

Contact: [C. Scholl](#)

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June 2014

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A WORD FROM THE:

Administration

Accelerator Div.

ES&F Div.

Acc. R&D Div.

Operations

▶ Arrivals/Departures

 Safety Stats

Quote of the Month: "There are no shortcuts in evolution" - Louis D. Brandeis

NOTE FROM OUR CHAIR: Thomas Roser



This year's RHIC run has come to an end with the very successful first operation with helium-3 on gold collisions. Just as during the preceding gold-gold run the luminosity exceeded the maximum projection. Collisions of helium-3 on gold will test whether a small amount of the perfect liquid of the quark-gluon plasma can be formed. If so then the triangular shape of the helium-3 nucleus would be reflected in the distribution of the decay particles detected in STAR and PHENIX.

This week we have a DOE review of the cost and schedule of the Low Energy RHIC electron Cooling (LEReC) project. This is our next major upgrade for RHIC, which will increase the luminosity at low collision energies. We are planning to run with this upgrade starting in 2018. Project leader Alexei Fedotov and the whole project team have worked hard to prepare a solid cost and schedule estimate for this important review.

DID YOU KNOW??

Check out who received an employee Service Award this year! 2014 Collider-Accelerator Dept. employees who received a [Service Award](#). Last year's Service Awards are listed [here](#). 2012 Service Awards are listed [here](#).

Check out who received an employee [Spotlight Award](#) this year!

CONGRATULATIONS Kerry Mirabella! - Kerry's son Dave recently got married in Myrtle Beach, SC - [see pictures here](#)

EVENTS/SEMINARS...



Check out the [BNL Calendar](#) for upcoming events & Seminars or the [Upcoming Conferences & Workshops](#) page for workshops and Conferences happening at

BNL.

July 09 - (Berkner Hall D | 12pm) Brookhaven Women in Science (BWIS) Event

Congratulations Francois Meot - he is a grandpa!! - Tristan Méot has been born in Givors on July 7, 2014..



Steve Bellavia captured a picture of - "The Eastern Veil Nebula, NGC 6992 (Caldwell 33)", a portion of a supernova remnant from a star that exploded approximately 6,500 years ago, 1,500 light years from Earth, and is now spreading out, covering a large field in the sky (several full moons) in the eastern wing of the constellation Cygnus, The Swan.



Cooling Tower #1 : Thanks to Al Pendick we have captured part of the process of the shutdown of the RHIC Run

July 09 - (Bldg 510- SCR | 2pm) High-Energy Physics & RIKEN Theory Seminar, "When is a top quark a parton?" Presented by Ahmed Ismail, ANL & UIC

July 13- Aug. 3 - (BERKNER HALL | 10am) [SUMMER SUNDAYS](#)

July 15 - (Bldg 510-LSR | 3:30pm) Sambamurti Lecture "TBA" Presented by Anne Sickles, BNL

July 22 - (Bldg 463 | 12pm) "Asian Food Tasting" - luncheon fundraiser

July 22 - (Berkner Hall Aud. | 4pm) Pegram Lecture "Reminiscences of a public Science Policy Wonk" Presented by Richard N. Zare, Chemistry Dept., Stanford U.

July 23 - (Berkner Hall Aud. | 11am) Pegram Lecture "VMass Spectrometry: Drop by Drop, " Presented by Richard N. Zare, Chemistry Dept., Stanford U.

July 24 - (C-AD LCR | 4pm) C-AD Accelerator Physics Seminar

Aug. 6 & 7 (Berkner Hall Aud. | 9am) [Office of Education Programs Event](#)

Do you have to give a talk?

Public Speaking Techniques:

Verbal & Non-verbal

Presented by:

Theodore Sampieri Ext: 4894

12:00 – 1:00 Fridays

CAD Building 911

Large Conference Room: 2nd Floor

IN OTHER NEWS...

Scientists Blow The Lid on Cancer & Sunscreen Myth - The epidemiological study followed 30,000 women for over 20 years and "showed that mortality was about double in women who avoided sun exposure compared to the highest exposure group." [Read about it](#)



WHAT'S GOING ON IN OUR NEIGHBORHOOD?

Interested in Cycling? <http://www.bicyclelongisland.org/majoride.htm>

Interested in Running or Walking? Check out the [lirunning March Calendar](#) for the following events: LIRRC Wed Night Summer Series (Eisenhower Park/Jul 16); Purple Ribbon 5k (Wantagh/ July 26) R.O.C. Race (Brooklyn/Sept. 13); Survival Race (Sept. 28) and more..

For the Kids: Marvel Universe LIVE! (August) @ [The Nassau Coliseum](#).

Stony Brook Events:

America's Love affair with the Motorcycle ~ July 12 (10:00am-) The exhibit will feature memorabilia and items from private collections, along with special events including celebrity appearances and speakers.

