

# Particle Post February 2009

*"Gravitation is not responsible for people falling in love." ~ Albert Einstein*

Previous issues

## A Note From Our Chairman



For the first time in recent memory the DOE asked C-AD to present them with a budget scenario that is not of the doom-and-gloom variety. This was in response to the stimulus bills that are wending their way through Congress. The reality of the situation is that we have neither a stimulus budget nor an FY2009 budget. We are still operating on a continuing resolution, the FY2008 budget distributed on a monthly basis.

Did Collider Charlie see his shadow? Since it was a bright clear morning on February 2 six more weeks of winter is in the offing, if you believe this nonsense.

RHIC is now turning on. Please remember that many areas are designated as ODH 1. They are no longer ODH 0. This requires you to have the appropriate training and equipment to enter the designated areas. **READ THE SIGNS.**

I would like to thank everyone for keeping current with his or her training. Everyone has either completed their training or has been scheduled to take the next instruction class.

## Administration



RHIC operating expense continued to be light throughout January. Although overtime was significantly higher than in December, holiday and vacation leave moderated labor expense. Total year-to-date cost for operations is \$32.7M. A balance of \$22.2M remains for the period which ends on March 6th, , the expiration of the Continuing Resolution. Hope for a budget that supports machine operations through June has been encouraged by the Program Office.

Although the annual budget submission is due in the Budget Office on February 17, we have yet to receive a final budget for FY 2009 and the FY 2010 Presidential is unlikely to be delivered in time to impact the process. Using interim guidance for FY 2010, provided by the Nuclear Physics Program Office, we are proceeding to build financial plans through FY 2015 based on various FY 2011 starting points. The Physics Department, too, must formulate financial plans, as well as, proposed experimental goals based on the operating schedules proposed by C-AD for the various scenarios.

