: be a good listener, speak up when you have a concern or some advice, offer ideas that help remove the barriers that distract us from working well and safely. If you're given ideas, take action and provide feedback to those who offered the ideas. Encourage openness and ownership.

Accountability means different things to different people — but here's how I define it: hold yourself accountable for the work you do, and hold your coworkers accountable, too. Set distinct, challenging, yet achievable goals for yourself and your work group. Enforce safety and health rules and regulations, without exception.

Role modeling is our version of the 'Golden Rule.' And I'm starting to see many excellent examples of this at the Lab — but we need more of this from all corners. Demonstrate a positive attitude. Be fair, comply with requirements, conduct yourself so the environment is protected, and demonstrate respect for safety and operational needs as well as for fellow employees. Lead by example.

Our Path Forward

Senior management's mission is to arm managers and supervisors — and everyone at the Lab with the goals, information, and methods to achieve operational excellence. As we all work together and begin to experience the results, instead of pressure, we'll feel the pride that comes with executing on a plan and realizing success.

As individuals we all deserve it and, as a Lab, we require it if we are to be successful.

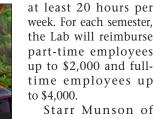
BNL Employees Keep On Learning

Karim Hamdi always knew he wanted to go back to school.

"On my first day here, they said that BNL wants you to continue your education. That's all I wanted to hear," he said.

Hamdi, who is originally from Tunisia, began working at RHIC as a design engineer in 2009. A few months later, he started his graduate degree in mechanical and aeronautical engineering at North Carolina State University.

He financed his degree through Brookhaven's Tuition Assistance Program, which is available to all regular employees who work



the Lab will reimburse part-time employees up to \$2,000 and fulltime employees up to \$4,000.

Starr Munson of Human Resources & Occupational Medicine coordinates the program.

"Starr was very supportive, very helpful," Hamdi said. "It was very easy. Anything I asked for, they said yes."

Tuition assistance has been used by hundreds of Lab employees towards degrees in fire science, organizational management, accounting, nuclear engineering,

and more. Some students prefer to attend local universities, while others like Hamdi choose a distancelearning course.

Munson says she often helps employees formulate a plan.

"I thoroughly enjoy working with my customers, and I'm always here if they need to come in for some guidance," she said.

The Lab also partners with Suffolk County Community College to offer an associate's degree class on site every semester. Provided that the minimum enrollment of 15 students is met, employees can take free courses in subjects like Marketing and Psychology.

For more information about the Lab's continuing education programs, contact Munson at munson@ bnl.gov, Ext. 7631. —Aviva Rutkin

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Congratulations, Perfect Attendance Awardees of 2011!

Operations Mike Bebon, with Gail O'Hern of the Human Resources and Occupational Medicine Division, congratulated 42 BNL employees on their excellent records of "Perfect Attendance" during calendar year 2011 at a ceremony held in Berkner Hall on May 14. Each honoree received a check for \$200, a logo-printed T-shirt, and a certificate showing the number of years of perfect attendance the recipient had achieved. The annual event is held by BNL in recognition of the commitment and service provided by full-time employees on the technical and clerical schedules who used no sick leave during the previous calendar year.

Award Given Since 1992

The Perfect Attendance award was first given in 1992, when full-time employees on the technical and clerical schedules were recognized

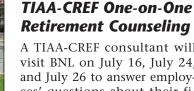
Deputy Laboratory Director for for having used no sick leave during 1991. In 1995, these employees and those from the Paper, Allied-Industrial, Chemical & Energy Workers International were joined in eligibility for the award by BNL employees represented by the International Brotherhood of Electrical Workers. In 1998, members of the Suffolk County Security Police Association in the Safeguards & Security Division also became eligible for the prize.