[Sunday Summer Concerts](#) ~ July 13 ~ Aug. 4 (7pm-9pm)

Determining Your Dinner to Determine Its Calories ~ GE has developed a prototype microwave scanner that can determine the calorific content of homogeneously blended food, such as strawberry milkshake or cream-of-mushroom. The company hopes to build a new version that can analyze a plate of diverse food items... [Read More..](#)

Nuclear-inspection Protocol Inspired by Game of Marbles ~ The combination of game theory and neutron bombardment can reveal whether two nuclear warheads are identical without revealing details of the warhead's design...[read about it.](#)

[5 Summer habits you should STOP! and 3 others that aren't so bad.](#)

Typhoon Neoguri Hits Japan's Okinawa With High Winds, Huge Waves ~

Typhoon Neoguri battered Japan's Okinawa Islands with sustained winds of 120 mph tuesday, paralyzing transport and forcing US military to move 61 aircraft from Kadena Air base... [read more](#)

DAY AT THE VINEYARDS...

Macari Vineyard ~ [MATTITUCK] June 13 ~ In Store tasting at the Wine Guy, June 18 ~ Wine Dinner at One Main Restaurant

Duckwalk North ~ [SOUTHOLD] No Events Posted

Duckwalk South ~ [WATER MILL]

Castello di Borghese Vineyard & Winery ~ [CUTCHOGUE] ** Vineyard Tours & Wine Tastings Every Thursday & Sunday @ 1pm & FREE Jazz Every Saturday (2-4) with Marguerite Volonts**

Jamesport Vineyards ~ *Live Music from 1-4pm every Sat & Sun*

Martha Clara Vineyards - [RIVERHEAD] ~ **Live Music every weekend**

Palmer Vineyards - [RIVERHEAD]

Pindar Vineyards - [PECONIC] ~ *Live music Every Sat 1-5pm*

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Salt Marsh Scientists: Jul 14-18 (10:00am-1:00pm) Ages 12-17 are invited to become experts of the salt marsh environment.

Salt Marsh Explorers ~ Jul 28 ~ Aug 1 (10:00am-1:00pm) Ages 5 ~8 are to Join us for a week long hands on program that combines outdoor investigations at an 88-acre wetland preserve, lab work at the Ernst Marine Conservation Center, crafts and tons of fun at this 5 day program.

Nassau Coliseum ~

Upcoming shows: American Idol Tour July 11 & 23; Miley Cyrus (August 1); Enrique Iglesias & Pitbull (Sept); Cher D2k Tour (Sept)

[October](#) ~ Home Show

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Baiting Hollow Farm Vineyard ~ [CALVERTON] *Music every Sat & Sun from (2-6)*

Thursdays ~ Happy Hour!

Paumanok Vineyards ~ [AQUEBOGUE] No Events Posted August 5-15, 2014 ~ Paumanok Mediterranean Wine Cruise

NOTE FROM OUR ADMINISTRATION: S. LaMontagne



YES, the project number used on each time card, WEB Requisition, work order, etc is of vital importance and may impact your ability to do your job effectively and/or the organizations ability to meet programmatic goals. For example, non-RHIC related labor carelessly charged to RHIC diminishes the funds available for purchases, including power.

Over the past several years, C-AD has grown and taken on a number of new programs, two of which have added responsibility for the maintenance, operation and upgrade of programmatic facilities independent of RHIC. With the transfer of the Isotope Research and Production Program from Medical in October 2011, C-AD assumed responsibility for the Target Processing Laboratory in Building 801 and with the transfer of the Accelerator Test Facility from the Physics Department in April 2013, responsibility for that facility in Building 820, as well.

For the most part, the operation of the added facilities continues with existing staff. However, the C-AD organizational infrastructure that supports RHIC operations is able to provide an enhanced level of support for the newly acquired facilities. This is particularly true in the areas of safety, experimental support and facility upgrades. C-AD personnel who have worked almost exclusively in support of the RHIC Program in earlier years are now also supporting upgrade efforts for the ATF, the TPL and BLIP facilities.

C-AD, as an organization is not funded; funding is secured from a number of sponsors and clearly linked to a defined work scope. As a customer, it is incumbent upon us to properly record expense using the project number associated with the work scope or program that benefits from the cost to be incurred. C-AD technicians, engineers, and scientists have a responsibility to the organization and to our customers to appropriately record effort by program on their time card and to identify on all WEB Req's, Work Orders, travel, etc., the specific program for which goods and/or services are being purchased.