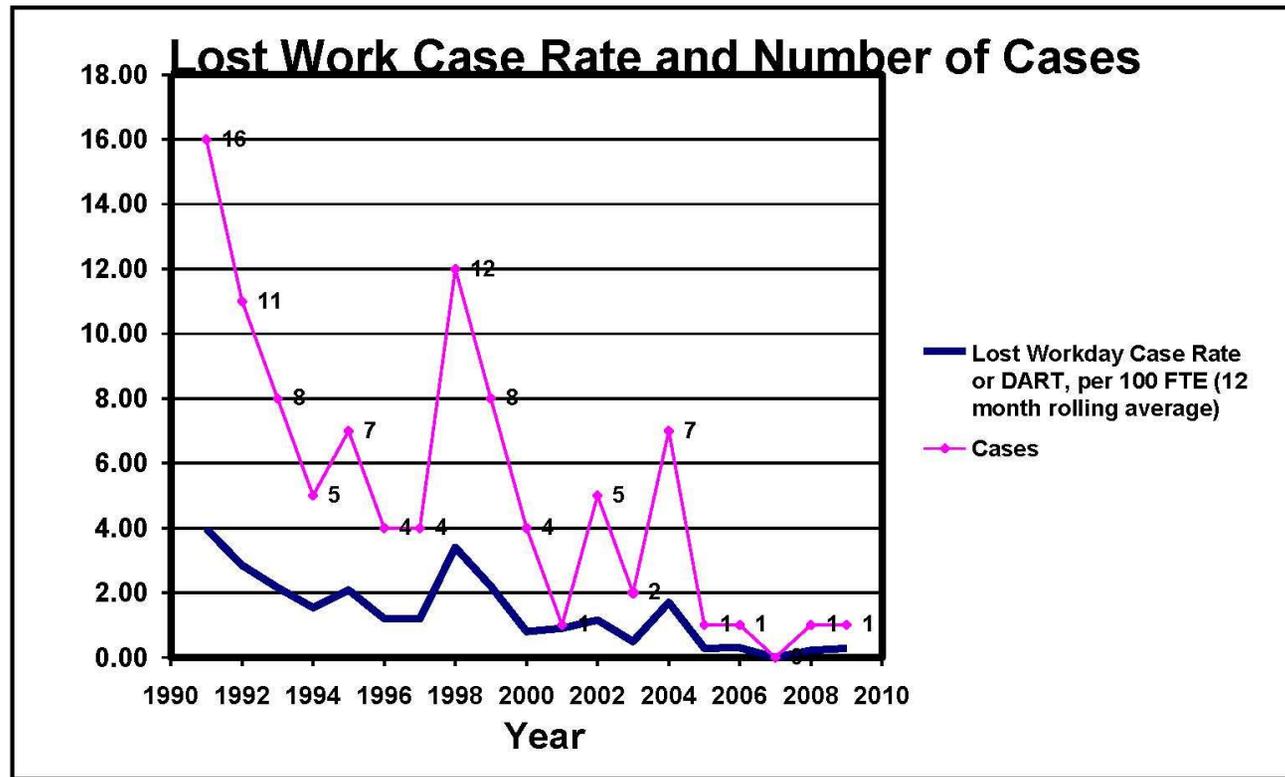
## Operations Update



As the Particle post goes to 'print' we are starting a new RHIC run. The cool-down to 4K started February 2nd and went in fact very well very, both rings are now cold and stable. (see <http://www.cadops.bnl.gov/Display/cryo.html> for ring temperatures). Power supply work including DX and snake magnets training is in progress. Always a critical job, power supply tests are this year more challenging as ring access is more restrictive when the rings are cold and the current in the main magnets is above the injection energy level. The accident at the LHC had us at RHIC revisiting previous assessments on tunnel safety, and while calculations and simulations are finalized the RHIC tunnel and service buildings hosting valve boxes have been declared as a precaution ODH-1, up from ODH-0 level. This has obvious consequences for the organization of access, equipment testing and maintenance, and potential implications for overall machine availability.

Work with beam in blue has already started, highlights being the successful commissioning of the 9 MHz cavity system and instrumentation set-up. Detailed Start-up plans can be found on the Run-9 web site <http://www.cadops.bnl.gov/AP/Spin2009/> If all goes well with the set-up, we should be running physics with 250 GeV polarized protons by the end of February. In fact, machine development with polarized protons has already started in the injectors. AGS started up on January 19, following the commissioning of the new LEBT and Booster start-up. Using the Run-6 optics and configuration a polarization of 60+% has been measured for bunch intensities of  $\sim 10^{11}$ , a very good start. Possible improvements may come from the Oppis source, a smaller emittance from the linac, the possible commissioning of an optics with the vertical tune closer to the integer, and the installation this or next year of pulsed quadrupoles to reduce the effect of horizontal depolarizing resonances. We all look forward in operations to another, hopefully long, RHIC run.

## Safety Stats



### C-AD Occupational Injury Statistics

For Year\* 2008      For Year\* 2009

First Aid Cases	6	0
Recordable Cases	3	0
Lost Work Cases	1	0

\* Calendar Year

**REMINDER: TLD exchange is done the *FIRST FRIDAY* of the Month.**

**EXCHANGE DATE: FRIDAY, FEBRUARY 6, 2009**

***Pete Cirnigliario***



## **Arrivals**

**Frederick Bornemann, IV, joined the department on February 2, he is working with Joe Sanfilippo in the Collider Accelerator Support Group.**

**Dennis Donaldson joined the department on February 9, he is working with P.K. Feng in the Power Distribution Group.**

**Kevin Mernick joined the department on January 12, he is working with Tom Russo in the Beam Components Group.**

**Christine Meyer joined the department on February 9, she is working with Tony Arno in the Design & Documentation Group and with Marion Heimerle in the Chairman's Office.**

**WELCOME!**

## **Departures**

**Dolores Collins, C-A Chairman's Office retired from BNL on January 30, (Dolores will be joining the secretarial pool and plans to work in the department 1-2 days/week).**

**GOOD LUCK!**

## **Leave of Absence**

**Louis Mazarakis, Preinjector Systems (Tandem Operations) Group has started his Leave of Absence effective January 22.**



**RHIC Newsletter.** Please click on link to the left to view the latest web publication of RHIC News.



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



## **C-AD Service Awards** January

<b>40 years</b>	<b>Leroy James</b>
<b>30 years</b>	<b>Daniel Lehn</b>

<b>20 years</b>	<b>David Gassner</b> <b>John Cupolo</b> <b>Douglas Gordon</b>
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## Congratulations!



