

Contact: [C. Scholl](#)

PREVIOUS ISSUES

August 2014

[{HOME PAGE}](#)

[BNL WEBSITE](#)

[C-AD WEBSITE](#)

[ES&F WEBSITE](#)

[BERA](#)

[BNL CLASSIFIED ADS](#)

[INSIDE](#)

A WORD FROM THE:

Administration

Accelerator Div.

ES&F Div.

Acc. R&D Div.

Operations

▶ Arrivals/Departures

 Safety Stats

Quote of the Month: "I believe in general in a dualism between facts and the ideas of those facts in human heads." - George Santayana

NOTE FROM OUR CHAIR: Thomas Roser



I hope everybody had a chance to enjoy some vacations over the summer. Preparations for the upcoming RHIC run are in full swing while the next NSRL run is soon getting underway.

If you went to the EEBA building recently you would have seen it almost completely empty and cleaned up. The B and C line targets including the secondary beam lines of the AGS slow extracted beam program have been dismantled to make room for the move of the Accelerator Test Facility (ATF) from its present location in building 820 to the much larger EEBA hall. Soon the shielding blocks of the AGS beam lines will be restacked to form the outline of the new ATF and accelerator elements, received from the decommissioning of the Source Development Laboratory (SDL) here at BNL and the BATES accelerator at MIT, will be put in place. The ATF facility will also be upgraded including a new 100 TW CO2 laser system. This laser system will be the most powerful laser of its kind in the world.

VIEW [CONFERENCE PROJECTIONS FOR 2014: DUE ASAP -](#)

[CONFERENCES SHOULD BE PROJECTED THROUGH APRIL 2015](#)

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 Service Awards are listed [here](#). 2012 Service Awards are listed [here](#).

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

Steve Bellavia captured a few pictures ~ He attended the Black forest start party and captured 2 pictures; one of the Cocoon Nebula and one of the Witches Broom...

[See the 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.

Sept 15- (Berkner Hall Aud | 10:30am) All Employee Event/Meeting

Sept 30 - (Bldg 510 - LSR | 3:30pm) Physics Colloquium "Sterile Neutrinos" Presented by Josh Spitz, MIT

WHAT'S GOING ON IN OUR NEIGHBORHOOD?

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

Interested in Running or Walking? Check out the [lirunning March Calendar](#) for the following events: R.O.C. Race (Brooklyn/Sept. 13); Run & walk It Out (Bellport), Run/Walk/Pray 5k (Manorville), (Survival Race (Sept. 28) and more..

For the Kids: Sesame Street LIVE! (Sept. 26~28) @ [The Nassau Coliseum](#).

Stony Brook Events:

LEGO Building Contest & Exhibit ~ Sep. 27 ~ Oct. 26 (9am ~5pm~)If you love building with LEGOS here is your chance to show off your original creations and maybe win a prize!

[Sund](#)

Nassau Coliseum ~

Upcoming shows: Enrique Iglesias & Pitbull (Sept 14); Cher D2k Tour (Sept 22) & Trans-Siberian Orchestra (DEC*)

October ~ Home Show

Check out Erik Forsyth's Travel's:



DAY AT THE VINEYARDS...

Macari Vineyard ~ [MATTITUCK] In Store tasting at the (9/12) EHP Liquors & (9/21)Stew Leonards; Sept 28 ~ Wine Dinner at Noah's

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 Fri, Sat & Sun*

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

Palmer Vineyards - [RIVERHEAD] ~ Live Music & Food Truck Every Sat & Sun; Friday wine specials and games.

Pindar Vineyards - [PECONIC] ~ *Live music Every Sat 1~5pm until the end of October*

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

Thursdays ~ Happy Hour!

Paumanok Vineyards ~ [AQUEBOGUE] Every Saturday Sept & Oct. (2~5) fresh local Oysters

NOTE FROM OUR ADMINISTRATION: S. LaMontagne



The Administrative group is preparing for fiscal year end closing on Friday, September 26th. The goal at closing is to reflect the full value of all effort performed, as well as the value of all goods and services received, in the annual cost reported to DoE on September 30th. While much of the activity associated with this process should be transparent to you, your assistance may be necessary.

How can you help?