Carelessness in this regard has both near and long term consequences for the organization. In the near term, operational schedules such as the number of weeks during which RHIC can operate, may be impacted if a significant amount of non-RHIC labor or materials is carelessly charged to RHIC. In the long term, the financial history of cost by program is distorted and estimates to support continued operations and/or upgrade efforts which are in part based on our financial history, may be over or under stated.

In summary, the PROJECT NUMBERS you use are important. If you are unsure of what project number should be used, ASK your supervisor.

NOTE FROM ACCELERATOR R&D DIVISION: Ilan Ben-Zvi



No addition this month..

NOTE FROM OUR ACCELERATOR DIVISION: Wolfram Fischer



The extremely successful RHIC Run-14 came to an end. Beam operation stopped on Sunday morning 7am, for a day of power supply tests, and a test of moving the DX magnets while being cold the following day. We need the latter next year. A special thanks to everyone who was working on the long 4th of July weekend. In the last month we delivered for the first time collisions of helium-3 on gold nuclei. This too was a very successful part of Run-14.

With the run over, preparations are ramping up for the next run. We will have a RHIC Retreat on 13 and 14 August 2014 at the Brookhaven Center to analyze past performance and plan for the next runs. The shut-down will be busy again. Apart from the extensive maintenance work in RHIC and the injectors, we need to upgrade the 56 MHz SRF cavity, make some modifications to the electron lenses, upgrade the RHIC dump and dump kickers, install a new damper in RHIC, install new pre-fire protection masks, and upgrade the polarimeters.

Upcoming events:

09-11 July 2014	DOE Review of Low-Energy RHIC electron Cooling (LEReC) Project
11 July 2014	End-of-the Run Party
15 July 2014	DOE Close-out Review of Electron Lenses Project
21-23 July 2014	Workshop on Transformative Hadron Beam Lines
13-14 August 2014	RHIC Retreat

NOTE FROM OUR EXPERIMENTAL SUPPORT & FACILITIES DIVISION: Phil Pile



The 3He-Au portion of Run 14 has ended with great success as both experiments collected excellent data surpassing their goals. We also took time for a STAR test of their fixed target concept by running the gold beam for a few hours at injection energy. The last day with the ring still cold was slated for a test of moving the DX magnet in preparation for the p-A run next year. The experiments are preparing for the summer shutdown.

NSRL finished Run 14B on June 20 and worked with the NRO for a single day of running on June 21. This was followed by several days of studying He-3 interactions with different target materials, performing an energy scan and angular scan of the scattering processes. The studies are part of the program to measure the scattering and fragmentation cross sections to validate the models for space radiation and radiation therapy. For instance, in carbon ion therapy we have measured the dose delivered by carbon ions, but in the process we know that the carbon ion fragments into lighter ions, and in order to fully understand the cascade process we need to know the scattering and fragmentation cross section of all the lighter ions. Currently there are no measurements for He-3 ions, and we must rely on models to predict the scaling with atomic number and weight, Z and A. These measurements will feed into the treatment planning for heavy ion therapies, as well as risk assessments for space radiation for NASA.

BIP continues its successful running with the base program of Sr-82 production. Another R&D 10-day exposure with Thorium foils at beam energies of 200 MeV for Ac-225 isotope production concluded on July 3rd. The targets were opened at the TPL hot cells and the foils were put in glass containers and after a 4-day cool down period the foils were shipped to ORNL for processing. The current Th foils program will conclude with a short exposure at 140 MeV as part of a study to determine the energy dependent yield.

NOTE FROM OPERATIONS: Paul Sampson



The FY14 High energy Au-Au Physics run is ended, on schedule, Monday June 16th. At that time, the changeover to 3He-Au began and was successfully completed by Friday June 20th. Physics then ran and successfully ended on July 6th, with both STAR and PHENX meeting their goals soon enough to allow for a final APEX session on Saturday July 5th. RHIC remained cold to allow for power supply tests on Sunday July 6th and for a Dx move test on Just 7th. Both efforts were successful. The shutdown started on July 8th with the first offload of helium beginning in the morning. Experimental access began on Sunday, while tunnel access was granted after ramping was completed on Tuesday morning. At present, testing on the access controls for CeC is ongoing and certification is anticipated in early July. This will allow for testing of the first RF elements mid July.

The AGS ring was surveyed and opened for Restricted Access on Monday July 7th. The Booster will open on July 8th, following Main Magnet Power Supply Tests. Auxiliary areas for Booster, AGS and RHIC, such as berms and fan houses have been opened for shutdown activities with the exception of shielding at RHIC IR2 and IR4, which will be removed after completion of RF tests in those areas.

The LINAC continues to run well, with continued high current and integrated proton beam delivered to the BLIP targets. Maintenance for BLIP and LINAC will coincide with scheduled BLIP target changes through the end of the LINAC run at the end of July.

Improvements in performance at EBIS and the laser ion source will continue during the shutdown.