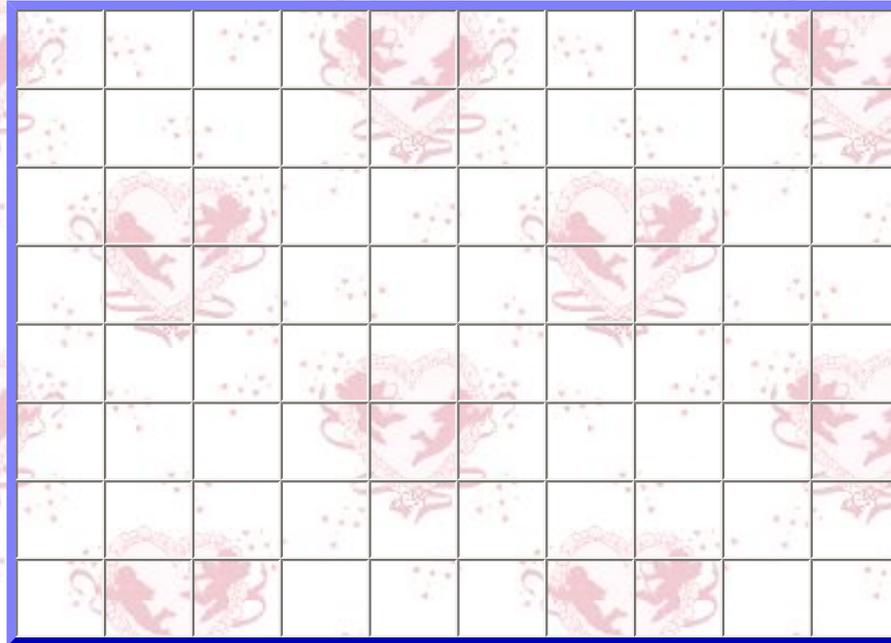
### Get To Know Your Co-Worker



**Jörg, Kewisch**, Superconducting Accelerator and Electron Cooling Group, has been at BNL for almost 15 years. He works on the Polarized Gun Experiment: test if a Gallium-Arsenide cathode (used for polarized electrons) can be used in a superconducting gun. The experiment is under construction with LDRD funding and first results are expected March. Jörg also does computer modeling of electron sources and rf cavities. , Jörg worked on the RHIC magnet control system and commissioning of RHIC before joining C-AD. He has worked at Jefferson Lab, working on the control system and DESY working on electron polarization for PETRA, DORIS and HERA. Jörg and his wife Patti are enjoying the night life as you can see in the picture. Son, Philip expects his masters in physics at the University of Hamburg, Germany in 2 years. Philip also works at Sun Micro-Systems as an open source developer. In Jörg's down time he enjoys kayaking, bass guitar and saxophone (for his ears only), and maintaining the house and yard.



## Fun Time



**Score:**

**Time:**

**Buzzy!!**

The objective of this game is to click on as many Green Boxes as possible. The time limit is 60 seconds. Let's check your reflexes, how many you can hit. Enjoy and Best of luck.

Free JavaScripts provided  
by [The JavaScript Source](#)



**Did You Know**

Here are some fun web sites:

[www.freerice.com](http://www.freerice.com) - sponsors donate 20 grains of rice for each correct answer you give. If you get the question right, the next question is harder; if you get it wrong, things get easier!

[www.musicoverly.com](http://www.musicoverly.com) - free music to listen as you work on your computer. Pick your mood or tempo, and the type of music you like. Select which decade you want the music from. If you register, it will save your preferences.

[www.zipskinny.com](http://www.zipskinny.com) - enter your zipcode and see lots of data about your community from the US Census.

## Smart Car On Site

Whoa! What is that?



David Pate and his smart car.