- Complete (but do not submit) your September time card by Monday, September 8th. Please note that you may modify the card as necessary until you are required to submit it on Wednesday, September 17th.
- If you are a credit card holder, be attentive to the two cut-off dates in September and promptly enter project numbers for those purchases that should not be charged to your default project.
- If you are the requestor for a high-value procurement and anticipate a material delivery in September, please keep your administrative group in the loop on any changes in the delivery schedule.
- If you are a technical representative on a construction, service or maintenance contract, assist your administrative group in and/or evaluating the vendor's estimated level of effort through September 30th.

In summary, in every interface with the financial system (i.e., time cards, web reqs, stores withdrawals, RFQ's, work orders, credit card purchases, etc.), please prepare your input carefully to ensure that the appropriate project numbers are referenced. Once the year is closed, we cannot correct prior year entries.

Lastly, if you are a supervisor, group leader or division head, please be attentive to the financial documentation prepared by your employees and follow-up to ensure that they respond to administrative requests on a timely basis.

NOTE FROM OUR ACCELERATOR DIVISION: Wolfram Fischer



The summer maintenance and preparations for Run-15 continue. We will start with 9 weeks of polarized protons at 100 GeV, followed by proton-gold and possibly proton-aluminum collisions. As an important step in the preparation for the first p+Au run, the Run Coordinator Chuyu Liu settled when to move the DX magnets and by how much.

Upcoming events:

- | | |
|----------------------|--|
| 16-18 September 2014 | RHIC Science and Technology Review by DOE |
| 22-26 September 2014 | International Workshop on FFAG Accelerators, BNL |
| 20-24 October 2014 | 21st International Spin Physics Symposium, SPIN2014, Beijing |
| 10-14 November 2014 | 54th ICFA ABD Workshop HB2014, East Lansing |

NOTE FROM OUR EXPERIMENTAL SUPPORT & FACILITIES DIVISION: Phil Pile



We are now well into the 2014 RHIC shutdown with both STAR and PHENIX experiments busy with repairs and modest upgrades. The Run 15 run plan remains unchanged with cooldown of RHIC to helium temperature set to begin about 2 January 2015. Beams planned for next year include 100x100 GeV polarized protons followed by 100x100 GeV/n polarized protons on gold with perhaps time left for a third beam pair.

C-AD and Magnet Division personnel (mechanical, electrical, and cryogenic engineering) are continuing preparations for shipping the sPHENIX BaBar magnet from SLAC to BNL. The shipment should be completed later this month. The magnet will be setup in building 912 on the floor adjacent to the ERL cryogenic plant. It will then be connected to the cryo plant and put through low current tests to check its functionality after years of storage at SLAC and subsequent transport across the country. If all goes as planned we will remove the PHENIX experiment from the 8:00 IR during the 2016 RHIC shutdown and begin the installation of a new PHENIX experiment, sPHENIX, with mostly new detectors built around the BaBar superconducting solenoid.

BLIP completed operations on 31 July and the last BLIP target was processed in the TPL the week of 15 August. After filling outstanding orders for strontium-82 the leftover strontium was shipped to LANL. This is the usual mode of operation, when we shutdown for maintenance LANL turns on and visa-versa. With this a continuous supply of strontium to US customers is maintained throughout the year. The shutdown period for BLIP this year is very busy with construction for Phase I of the new BLIP Raster project. Phase I will provide better beam diagnostics with a new beam position monitor assembly and a new laser beam profile monitor as well as install a new vacuum system to set the stage for the Phase II installation of the Raster magnet. The schedule for Phase I is very tight since the LINAC will need to be up and running for RHIC polarized protons by the end of November. BLIP will likely startup again in late December or early January and run through June followed by final installation of the Raster system (Phase II). In addition to the Raster project another upgrade is now in progress that should result in about 15% more beam intensity by September 2016. The actinium-225 project (BNL, LANL, ORNL tri-lab collaboration) is up for a cost and schedule review next month, an important "baseline" review.

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



No updates for this month...

NOTE FROM OPERATIONS: Paul Sampson



Shutdown FY14 continues with a very aggressive schedule. Major construction, upgrade and maintenance projects are making good progress.

In RHIC, testing of one of the 500 MHz CeC cavities began early this month and will continue during scheduled periods throughout the shutdown. Between tests, construction and installation will continue. Tests of the 112MHz SC cavity are expected to start later in the shutdown.