This year, as previously, many awardees had achieved multiple years of perfect attendance: eight were honored for the first time, nine for the second time, one for the third, three for the fourth, five for the fifth time, one for the sixth time, two for the seventh time, two for the eighth time, and one for the ninth time. Ralph Giordano was recognized for the tenth time, Lisa Metz and Brian Hanlon for the twelfth

Photographed during the Perfect Attendance Award celebration on May 14 at Berkner Hall are many of the 42 Perfect Attendance Award honorees of 2011. All honorees are listed below alphabetically in their departments/ divisions; the number of years they have won this perfect attendance prize appears after their name. Biology Department: Phyllis Tinsley-Smith, 20; Collider Accelerator Department: John C. Moloney, Jr., 1; Community, Education, Government & Public Affairs: Cornelius Jackson, 17, and Alex Reben, 17; Energy & Utilities Division: Daniel Feeley, 2; Frank Pomaro, 2; Kevin Tisch, 1; and Thomas Walters, 2; Environmental Protection Division-Waste Management: Daniel Blakely, 1; Laboratory Protection Division: Daniel Chapman, 1; John Davies, 2; and Gary Schaum, 14; Physics Department: Kevin Casella, 4; Procurement & Property Management Division: Wayne Cummings, 4; Isidro Garcia, 5; Dhruba Ghimiray, 15; William McPherson, 7; Peter Realmuto, 9; Regis Saitta, 2; Anthony Shane, 2, and Shelby Williams, 17; Photon Sciences Directorate: Ronald Loffredo, 1, and Paul Edward Palecek, Jr., 1; Site Resources Division: Eugene Barrow, 7; Howard W. Bell, Jr., 6; Robert W. Callister, Jr., 8; Michael Daddi, 2; Robert Danowski, 3; Ralph J. Giordano, Jr., 10; Keith Jackson, 4; Keith Krisman, 1; Carol Mason, 5; Lisa Metz, 12; Randolph Seibel, 15; John Sullivan, 2; Scott Thilberg, 1; Johnnie Turner, Jr., 8, and Jeannette Vera, 5; Staff Services Division: Shirley Ayers, 5; Bryan Hanlon, 12; Susan

time; Gary Schaum for the fourteenth time, Dhruba Ghimiray and Randolph Seibel for the fifteenth time; Cornelius Jackson, Richard Lutz, Alex Reben, and Shelby Williams for the seventeenth time; and Phyllis Tinsley-Smith, BNL's

A-one, shining top-of-thebill all-star, for the twentieth time. Employees who became eligible for the prize after its inception have often served BNL with additional years of perfect attendance that are on record elsewhere.



drawal options.

For an appointment, call 1-800-732-8353 or go online at www.tiaa-cref.org/bnl and select "contact" on the bottom of the page, then "contact us online, then select "schedule a personalized advice consultation."

CALENDAR

Sunday, 7/15

*Summer Sundays: Family Science

10 a.m.-3 p.m. Berkner Hall and the Science Learning Center. All are invited to this free program, open to the public. Visitors to the Lab of 16 and older must carry a photo I.D. See p.4.

WEEK OF 7/16 -

Tuesday, 7/17

*APAA Event: Asian Food Tasting

Noon-1 p.m. Biology Seminar Room, Bidg. 435, Room 157.To celebrate their 10th anniversa-ry, the Asian Pacific American Association (APAA) will offer homemade cuisine from several Asian countries, at \$7 per person, to benefit the Dr. Mow Lin scholarship. See below, left.

Sunday, 7/22

*Summer Sundays: Dazzling Light

10 a.m.-3 p.m. Berkner Hall and the National Synchrotron Light Source II (NSLS-II). All are invited to this free program, open to the public. Visitors to the Lab of 16 and older must carry a photo I.D. See p.4.

- WEEK OF 7/23 -

Tuesday, 7/24

IBEW Meeting

6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

Wednesday, 7/25

*BSA Noon Recital: Pianofest

Noon. Berkner Hall. All are welcome to this free public piano concert, sponsored by Brookhaven Science Associates. Visitors to the Lab of 16 and older must carry a photo ID. See p.4.

BSA Distinguished Lecture: Higgs?

4 p.m. Berkner Hall. Sally Dawson and Howard Gordon of the BNL Physics Department will talk on "A Discovery! The Higgs? Why is this Important? How it was done." This free lecture is open to the public. Visitors to the Lab of 16 and older must carry a photo I.D.

Family Movie Night - Free

8:15 p.m. Recreation Hall, Bldg. Enjoy free movies, free popcorn, under the stars outside the Rec Hall. Organized by BERA. All Lab community welcome.

Arrivals & Departures - Arrivals -

| Alexei Belochitski | Env. Scis |
|--------------------------------|------------|
| James Buddenhagen | CFN |
| Mehmed Ertem | .Chemistry |
| Hui Wang | Physics |
| Binping Xiao | C-AD |
| Dmitriy Beznosko | Physics |
| Departures — | |
| Congwu Du | Medical |
| Joseph Libertelli | HROM |

Mamta NaiduBiology

Paul Ribaudo Photon Scis

BERA Trips, Other Entertainments

Sat.. **7/14. Horseback Riding** on the beach. Montauk: 1.5-hour trail and beach ride, picnic at park (bring your own food), then to ocean. Leave BNL at 8:30 a.m., leave Montauk at 4 p.m. Not recommended for children under 10 years old. \$85 per person (pp).

Sat., 7/21. Professional Soccer: N.Y. Red Bulls take on the Philadelphia Union at Red Bull Arena in N.J. Leave BNL at noon and leave after the game around 5 p.m. Seats in Section 224, \$40 pp.

Sun., 7/22. Brooklyn Cyclones Baseball vs. Staten Island Yankees. Receive a ball cap and bat and run the bases after the game! Spend day on the beach, at the boardwalk or at Luna Park and Brooklyn Cyclone Roller Coaster (amusement park charges not included). Depart BNL at 11 a.m., game at 5 p.m. Leave after the game, about 8 p.m. Cost: \$20 pp adult or child, includes coach, driver tip, game ticket.

Fri., 7/27. Dorney Park Wild Water Kingdom \$33 pp.

Fri., 8/17. Skyline Princess New York City Dinner Cruise. \$100 pp. A wonderful dinner with breathtaking scenery! Free Outdoor Concerts at Port Jeff, Stony Brook, Rocky Point. Get

information at http://bit.ly/NhQuTA. Family Concerts Fridays at Benner's Farm in Setauket. \$7 adults, \$6 children. www.bennersfarm.com/.

Santana, 2; and Brenda Turner, 5.

Retirement Counseling

A TIAA-CREF consultant will visit BNL on July 16, July 24, and July 26 to answer employees' questions about their financial matters. The consultant will help you: understand the importance of protecting your assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare life-time income vs. cash with-

Asian Pacific American Association 10th Anniversary Celebration and Movie Viewings for Scholarship Fund Planned

Asian Food Tasting, 7/17

This year marks the 10th anniversary of the BERA Asian Pacific American Association (APAA). In celebration of their 10th birthday, club members invite BNL employees, students, guests, and visitors to join them at noon on Tuesday, July 17 for an "Asian Food Tasting" of homemade cuisine from a variety of Asian countries. The event will be held in the Biology Seminar Room (Bldg. 435, Room 157).

This is the APAA's 8th year of offering the Dr. Lin Scholarship to assist Asian students matriculating toward a doctorate degree in the U.S., and funds are now limited. Therefore, a

fee of \$7 per person will be collected at the door (\$5 for APAA members before July 15). All proceeds go to the scholarship, which is awarded in memory of Dr. Lin's work and legacy.

Three Great Movies: July 19, 20; 26, 27; August 2, 3

Each film will be shown at Berkner Hall in two parts over consecutive lunch hours.

July 19 and 20: Water was a 2006 nominee for the Best Foreign Language Film. At that time, extremist groups waged a campaign of death threats, arson, and riots to stop the production of this controversial film, but director Deepa Mehta would not be silenced.

Chuyia, an Indian girl married and widowed at eight years old. who is sent away to a home where Hindu widows must live in penitence. Chuyia's feisty presence deeply affects the other residents, forcing each to confront their faith and society's prejudices. (117 minutes) July 26 and 27: Mao's

Set against Gandhi's rise

to power, Water tells the

profoundly moving story of

runner up for the Toronto Internat'l Film Festival: People's Choice Award. August 2 and 3: The Way

Last Dancer was the 2009

Home (Jibeuro) was the 2002 Winner of the Korean Academy Award for Best Picture.