The CAD CATV system display includes daily updates including Testing, power disruptions and outages as well as important dates. This information can also be seen on the web at [RHIC Broadcast](#).

To view a list of the approved work for shutdown or maintenance, go to the [Job Request System](#) and select the appropriate date. This link is behind the firewall and requires privileges to view.

For schedule updates see: [This Week, which can be viewed by all](#).

ARRIVALS: Welcome!

Russell Trentacoste ~ (Vacuum Systems) Started working with M. Mapes June 10, 2014

Philip DeCaro ~ (Maintenance Support) ~ Started working with P. Sampson June 17, 2014

Marc Cadet ~ (Maintenance Support) ~ Started working with P. Sampson June 23, 2014

Kyle Clasen ~ (Preinjector Systems) ~ Started working in Technical Support with C. Carlson on June 19, 2014

Jermaine Jackson ~ (Instrumentation Systems) ~ Started working in Technical Support with D. Lehn on June 25, 2014.

Zaiwen Gong ~ (Controls Systems) ~ Started working in System Administration with J. Laster on June 30, 2014.

DEPARTURES: Farewell, you will surely be missed..

Simon White - (Acc. R & D) - Last Day was June 16, 2014

Kevin Mandracchia - (Booster/AGS) - Last day was July 3, 2014

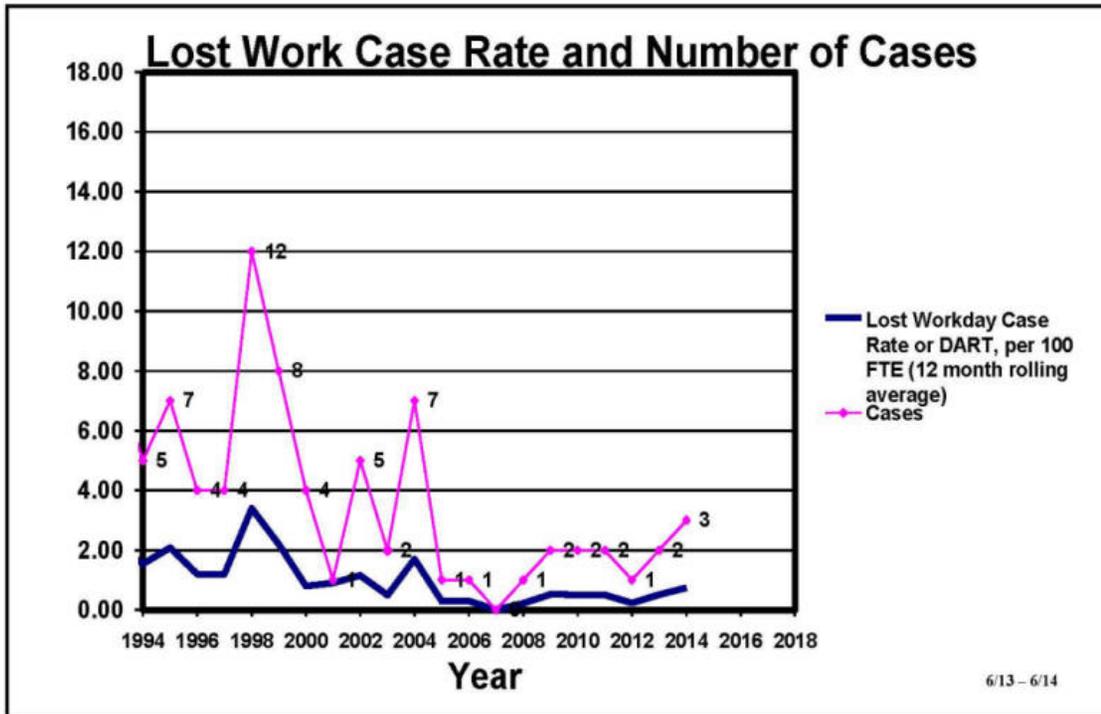
Ramesh Sharma - (BLIP/MIRP) - Last Day is July 16, 2014

Michael Cross - (Instrumentation Systems_) - Last day in Technical Support in Aug. 5, 2014

Guest Notices:

Xue Liang (V7858), C-AD Guest end date was July 3, 2014.

Thomas Andre, (P7149), C-AD Guest end date Aug. 31, 2014.



C-AD Occupational Injury Statistics

For Year 2013 For Year* 2014

First Aid Cases	5	4
Recordable Cases	3	2
Lost Work Cases	2	1

* Calendar Year through 6/14

CONGRATULATIONS: Kerry Mirabella

Kerry's son, Dave King married Lindsey Felton early June in Myrtle Beach, SC. The couple now resides in Pittsburgh, PA, Below are some pictures of the beautiful wedding!

Ceremony:

