

Particle Post January 2010

*"We make a living
by what we get,
we make a life
by what we
give."
~Winston Churchill*

Previous issues

Note from the Chair



In this first note as C-AD Chair I would like to express my deep appreciation for Derek's leadership of C-AD over the last 27 years. His long string of successes lasted until the last moments of his tenure, when four minutes before midnight on December 31, "Physics running" was declared for the 10th RHIC run. It was a bit of a nail biter since the RHIC start-up was delayed a little by extensive and eventually successful commissioning of a new, fully digital low level rf control system as well as a historic blizzard that interrupted RHIC operation for a couple of days. Kudos go to the operations shift personnel that made heroic efforts to staff their positions throughout the blizzard and with three foot snow drifts around most buildings.

I wish everybody a very happy and healthy New Year.

Wishing Everyone Well from Derek



I would like to personally thank everyone for your contributions and to wish you



all the best and offer my support and effort.

I have had the great privilege to lead the Collider – Accelerator Department, and its previous incarnations, over the past 27+ years. I am announcing that it is time to pass the mantle on and I will be resigning from this post effective December 31, 2009.

I have been honored to lead a great accelerator team from the glory days of the AGS fixed target program to today's tremendously successful RHIC program. We have been able to do this all over a time span where the AGS generation team has evolved into the world class RHIC generation team. C-AD is now in the position to successfully compete with any laboratory in the world. We are on the verge of completing EBIS and RHICII, and have taken the lead in making the case for eRHIC. The NASA Space Radiation Laboratory is the leading world-class facility that supports the US humans-in-space radiobiology effects mission.

I will remain at C-AD as the NSRL Principal Investigator, pursue my interests in the education of future accelerator physicists at the newly established SBU / BNL Center for Accelerator Science Education (CASE), as Chair of the Board of Governors of the US Particle Accelerator School (USPAS), work to establish, with several C-AD staff, a new generation of medical therapy accelerators with SBU and industry and support the creation of MeRHIC / eRHIC.

I would like to thank everyone for their support to make C-AD a world leader in accelerator physics and operations and a BNL leader in safety performance. It has taken a lot of teamwork to get to this point. Please continue your efforts as we move into a new era of leadership.

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for the U.S. Department of Energy

Memo

Date: December 15, 2009

To: All Employees
From: Sam Aronson 
Subject: Collider-Accelerator Department

Effective January 1, 2010, the leadership of the Collider-Accelerator Department (C-AD) will pass from Derek Lowenstein to Thomas Roser.

Derek Lowenstein, Senior Physicist and C-AD Chair, will remain in C-AD. Thomas Roser, Senior Physicist, C-AD Associate Chair for Accelerators and Accelerator Division Head will replace Derek as C-AD Chair.

Derek, a BNL employee since 1973, has led C-AD and its predecessors since 1982, a remarkably productive period for the Department and the Laboratory in high energy and nuclear physics and in accelerator development. Those 27 years under Derek's expert leadership saw a transition from a world-leading research program at the Alternating Gradient Synchrotron (AGS) to a world-leading program at the Relativistic Heavy Ion Collider (RHIC).

While leaving the Chair's Office, Derek will take on or continue in key roles in the Department, the Lab and in accelerator-based science, technology and education. He will remain the Principal Investigator of the NASA Space Radiation Laboratory, as well as the Chair of the Board of Governors of the US Particle Accelerator School (USPAS). He will also continue to pursue a long-standing active interest in the development of specialized accelerators for medical diagnosis and treatment. In addition to his work with USPAS, Derek will pursue his interest in educating new generations of accelerator scientists by taking on a leadership role in the Center for Accelerator Science Education – a recently established joint center with Stony Brook.

Thomas Roser will assume the role of C-AD Chair on January 1, the next step in a long and distinguished career at C-AD. Thomas joined BNL in 1991 as an experimental nuclear

physicist. He has since made his mark as an outstanding accelerator physicist and leader in

the Department and in the worldwide accelerator community. He has been responsible for all aspects of the commissioning, operation and development of the RHIC complex, which is now embarking on its tenth running period. During the past decade RHIC, the world's highest energy nuclear physics facility and the world's only high energy polarized proton collider, has achieved and surpassed its design performance expectations. Thomas intellectually spearheaded the development of RHIC's polarized proton collider capability. He has also built and led an outstanding group of accelerator scientists.

