

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

Administration

{ [HOME PAGE](#) }

BNL WEBSITE | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | BERA | BNL CLASSIFIED ADS | [INSIDE](#)

Accelerator Div.

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

ES&F Div.

Acc. R&D Div.

Operations

**NOTE FROM OUR CHAIR:** Thomas Roser

▶ Arrivals/Departures

 Safety Stats



Last month the C-AD Machine Advisory Committee had its annual meeting. The Machine Advisory Committee consists of members from major accelerator laboratories from around the world. This year the Committee was reviewing the recently developed designs for eRHIC that have significantly reduced technical risks as compared to the design described in last year's "eRHIC Design Study". Two presentations described a possible option that would use a storage ring for the electron beam that collides with the RHIC beams ("Ring-ring collider"). This option uses more conventional technologies and has therefore much reduced technical risk but has also reduced performance and high operating costs due to the large amount of synchrotron radiation that is generated. Two presentations described a version of the "linac-ring collider" option that has significantly reduced technical risk by starting with lower luminosity with the plan to later upgrade to high luminosity in similar way that RHIC dramatically increased its luminosity over the last fifteen years. The committee strongly supported the development of these lower risk eRHIC designs and gave very valuable advice on how to further reduce risk.

If you go to the north section of building 912 you will see a lot of activity. (You need to wear a hardhat if the overhead crane is being used.) The upgraded Accelerator Test Facility is taking shape with the linac structures and the klystrons being assembled and the shielding enclosure and the first magnets being put in place.

VIEW [CONFERENCE PROJECTIONS FOR 2015: DUE ASAP](#) -  
**\*CONFERENCES SHOULD BE PROJECTED THROUGH DECEMBER 2015\***

## DID YOU KNOW??

Check out who received an employee Service Award this year! Collider-Accelerator Dept. employees who received a [Service Award](#).

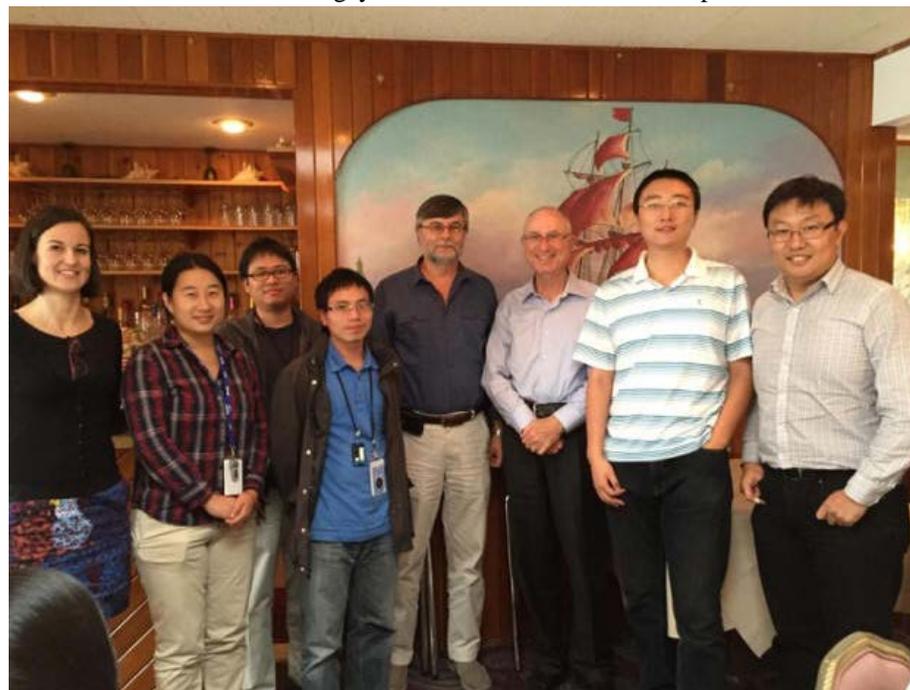
Check out who received an employee [Spotlight Award](#) this year!

## EVENTS/SEMINARS



Check out the [BNL Calendar](#) for upcoming Events & Seminars or the [Upcoming Conferences & Workshops](#) page for those

We wish Sergey the best as he starts a new chapter!



happening at BNL.

**October 13** - (Bldg. 400 - Room RDB1 | 2 pm) Cryogenics Safety Focus Group

**October 15** - (Bldg. 734 - Room 201 | 1:30 pm) Condensed-Matter Physics & Materials Science Seminar

**October 16** - (Bldg. 478 | 11:30 am) Healthfest 2015: 400-Year Swim

**October 16** - (Corner of Renaissance & Rutherford | 12 pm) Healthfest 2015: 5K Run

**October 19** - (Berkner Hall - Room B | 12 pm) Healthfest 2015: "Making Longevity Happen: Living Healthier and Longer" Talk

**October 21** - (Bldg. 555 - Hamilton Seminar Room | 2 pm) Safety Culture Speaker

**October 21** - (Berkner Hall Lobby | 12 pm) Healthfest 2015: Ergonomic Sit/Stand Workstation Demonstration

**October 23** - (Bldg. 459 | 12:30 pm) Stony Brook University's On-Site MBA Program: Information Session

**October 29** - (RHIC Circle 1005 | 12 pm) Healthfest 2015: Bike Ride (bring your own bicycle and helmet!)

*Do you have to give a talk?*

**Public Speaking Techniques: Verbal & Non-verbal**

*Presented by: Theodore Sampieri*

*12:00 – 1:00 Fridays*

*CAD Bldg. 911*

*Large Conference Room: 2<sup>nd</sup> Floor*

---

---

### IN OTHER NEWS...

---

---

*Neutrinos Change Their Flavor and Snag Another Nobel Prize*

Early this morning the world learned that the 2015 Nobel Prize in Physics has been awarded to Takaaki Kajita and Arthur B. McDonald for discovering that neutrinos can change from one type to another. [Read more.](#)

*World's largest atom smashers create world's smallest droplets*

How long can a droplet shrink and remain a liquid? [Read more.](#)



*Ion collider produces droplets of primordial goo*  
The Relativistic Heavy Ion Collider just spit out tiny droplets of a liquid researchers say resembles the seeds of the cosmos, primordial goo created by the Big Bang, which existed on briefly before cooling the matter that helped birth stars, galaxies and planets. [Read more.](#)

*Brookhaven National Laboratory projects are up for awards*  
Four projects developed at BNL have been nominated as finalists for awards to be presented this year by a national magazine. [Read more.](#)

*Scientists Create Primordial 'Perfect Liquid' in Lab*  
The BNL's Relativistic Heavy Ion Collider smashed together large nuclei at nearly the speed of light to recreate the fundamental particles in the primordial soup present during the earliest days of the universe. [Read more.](#)



*World's most powerful digital camera being built by US Department of Energy*  
The US Department of Energy is building a digital camera that puts your camera to shame. [Read more.](#)

*The last place left in America that's piecing together the origins of the universe*  
In the instant after the Big Bang, the only thing in the universe that existed was a hot plasma soup full of subatomic particles. But to study that plasma, you don't have to travel back in time billions of years to the Big Bang itself - just go to Long Island, NY. [Read more.](#)



Thank you to Anna and Caitlin for providing these photos from Sergey's Goodbye Luncheon!

Steve Bellavia captured some beautiful shots of the Super Moon Lunar Eclipse on September 27-28, 2015.





---

---

## WHAT'S GOING ON IN OUR NEIGHBORHOOD?

---

---

### *Interested in Cycling?*

<http://www.bicyclongisland.org/majoride.htm>

<http://www.cyclotour.com/events.htm>

### *Interested in Running or Walking?*

**Eastern Long Island Take Steps for Crohn's and Colitis** – Oct 25 (11a – 4p) at Stony Brook University, Student Activity Plaza

**Run for the Ridley 5K** – October 24 (10a) in Riverhead

**22<sup>nd</sup> Annual Walk for Beauty!** – Oct 25 (8:30a – 4p) at the Stony Brook Village Center

**Hercules on the Harbor 10K Run** – Oct 25 (8:30a) at the Stony Brook Village Center

...Check out the [LI Running Calendar](#) for more!