In addition to normal maintenance items, other major efforts in RHIC include: e-lens upgrade and repair, PP-PP installation, preparation for multiple DX magnet moves, "mask" collimator installation, bunch-by-bunch damper installation, Beam Dump and Dump Kicker repair and upgrades. At STAR and PHENIX, scheduled is progressing on or near schedule.

The AGS, Booster and LINAC are opened and on Restricted Access. Work in the Booster, including installation of the new Access Controls System is wrapping up and startup for NSRL has begun. First beams for NSRL setup are scheduled for September 25th.

Early in October, the Tandem will be utilized to provide protons for NSRL experiments. Work in the BLIP area will commence later this month and will continue through November. Work in other areas will continue through November as well.

Scheduled power outages during the shutdown are displayed both on the CATV and on line. Use the "RHIC Broadcast" link below to view all scheduled outages and testing.

Shutdown project progress can also be viewed via the [links](#) below.

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 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!

Alyssa Pilkington (C-AD Procedure Coordinator), working with Ray Karol, started Aug. 21, 2014.

DEPARTURES: Farewell, you will surely be missed..

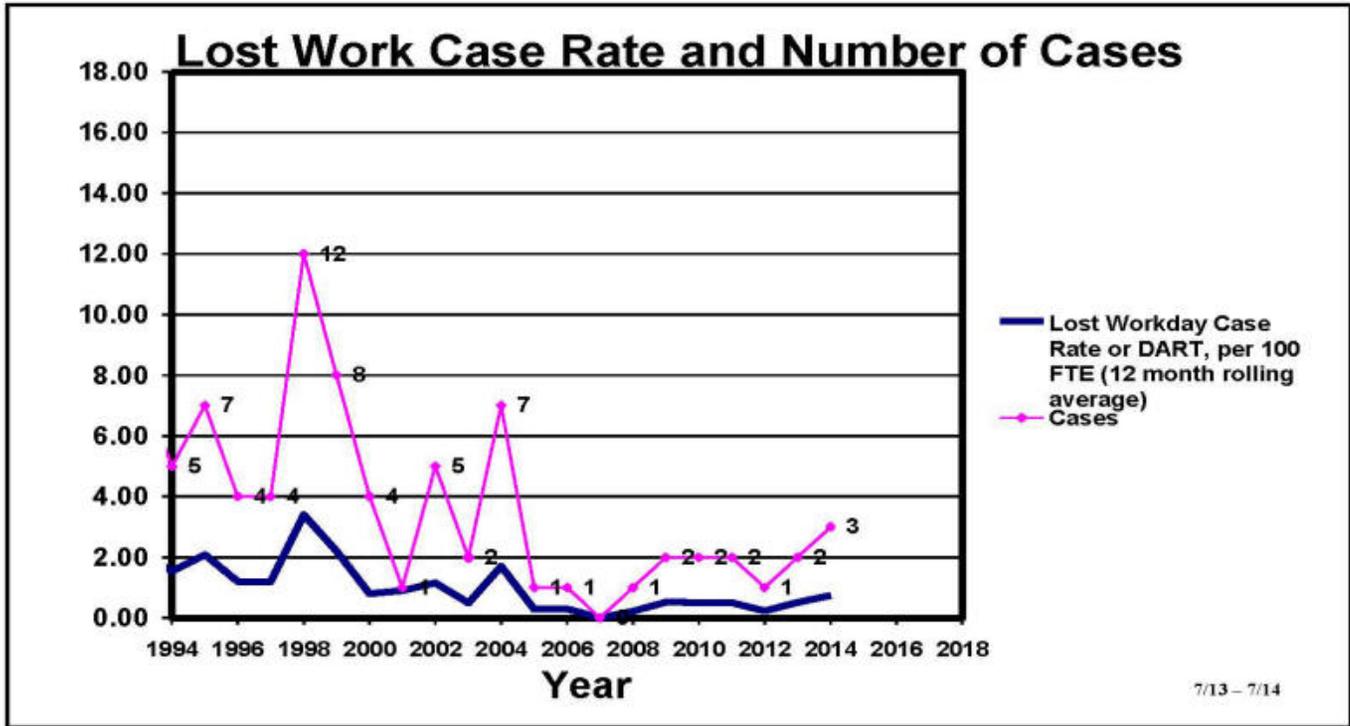
Carlos Marques - (SRF) - Transferred to PS on Sept. 1, 2014

Guest Notices:

Tongfei Guo (Guest Jr. Research Assoc.), End date is Sept. 30, 2014.