BNL Food Drive

Extra food is urgently needed. Please give as much as possible.

Fidelity Investments One-on-One Meetings

A representative from Fidelity Investments will visit BNL on two Fridays: July 20 and August 3, to answer employees' questions about financial matters. To schedule an appointment, call 1-800-642-7131 or go online at www.Fidelity.com/atwork/reservations.

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 benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible 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. Access current job openings on the World Wide Web

To apply for a position, go to www.bnl.gov. Select "Job Opportunities," then "Search Job List."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

TOWER LINE PERSON -TEMPORARY - Under minimum supervision installs, repairs, and maintains overhead and underground electrical distribution lines, systems, equipment, controls and related devices, ordinarily of 2300 volts and over. Duties include rigging, electrical and mechanical work incidental to the installation, maintenance, and repair of equipment, wires, lines, instruments, and fabricated metal on structures such as meteorology towers, pile stack and water tower. Will otherwise perform duties of Electrician A. Energy & Utilities Division. Please apply to Job ID # 16157.

Motor Vehicles & Supplies

10 HARLEY 1200 SPORTSTER - 1.3K mi. bought new March '11, excl cond, ask. \$8,500. Rolf, 714-4688.

10 HARLEY DAVIDSON STREET GLIDE -5.3K mi. Magnificently loaded: ABS Brakes. Weather Radio w/IPod Jack, much more. \$17,000 neg. 872-9268 or lasalla@bnl.gov. 06 HYUNDAI ELANTRA GLS - 96K mi.

4-cyl, black, a/t, a/c, abs, p/b, p/w, dual air bags, well maintained. \$4,800 neg. Peter, Ext. 4955 or pwarnicke@bnl.gov. 02 CHRYSLER SEBRING - 130K mi. v6 4 dr, a/t, white w/gray cloth rebuilt eng w/2,500 mi, tinted windows, rem start, runs/drives like new. \$3,200 neg. 681-9800.

99 FORD ESCORT SE - 120K mi. 4-cyl, 2L, ABS, a/t, a/c, all pwr, dual air bags, new t. belt/batt/brake. \$2,300 neg. Lu, Ext. 2458 or clu@bnl.gov.

97 HONDA PRELUDE - 82K mi. 2.2L i4, 190HP, A/T. Grt cond, t. belt, water pump replaced. New brake pads, rotors, extra set wheels+tires. Must sell. \$4,000 neg. 282-8201. DUMP TRAILER - 1995 Bri-Mar, 5X8, 15" sides, single axel, electric brakes, 1500.00 Neg. Kenneth, Ext. 7268, 928-1254 or khartmann@bnl.gov

TIRE COVER FOR JEEP WRANGLER brand new/\$50, dmcarthur@bnl.gov.

Boats & Marine Supplies

21' CLIPPER MARINE CORP. 1972 CM21 MKII - swing keel, flush deck. 3 sails: main, jib, genoa, alum mast, boom & rigging lines all usable. \$250 neg. 960-8410. BOAT COWLINGS - JOHNSON 235 fiberglass light damage; JOHNSON 175 great ond/cross-flow; FORCE 125 great cond. \$100/ea, Lvnda, Ext. 7235, 286-1018,

BOAT-MOTOR-TRAILER-EXTRAS - 14ft Vhull fg (2001), 15hp Susuki outbrd, trailer, gas tank, alum oars, anchor, life jackets, In water/will demo \$1700 all, 512-2328.

VANGUARD 420 - Vanguard 420 club boat,racing sails, includes dolly and over the road trailer, all in mint condition. \$6500 firm, Ext. 4929

Audio, Video & Computers

HP PAVILION DV2000 - laptop notebook w/AMD turion 64 X2 processor & 2GB ram installed, windows 7, power cord & new hard drive. \$250/neg. 443-799-2571. MULTIFUNCTION LASER PRINTER -HP Laserjet 3055 all-in-one, full specs, http://tinyurl.com/fdlaser3055 cond. \$200/neg. Frank. fdonato@bnl.gov. TV - 32" Model AVM-3259G, w/remote; great color, pic and sound; \$50. Brian, Ext. 8240 or bmccaffrey@bnl.gov.