---

---

## DAY AT THE VINEYARDS...

---

---

*Duckwalk North - SOUTHOLD* - Music on Saturdays (4-6pm)

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

*Jamesport Vineyards - JAMESPORT* -Live Music from 1-4pm every Fri, Sat & Sun

*Martha Clara Vineyards - RIVERHEAD* - Live Music every weekend

**For the Kids:**

**25th Annual Scarecrow Competition** – Oct 3 - Oct 31 (3p – 5p) at the Stony Brook Village Center

**3rd Annual LEGO Building Contest & Exhibit** - Sep 19-Oct 18 (10a – 5p) at the Educational & Cultural Center

**Stony Brook Events:**

**Long Island's Got Talent 2015 Finale** – Oct 23 (6:30p – 8:30p) at the Educational & Cultural Center

**Port Jefferson Events:**

**Paint Port Pink Month** – October 1 – 31 at Mather Hospital

**PJ Historical Society Auction** – Oct 17

**8th Annual PJ Chamber of Commerce Taste of Port Jefferson** – Oct 24 at PJ Chamber

**6th Annual Harvest Fest** – Oct 25 in PJ Village

*Palmer Vineyards*

Music every Sat (12-4).

*Pindar Vineyards* - PECONIC - Live Music  
Every Saturday (1-5pm)

*Baiting Hollow Farm Vineyard* - BAITING  
HOLLOW - Music every Sat & Sun from (2-  
6)

—  
*Paumanok Vineyards* - RIVERHEAD - Fresh,  
Local Oysters (2-5pm) every Sat & Sun  
starting Memorial Day through September

*Check out Erik Forsyth's Travels:*



[HTTP://WWW.YACHTFIONA.COM](http://www.yachtfiona.com)

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

[Administration](#)

[{HOME PAGE}](#)

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

[Accelerator Div.](#)

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

[ES&F Div.](#)

[Acc. R&D Div.](#)

[Operations](#)

**NOTE FROM OUR ADMINISTRATION: S. LaMontagne**

[▶ Arrivals/Departures](#)

[Safety Stats](#)



Thank you for your cooperation in efforts to control cost. Total cost for RHIC operations in FY 2015 rose by only 2% and cost in the final quarter of FY 2015 was more than the \$3M lower than cost in the final quarter of FY 2014. As a result of your efforts, we are well poised for what has become our customary mode of operation, a year that begins with a Continuing Resolution and the threat of yet another flat funded year.

Those of you attentive to periodic changes in the Department's organizational chart may have noticed that on the most recent chart issued, Susan Pankowski replaced me as the Associate Department Chair for Administration in the Collider-Accelerator Department. Sue has served as my Deputy since 2009 and is more than ready to take the lead in C-AD. I am grateful to have Sue to rely on so that I may focus more fully on issues affecting the Directorate and the Laboratory as a whole.

Please, join me in heartfelt congratulations to Sue and look for her monthly financial update in the November issue of C-AD's Particle Post.

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

[Administration](#)

[{HOME PAGE}](#)

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

[Accelerator Div.](#)

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

[ES&F Div.](#)

[Acc. R&D Div.](#)

[Operations](#)

**NOTE FROM OUR ACCELERATOR DIVISION: Wolfram Fischer**

[▶ Arrivals/Departures](#)

[Safety Stats](#)



The NSRL Run15C will start on 12 October 2015. The RHIC Run-16 will have Au+Au at 100 GeV, followed - time and budget permitting - by d+Au at a number of energies. With this decision the installation of the Coherent electron Cooling Proof of Principle (CeC PoP) undulator is possible, and the experiment can proceed.

Meanwhile the ERL commissioning continues led by Wencan Xu. We have now moved the operation into the MCR taking full advantage of the expertise of the operations staff, and will be training more shift leaders. The ERL commissioning also serves as a test for the commissioning of the Low Energy RHIC electron Cooler, beginning in 2018. The Low Energy RHIC electron Cooling project is our largest upgrade, and will enable a 4-fold luminosity increase at the lowest collision energies, thereby enabling a 2-year physics program.

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

Administration

{[HOME PAGE](#)}

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

Accelerator Div.

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

ES&F Div.

Acc. R&D Div.

Operations

**NOTE FROM OUR EXPERIMENTAL SUPPORT & FACILITIES DIVISION: Phil Pile**

▶ Arrivals/Departures

 Safety Stats



We are now into fiscal year 2016 with the usual uncertain budget situation...at least the government is still functioning! Our run plans for next year remain the same with cooldown set to begin on 4 January. The PHENIX and STAR experiments will be ready for beam. Hopefully our US Congress will pass a good budget before the run starts and we can get in the planned 22 weeks of operation. First up will be full energy gold on gold for 10 weeks of physics.