Xiaozhe Shen (Remote User), End date is Oct. 31, 2014

Vladimir Davydenko (Guest Scientist), End date is Oct. 30, 2014



C-AD Occupational Injury Statistics

For Year 2013 For Year* 2014

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

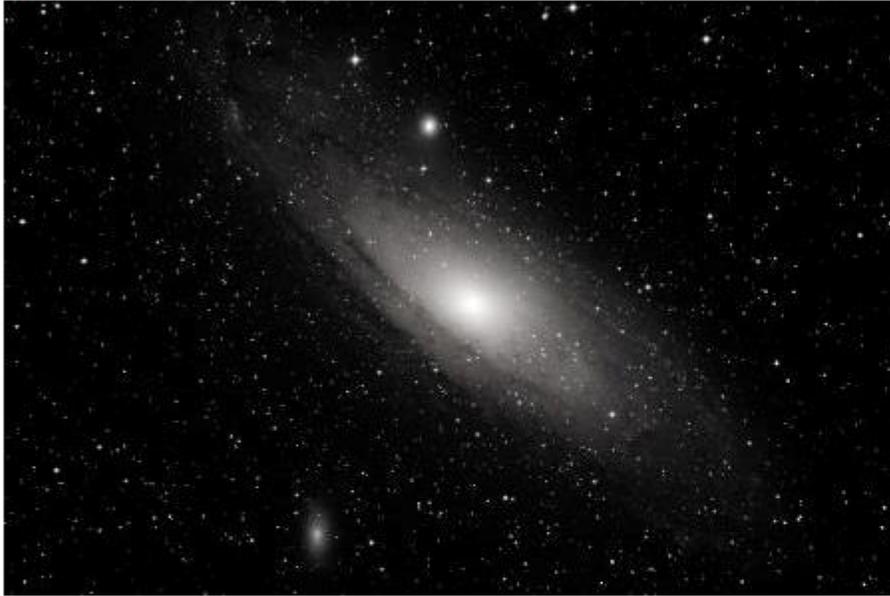
* Calendar Year through 7/14

PHOTOS BY: STEVE BELLAVIA

Steve attended the annual Black Forest Star Party, at Cherry Springs, PA.

He was able to image 3 objects: **Andromeda galaxy (1)**, **The Eastern Veil nebula (2)** and the **Helix nebula (3)**

(1)



(2)



(3)



Here are 2 more nebulae images from Tuesday (8/26) and Thursday (8/28) night:



The Cocoon Nebula:

The Cocoon Nebula is a reflection/emission nebula and Caldwell object in the constellation Cygnus. The NGC description refers to IC 5146 as a cluster of 9.5 mag stars involved in a bright and dark nebula. The cluster is also known as Collinder 470. The cluster is about 4,000 ly away, and the central star that lights it formed about 100,000 years ago. The nebula is about 12 arcmins across, which is equivalent to a span of 15 light years. When viewing IC 5146, dark nebula Barnard 168 (B168) is an inseparable part of the experience, forming a dark lane that surrounds the cluster and projects westward forming the appearance of a trail behind the Cocoon.



The Witches Broom:

The Western Veil, NGC 6960, is also known as the "Witch's Broom", "Finger of God" and the "Filamentary Nebula", is a portion of the larger Veil Nebula, a cloud of heated and ionized gas and dust in the constellation Cygnus. It constitutes the visible portions of the Cygnus Loop (radio source W78, or Sharpless 103), a large but relatively faint supernova remnant. The source supernova exploded some 5,000 to 8,000 years ago, and the remnants have since expanded to cover an area roughly 3 degrees in diameter (about 6 times the diameter, or 36 times the area, of the full moon). The distance to the nebula is not precisely known, but Far Ultraviolet Spectroscopic Explorer (FUSE) data supports a distance of about 1,470 light-years. The bright foreground star is 52 Cygni.