Sports, Hobbies & Pets

BICYCLE - Vintage Nashbar Sport Rx 10spd rd bike, 20" frame, for 5'2" to 5'7" tall, new tires, tubes, brakes, pedals, cables, like new, \$195. Ext. 5669, harringt@bnl.gov. HOME GYM - Parabody 425, 1st cost \$2200 ask/\$375. Tim, Ext. 8847, tlehn@bnl.gov.

MTN. BIKE, FULL SUSPENSION - specialized fsr - rock shox judy-c front, fox vanilla rear, rock ring, model frm 2000, \$400/neg. Leo, Ext. 3823 or reffi@bnl.gov. CLIMBING GFAR - Stealth C4, 5.10 Men's shoes, sz US 12, \$45; blk damond: harness, men's L, \$35; print chalk bag med, \$10; belay, \$5. locking carabiner, \$7. Ext. 8240.

BNL Open to the Public:

Where can you go on a summer Sunday on Long Island to see exciting science shows, enjoy tours of world-class science facilities, and engage in hands-on science activities for the whole family all for free? Visit BNL on Summer Sundays from July 15 to August 5 to enjoy a fun-filled day while learning about dynamic scientific developments at the Lab.

No reservations are needed, and visitors may arrive any time between 10 a.m. and 3 p.m. Activities are first-come, first-served. Visitors age 16 and older must bring a photo I.D. A different facility will be featured each week, and the last facility tour takes place at 3 p.m. Science shows will be held at noon, 1:30 p.m., and 3 p.m. each day in Berkner Hall. A cafeteria and gift shop, also located in Berkner Hall, will be open until 2 p.m. and 4 p.m., respectively. See also www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1433.

Summer Sundays Schedule

July 15: Family Exploration Day, Science Learning Center

An exciting day of hands-on family fun! Visit the Science Learning Center to explore basic scientific theory using magnets, mirrors, and more. See the Environmental Extravaganza. Play a part in the Super Scientific Circus. Be enthralled by the "Phenomenal Physics of Mr. Fish" show.



July 29: Nano, Nano

July 22: Dazzling Light, Astounding Discoveries

Learn about National Synchrotron Light Source II.

Visit the Center for Functional Nanomaterials.

Check out the Relativistic Heavy Ion Collider.

August 5: Atom Smashing Fun

\$23 (\$25 on race day), go to www. marcumworkplacechallenge.com to register. For the picnic, send \$10 nizers thank Michael Thorn and

per person to Betty Elder, Bldg. 1005S. Elder and the other orgathe Health Promotion Program, as well as BERA, for sponsoring the

BSA Noon Recitals: Pianofest, 7/25

Participants in Pianofest, a summer workshop held in the Hamptons, will be showcased on Wednesday, July 25, at noon in Berkner Hall. This is the second of two recitals. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concert is free and open to the public. Visitors 16 and older must bring a photo I.D.

Now in its 23rd season, Pianofest is an East Hampton-based intensive workshop that addresses the fine points of professional pianism. Its alumni have gone on to make their mark nationally and internationally. For each recital at Brookhaven, the workshop's founder and director, Paul Schenly, brings a selection of outstanding Pianofest participants to perform from the great classical repertoire. The program may include renditions of popular concertos, using two pianos. For more information on Pianofest, go to: www.pianofest.com. To see and hear a wonderful 2-minute video of selections from Pianofest 2011, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1420.

MEDELA NURSING PUMP - Double suction at same time. \$150. 813-0497.

POOL LADDER - For Aboveground Pool. A-shaped. Steps go into the water. Hardly used. \$50. Pics available. vbri1@ aol.com.

Lost & Found

CELLPHONE - lost, black Samsung GALAXY S II. thanks Lillian.xiangli@bnl. gov. Xiang, Ext. 4331 or xiangli@bnl.gov. HIGH TOP COMPOSITE WORK BOOTS Lost boots almost a week ago on BNL Shuttle Service. Exact date of incident: July 5. If found please call my number promptly. Thank you. 347-285-8508.