+ ENLARGE

Heads turn when the little black car zips by. If you haven't seen one yet, you'll be startled the first time you spot a "smart" car.

David Pate, Collider Accelerator Department, owns that tiny box on wheels, measuring just 8.8 feet long, 5.1 feet tall, and 5.1 feet wide.

"I purchased the car back in August after waiting six months for delivery," said Pate. "I was looking for something small, economical and easy to park."

His first experience in a smart car was at CERN when he was working on the ATLAS detector. He found that it was fun to drive and had some great features for such a little car, a common sight on Europe's narrow streets.

It also has an amazingly roomy interior. Pate easily folds his 6-foot, 2-inch frame inside.

He's so comfortable in the car that he's even taken long road trips, most recently with his wife Beth to the northwestern corner of Connecticut, across to eastern Massachusetts and back through Rhode Island via Interstate 95. That means highway driving, where he has no trouble keeping up with traffic. He reports that the car is "very peppy" and that he has no problem getting on and off the highway.

The smart car has a top speed of 90 mph, "electronically limited" says the [official website](#), which lists its fuel economy as "33 city/41 highway mpg according to 2008 EPA standards."

That's the only negative thing Pate could think of about his car. "For its size, I expected 50-60 mpg," he said. "But it weighs 1,800 pounds."



He's impressed by the thought that went into the car, made by Mercedes-Benz. For example, when he drives in the rain and has to back up, the rear windshield wiper comes on automatically.

He likes the way the car handles. "Remember when the Lab had an early dismissal on December 19th? I'm the [mayor of Bellport](#), and it's my job to check on road crews. I had no trouble. The car has a built-in stability system and traction system. If you start sliding, it compensates."

He's especially pleased about the car's eco-friendliness. The steel frame is coated with powder paint, kinder to the environment than conventional painting processes. And the colorful, easily exchangeable body panels are made of recycled plastic.

Pate's thoughtful attitude carries over into his work. He's an engineer in C-AD, where he coordinates the energy-recovery linac project. Ultimately, this linear accelerator will be used as an electron-cooling machine for RHIC, saving the Lab energy in operations.

"My car has turned into quite the statement in Bellport Village, considering the economic climate," said Pate.

2009-968 | [Media & Communications Office](#)



**Paul Sparrow, Facilities, Administrative Group, son David was married on December 8 to Maria Leah at Rock Hill Country Club in Manorville. Maria is from the Philippines. The newlywed couple will reside in Riverhead. David works for Riverhead Building Supply where is the Facility Manager. Maria works for a company in the city as the CFO in Administration. Here are a few photos"**





**Congratulations to the Luo family and their new addition Andy Luo, 8 lbs. 12 oz. This is Yun's second child. The correct pronunciation of "Andy" is very similar to Chinese word "An" which means "Safe".**



*The Food Pantry needs our help.....*

*If everyone can bring in at least one non-perishable food item, this would help the local food pantries in our area. There are so many families who are in need of food and depend on their local food pantry*

*to have at least one meal a day. With the food supply so low, the volunteer's who help out at our local food pantries can't help those in need. So please.....bring whatever you can to replenish the food supply for those in need.*

*Your donation of any non-perishable food item can be left in the box marked "Food Drive" located in the 911A Lobby.*

*Thank you.*

**INFORMAL ENGLISH CLASS for all levels taught by Jennifer Lynch,**

***English for Speakers of Other Languages Program Coordinator.***

**Every Friday, 12:00 -1:30 pm**

**Building 911, Second Floor, Rm. A-201 (Small Conference Room)**

**Please contact Jennifer at [jlynch@bnl.gov](mailto:jlynch@bnl.gov) or ext. 4894 for more information.**

**[www.bnl.gov/esol](http://www.bnl.gov/esol)**



**Please join us in celebrating**

# Please join us in celebrating Bill Hempfling's retirement

Date: Friday, February 27<sup>th</sup>, 2009

Time: 5:30 pm – 8:00 pm

Place: Brookhaven Center, South Room

Cost: \$35 per person

Includes buffet dinner, dessert, beer, wine, soda & gift

Cash Bar



Contact:

Leesa Allen x2700

Lorraine Barry x7814



Bonnie Miller x2875  
Darlene Peragine x5191

Please RSVP by February 13th

**BERA** <http://www.bnl.gov/bera/>

**FLOWERS & Gifts!** We have lots of discounts to help you for Valentine's Day or any occasion!  
<http://www.bnl.gov/bera/recreation/discounts.asp>

<http://nycgo.com/restaurantweek> NYC Restaurant Week extended through 2/27/09

[http://www.dishingondining.com/event\\_lirw\\_extended.php](http://www.dishingondining.com/event_lirw_extended.php) LI Restaurant Week extended by some.

**EXERCISE & ENJOY THE POOL!** <http://www.bnl.gov/bera/recreation/fitness.asp>

**TRY a class for FREE!** Tours of the gym, pool & weight room are always available.

**Sam's Club, BJ's & Costco will all be at Berkner for Membership Drives in February & March:** <http://www.bnl.gov/bera/recreation/calendar.asp>

**COOL site!** As seen on Channel 12 & 2: <http://www.osc.state.ny.us/ouf/index.htm>

**Are you or your family members on the Money List?? Pass it on!!**

**Saturday, March 7, 2009**

**The coach bus will leave Brookhaven Center at 6am and leave PA at 4pm. Price is \$35 per person (adult or child) and includes transportation and entry to the show. For more details of what will be available, go to: <http://www.theflowershow.com/home/index.html> All tickets are non-refundable and will be limited to 4 tickets per person for the first 2 weeks of sale (Jan 16-30).**

**Saturday, April 4, 2009**

**Casino in Atlantic City to be announced. \$25 per person (must be at least 21 years of age). Luxury coach bus will leave Brookhaven Center at 9am and leave Atlantic City at 8pm. All tickets are non-refundable and will be limited to 4 tickets per person for the first 2 weeks of sale (Jan 16-30).**

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**Saturday, April 18, 2009**

**NY International Auto Show at Javits Center. The coach bus will leave Brookhaven Center at 9am and leave NYC at 4pm. Cost is \$20 per person. All tickets are non-refundable and will be limited to 4 tickets per person for the first 2 weeks of sale (Jan 16-30).**

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**Newport Rhode Island Tour**

Saturday & Sunday, April 25 & 26, 2009

**Two full days includes ferry from Port Jefferson, Harbor Cruise, Hampton Inn hotel, hot breakfast, tour of 2 Mansions, free time and ferry home. \$100 deposit is due upon sign up, with balance paid in full by March 24th. Suggested reading material prior to taking the tour is "Theopholis North" by Thorton Wilder. [For itinerary click here](#). All tickets are non-refundable and will be limited to 4 tickets per person for the first 2 weeks of sale (Jan 16-30).**

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### **Royal Caribbean Cruise - Explorer of the Seas**

**May 23-28, 2009**

**BERA is sponsoring a 5 Night Bermuda Cruise on the Royal Caribbean Cruise Mega Ship! We depart from Cape Liberty Cruise Port, New Jersey on Saturday May 23 and return on Thursday, May 28, 2009. [More...](#)**



**ALUMNI NEWS: AGS/RHIC/C-AD RETIRED CROWD - We'd enjoy hearing from you and what you have been up to. Please send your notes to [pmanning@bnl.gov](mailto:pmanning@bnl.gov)**

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



## February 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
	Groundhog Day	"Fast and Fabulous Meals", Amy Shapiro, 12noon, Berkner Rm B			OMC Presents Lunchtime Talk in Berkner "What it Means to Go Red", Jean Marie Cacciabaudo, MD	