The Fall NSRL run started on 12 October with commissioning of the new Booster D6 extraction magnet and a 1.5 GeV/n capable beam line (Galactic Cosmic Ray simulator)...the commissioning went well with the first biology experiment completed this morning as well. The experiments are scheduled to continue through 20 November. Unfortunately, we were not able to install the new scattering/stripper foil changer in the Booster due to a mating problem with one of the vacuum flanges. Charlie has worked out a fix for this and we should be able to install the new device before the Booster starts up for RHIC in December.

The sPHENIX project folks are working hard to be ready for the important cost and schedule review set for 9-10 November. The low current cold test of the BaBAR superconducting solenoid is awaiting delivery of modified cryo pipeline to mate up with the ERL cryo plant and for a break in the ERL commissioning efforts, otherwise we are chasing a few vacuum leaks in the magnet cryostat and patiently (or not, depending on who you ask!) waiting for a window of opportunity to get BaBAR connected to the ERL cryo system.

We plan to bring on the LINAC for BLIP by 15 December with commissioning of the new raster system followed by beam on our first BLIP targets by 4 January. We have a final test of the raster system in building 919, with a new set of transformers for the power supply, to do before we are ready for installation in the BLIP spur. The 2016 BLIP run is presently scheduled to run through July 2016 with the usual deliveries of strontium-82 to customers and with a resumption of germanium-68 deliveries, something that we have not done for the past two years. This coupled with R&D efforts will keep everyone busy.

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

Administration

{ [HOME PAGE](#) }

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

Accelerator Div.

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

ES&F Div.

Acc. R&D Div.

Link to: [ATE Newsletter](#)

Operations

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

▶ Arrivals/Departures



No comment at the time of this publication.

 Safety Stats

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

[Administration](#)

{ [HOME PAGE](#) }

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

[Accelerator Div.](#)

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

[ES&F Div.](#)

[Acc. R&D Div.](#)

**ARRIVALS:** Welcome!

[Operations](#)

Terrence Buck

Felix Carlier

[▶ Arrivals/Departures](#)

James Figueroa

 Safety Stats

**DEPARTURES:** Farewell, you will surely be missed..

Sergey Belomestnykh

Roger Katz

Harold Kirk

Pam Manning

Kathy Tuohy

Glenn Wagner

OCT '15  
ISSUE

# PARTICLE POST

COLLIDER-ACCELERATOR DEPARTMENT

Contact: [A. Lamberti](#)

A WORD FROM  
THE:

PREVIOUS ISSUES

**August 2015**

Administration

{ [HOME PAGE](#) }

[BNL WEBSITE](#) | [C-AD WEBSITE](#) | [ES&F WEBSITE](#) | [BERA](#) | [BNL CLASSIFIED ADS](#) | [INSIDE](#)

Accelerator Div.

Quote of the Month: "If the facts don't fit the theory, change the facts." - Albert Einstein

ES&F Div.

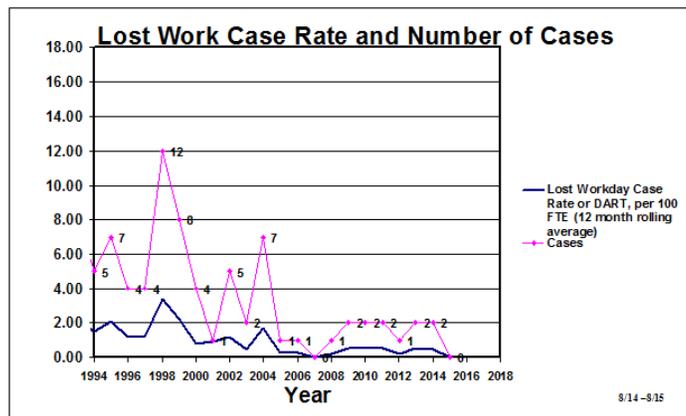
Acc. R&D Div.

Operations

**SAFETY STATS:** Peter Cernigliaro

▶ Arrivals/Departures

 Safety Stats



**C-AD Occupational Injury Statistics**

	For Year 2014	For Year* 2015
First Aid Cases	8	7
Recordable Cases	3	1
Lost Work Cases	1	0

\* Fiscal Year 2015