AWARD WINNING FILM - "The Courage to Believe" is a documentary produced by New Tang Dynasty Television(NTDTV). George, georgewei@bnl.gov.

COUCH AND LOVESEAT - Colonial, blue, heavy frame. Play room condition. John, Ext. 2788.

KITTEN - 12 wks, v/sweet polydactyly gray tabby female, health cleared, has shots and just spayed, ready for a loving home!! Colleen, 399-6959 or BCHornic@ optonline.net.

Wanted

BERA CLUB MEMBERS WANTED - I am trying to begin a BERA club to learn about investing and preparing for retirement. Please join us! No experience required! We will learn together. Sue Perino, Ext. 2483 or perino@bnl.gov.

CAR - 4dr, a/t, a/c, >26mpg/hwy, <60K, will pay up to \$8k depends on cond. Hengzi, 344-5008 or dhwang@bnl.gov. FIREWOOD - split, hardwd, seasoned not necessary, delivered to Flanders. Christine, Ext. 4238.

MATTRESS - QUEEN SIZE - Want used, gdcond qu mattress, boxspring. Hdbrd / ftbrd also welcome. Thank you. Rick, Ext. 3005.

For Rent

MILLER PLACE - own b/r, share lg furn Colonial home in prof resid. area, int, a/c, heat, 10 mi to BNL, ir non-smkr, no pets. \$750/mo. 744-8386. N. SHIRLEY - 1 bdrm furn apt, ground flr, close to Lab, very clean and quiet, pvt ent, util incl, no smkg/pets,1 mo rent/sec. \$850/mo. Ext. 3849.

RIDGE - Cozy 3 bdrm/1 ba house. Quiet, only 3.5 mi to BNL. Hardwood floors/part basement /washer/dryer. Utils extra. Non smoker please. \$1,600/mo. Kristy, 834-9176. RIDGE - rm for rent, incls all utils and int, only mins to BNL. \$625/mo. 917-721-

RIVERHEAD - 3 bdrm, 2 full ba, Western Ranch, kit, dw. I/r, d/r, gar, new windws & furn, nr shops, no smkg/pets, refs, credit ck read. 1/mo sec + util. \$2.150/mo. 512-6470. SHOREHAM - 1 bdrm furn apt, I/r, d/r, full kitch&bath. no smkg/pets, pvt.ent/drvwy. util.incl. 1mth sec. 5min to Lab. \$1.150/mo. Judy, 375-7957, judyb55@optonline.net.

SHOREHAM - share a hse w/professional, Irg/furn bdrm, cable TV, int, no smkg/ pets, 7 mi to BNL, avail now, cell/464-8134. \$650/mo. gg19582003@gmail.com. "BNL" tent for the event.



SOUND BEACH - 1Br apt, \$850 single, \$950 double. Utilities included. No smoking. Pets negotiable. \$850/mo. 346-5942. UPTON - Roommate(s) to share Ig home or apt, off st prkg, quiet, safe n'hd, BNL vicin, backgrd/credit check, 1st mo rent/1 mo

sec. \$700/mo neg. Kazek, 847-477-1634. For Sale

CORAM - spacious 1 bdrm co-op, updated kit & b/r, laundry across fr unit, alarm syst, MLS #2501596 contact for link to listing. \$110,000. Warren, Ext. 8329.

PORT JEFF STATION - Ig upper 1 bdrm, 1 bath co-op, eik, new applis/windows, a/c, d/w, Indry/pool on site, great location. \$91,000 neg. Megan, 828-2743.

RIDGE - beautiful 1 bdrm condo in 55+ community, new carpet/paint, sunrm/ pool/golf/clubhse, taxes low @\$2,919 yr, j4/mi to BNL. \$64,500 neg. 849-3305.

SHOREHAM - Robert Ct: 3 bdrm, 1.5 ba Col. on c-d-sac, updated ba & kit/w ss applis, dn w/fp, gar, bsmt, wood deck, wood shed, 10 min to Lab. \$339,000. 744-8793, dreas house@aol.com

SMITHTOWN - Open concept-great-rm high ranch, dead end, attic, 1.5 gar, full bsmt, fpl, laundry room, CAC, Cvac, 4 bdrm, deck/balc, 3 full ba, den, walk to town, RR, schools. \$425,000 neg. 516-808-3422.