8	9	10 <b>Physics Colloquium "Categorification", Mikhail Khovanov, Columbia U., 3:30pm, Bldg. 510 Large Seminar</b>	11 <b>Particle Physics Seminar "Two Complementary Strategies for New Physics Searches at Lepton Colliders", Benjamin Hooberman, U. CA-Berkeley, 11am, Bldg. 510 Small Seminar</b>	12 <b>Lincoln's Birthday</b> <b>Blood Drive, 9:30-3pm, Center</b> <b>Particle Physics Seminar "Study of Multi-Muon Events at CDF", Mark Kruse, Duke U., 3pm, Bldg. 510 Small Seminar</b>	13 <b>RHIC &amp; AGS Open Forum "Nuclear and Particle Physics at BNL: The View from the PO", T. Ludlam, noon, Berkner Rm B</b> <b>Particle Physics Seminar "CP Violation in Hadronic Penguins at BABAR", 9:30am, Bldg. 510 Small Seminar</b>	14 <b>Valentine's Day</b>
15	16  <b>HOLIDAY</b>	17 <b>"Exercise Anywhere, Any Time", Amy Shapiro, 12noon, Berkner Rm B</b> <b>Physics Colloquium "The CMS Detector and LHC Physics: the Good, the Bad, and the Ugly", Nick Hadley, U. of MD, 3:30pm, Bldg. 510 Large Seminar</b>	18 <b>Brookhaven Lecture "Beyond Protein Crystallography: Seeking Alternatives to Study Biological Membranes and Membrane Proteins", Lin Yang, NSLS, 4:00 pm, Berkner Auditorium</b>	19 <b>Particle Physics Seminar "Early Results from the Fermi Large Area Telescope", Eduardo do Couto e Silva, KIPAC/SLAC, 3:30pm, Bldg. 510 Small Seminar</b>	20 <b>Employee Lunchtime Tour of C-AD Main Control Room, Noon, Berkner Upper Lobby</b>	21 <b>Rock Bands The Electrix and Reckoning to Perform, 7pm, Berkner</b>

<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>
<b>Washington's Birthday</b>		<b>Physics Colloquium "TBD", Jean-Yves Ollitrault, Saclay, 3:30pm, Bldg. 510 Large Seminar</b>		<b>Particle Physics Seminar "New 'Low Energy' High-Energy Experiments", William Marciano, PO, 3pm, Bldg. 510 Small Seminar</b>		



## March 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
		<b>Physics Colloquium "Ab Initio Calculations in Lattice QCD", Zoltan Fodor, Wuppertal U., 3:30pm, Bldg. 510 Large Seminar</b>		<b>Particle Physics Seminar "Higgs Coupling Measurements at the LHC - LHC at BNL Seminar Series", Ketevi Assamagan, BNL, 3pm, Bldg. 510 Small Seminar</b>	<b>The Prodigals, 8pm, Brookhaven Center</b>	
8	9	10	11	12	13	14
<b>Daylight Savings Time Begins</b>		<b>Physics Colloquium "Superstrings and RHIC", Steven Gubser, Princeton U., 3:30pm, Bldg. 510 Large Seminar</b>	<b>Brookhaven Lecture "447th Lecture", Masahiro Okamura, C-AD, 4pm, Berkner Auditorium</b>	<b>Particle Physics Seminar "The 5-Year Wilkinson Microwave Anisotropy Probe (WMAP) Observations: Cosmological Interpretation", Elichiro Komatsu, U. of TX, 3pm,</b>		

				<b>Bldg. 510 Small Seminar</b>		
<b>15</b>	<b>16</b>	<b>17</b> <b>Saint Patrick's</b>	<b>18</b>	<b>19</b> Particle Physics Seminar "Mass Bounds on a Very Light Neutralino (Joint Experimental/Theory Seminar, 3pm, Bldg. 510 Small Seminar	<b>20</b> Spring Begins	<b>21</b>
<b>22</b>	<b>23</b>	<b>24</b> Physics Colloquium "Dark Matter", Daniel Boyanovsky, U. of Pittsburgh, 3:30pm, Bldg. 510 Large Seminar	<b>25</b>	<b>26</b> Physics Colloquium "Parity Violation in Heavy Ion Collisions (TBD)", 10am, Bldg. 510 Large Seminar	<b>27</b>	<b>28</b>
<b>29</b>	<b>30</b>	<b>31</b>				



**We Remember USS New York - A ship forged from the steel of the World Trade Center.  
Sept. 11, 2001**

**Editor: Pamela Manning x4072**