In Appreciation

I just want to thank everyone for all you support and kind donations for Baby Joey's Fundraiser. It was a great turnout and now the family is in a much better situation thanks to all of you. - Judi Romeo

Summer Sundays, 7/15 – 8/5

Come Join in

The Jones Beach **Marcum Workplace** Challenge Run, 7/31

Think Jones Beach for Tuesday, July 31, at 7 p.m., when thousands of walkers and runners from major and minor companies on Long Island gather for a 3.5-mile run followed by a picnic. The companies run in teams, and BNL organizers are hoping to double last year's 50 participants. The event is open to all the Lab community, including summer interns, family members, and friends. Registration for the run is

ROOF RACK BIKE CARRIER - THULE 599XTR Big Mouth upright bike carrier (w/o lock), \$80; Thule 50" load bars & 44" fairing, \$125. bmccaffrey@bnl.gov.

SCUBA TANKS - LUXFER, 80 cf, aluminum, 3000 psi, yoke valve; U.S. DIVERS, 80 cf, aluminum, 3000 psi, yoke valve; \$35/ea. Ext. 8240.

SURFBOARD - "Roxy", 7.5', light blue w/ pink details, cushioned non-slip surface, leash incld, excel cond, \$300. 219-7196.

Furnishings & Appliances

AREA RUG 12 X18 - Many colors in pattern - deep green, burgundy, gold - unique, pic available. \$50. Susan, 929-0596. FOR BABY - girl bedding \$60, 4-in-1 High-

chr \$50, Delta 5-in-1 convtible crib \$125. GRT cond. Pics. miamyamo@optonline.net. IKEA DINING TABLE - w/extra leaf, orig \$200+, grt cond, ask/\$50, pic: http://tinyurl. com/pic0703. Ying, Ext. 5360, ylou@bnl.gov. OVEN/STOVE - (tan) & counter top 1100 Watt GE m/wave (wh), \$90. 516 769-370.

Tools, House & Garden

CRAFTSMAN LAWN TRACTOR - 12 HP, needs some work. \$100. John, Ext. 8206 or biemer@bnl.gov. CRAFTSMAN RADIAL ARM SAW - 10"

v/gd cond, extra blades, owners manual incl, ask/\$150. Joseph, Ext. 8119. HUGE PLAYGROUND - great cond, tree

hse, 2 slides, jungle gym, 3/swings, 1/rocking, orig/\$3.8K, ask/\$1.7K, you disassemble, pics avail. 516-779-3111.

DIAL ARM SAW Craftsman tra blades, on casters, works finr, \$100. Lynda, Ext. 7235, 286-1018, fitz@bnl.gov.

Miscellaneous

AUDI & VOLKSWAGEN REPAIR - Certified VW tech, 8-yrs dealer exper, all types of repairs. Reasonable. Email/call for est. Refs avail. 371-2988, wfielitz@gmail.com. ESPN AIR HOCKEY TABLE - Glow in the dark, barely used, \$75, you pick up. dmcarthur@bnl.gov.

GLASS - 2 pcs of 22" x 64" glass from Anderson sliding drs/\$30 obo. Ext. 7235. GO-KART - no motor, body & tires only/\$25. Additional \$100 for motor. Pics avail. 286-1018 or fitz@bnl.gov.

INVERSION TABLE - Ironman Essex 990,

stress and back relief. Accoms. users

4'10" to 6'6" tall; up to 275 lbs. Less than year old. \$75. Michelle, 516-315-6029. LIRR TICKET RONKOKOMA-PENN STA unused return ticket (off peak) valid thru July 19, 2012. Paid US\$ 23.50, selling for

US\$ 18. Ext. 5069 or ipatterson@bnl.gov.

Liz Seubert, editor Joe Gettler, assistant editor Roger Stoutenburgh, photographer On the Web, the Bulletin is located at www.bnl.gov/bnlweb/pubaf/bulletin.asp. A calendar listing scientific and technical seminars and lectures is found at www. bnl.gov/bnlweb/pubaf/calendar.asp.

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