As C-AD makes this transition at the turn of the year, it looks back on a great tradition and ahead to exciting new challenges. The coming year will see the 50th anniversary of first beam at the AGS and the 10th anniversary of first collisions at RHIC. The future prospects for C-AD include a new ion source (EBIS), higher physics output from the beams at RHIC (RHIC-II) and the possibility of major new capabilities and science at RHIC (eRHIC). These future avenues are fueled by C-AD's close collaboration with the scientific users and by its world-class program in accelerator R&D, largely funded by the Office of Nuclear Physics at DOE. Derek Lowenstein and Thomas Roser both have critical roles in the past, present and future of C-AD and accelerator science & technology. Please join me in giving them the thanks and congratulations they deserve, and in providing the support of the Laboratory in taking C-AD to the next level.

From: "Kovar, Dennis" <Dennis.Kovar@science.doe.gov>

Derek,

Thank you for your efforts and leadership as Director of the Collider-Accelerator Division. Your service to DOE and the Nation is greatly appreciated. I have enjoyed working with you over the years- you were a straight shooter, you delivered - many times exceeding all expectations- and were there when I or the Office needed help. You have accomplished much and have much to be proud of. I wish you and your family the best of everything in the future.

Dennis

For release: January 5, 2010



Thomas Roser Named Chair of Brookhaven Lab's Collider-Accelerator Department

UPTON, NY - Thomas Roser, a senior physicist who joined the U.S. Department of Energy's Brookhaven National Laboratory in 1991, has been named chair of the Laboratory's Collider-Accelerator Department (C-AD), effective January 1, 2010. He replaces Derek Lowenstein, who served as C-AD chair for 27 years, and will continue to play key roles in the department.

With about 400 employees and an annual budget of \$140 million, C-AD develops, improves and operates a suite of accelerators used for experiments by an international community of about 1,500 scientists. The department also designs and constructs new accelerators in support of the Laboratory's and national missions.

"I am grateful for Derek Lowenstein's leadership of C-AD, which has helped to make the department one of the premier institutions for accelerator science and technology in the world," Roser said. "I hope to build on his success as I look forward to exciting new challenges in the new decade."

Future challenges include an upgrade of the Relativistic Heavy Ion Collider (RHIC), Brookhaven's world-class accelerator, where physicists have discovered a type of matter - known as quark-gluon plasma - that is believed to have existed just microseconds after the Big Bang. The upgraded accelerator will provide many more heavy ion collisions and allow physicists to study the quark-gluon plasma in greater detail. A future electron accelerator, added to the RHIC facility and called eRHIC, might make it possible to discover yet another new state of nuclear matter. Currently under construction and due to start operations in 2011 is an Energy Recovery Linac, which will be used for accelerator research and development of the high-intensity electron beams required for eRHIC.

Also part of the C-AD complex is the Booster accelerator, which supplies the ion beams for the NASA Space Radiation Laboratory (NSRL) at Brookhaven, where scientists study the effects of simulated space radiation on biological and physical systems. The goal of this research is the development of methods and materials to reduce the risk of radiation damage to astronauts on prolonged space missions. Roser indicated that the facility might be expanded to allow research on the use of ions for cancer treatment, a therapy that is successfully being employed in Japan and Europe.

The LINAC, a linear accelerator that supplies beams of polarized protons for RHIC, also provides high intensity proton beams for the production of medical isotopes at the Brookhaven Linac

Isotope Producer facility. The isotopes are used for medical imaging, cancer treatment, and research at hospitals and medical centers around the world. Roser said this facility might also be expanded or replaced within the next several years.

The Tandem Van de Graaff electrostatic accelerators provide ions for the RHIC accelerator injector chain and for the NSRL facility. In 2011, this function will be taken over by the more efficient Electron Beam Ion Source, a pre-injector system designed by C-AD. The Tandem accelerators also supply ions for radiation testing of electronic components and manufacturing of industrial materials.

Roser earned a Ph.D. in physics from the Swiss Federal Institute of Technology in Zurich in 1984. He became a research fellow at the University of Michigan in the same year and was appointed assistant professor of physics at the university in 1990. He joined Brookhaven Lab as an associate physicist in 1991, and, in 1994, he became the head of the Accelerator Division for Brookhaven's Alternating Gradient Synchrotron Department, which later became C-AD. In 1999, he was promoted to senior physicist with tenure, and he became the accelerator division head at C-AD, in charge of commissioning RHIC. In addition, he was appointed associate chair for accelerators in 2002.

Roser is a fellow of the American Association for the Advancement of Science, the American Physical Society, and the IEEE. He has been honored with Brookhaven Lab's Sambamurti Memorial Lectureship Award in 1994, the BNL Science and Technology Award in 2000, and the Nuclear & Plasma Sciences Society/IEEE Particle Accelerator Science and Technology Award in 2005. He has served on numerous advisory committees, and he is currently chair of both the CERN Machine Advisory Committee and the Organizing Committee of the Particle Accelerator Conferences.

Number: 10-1059 | [BNL Media & Communications Office](#)

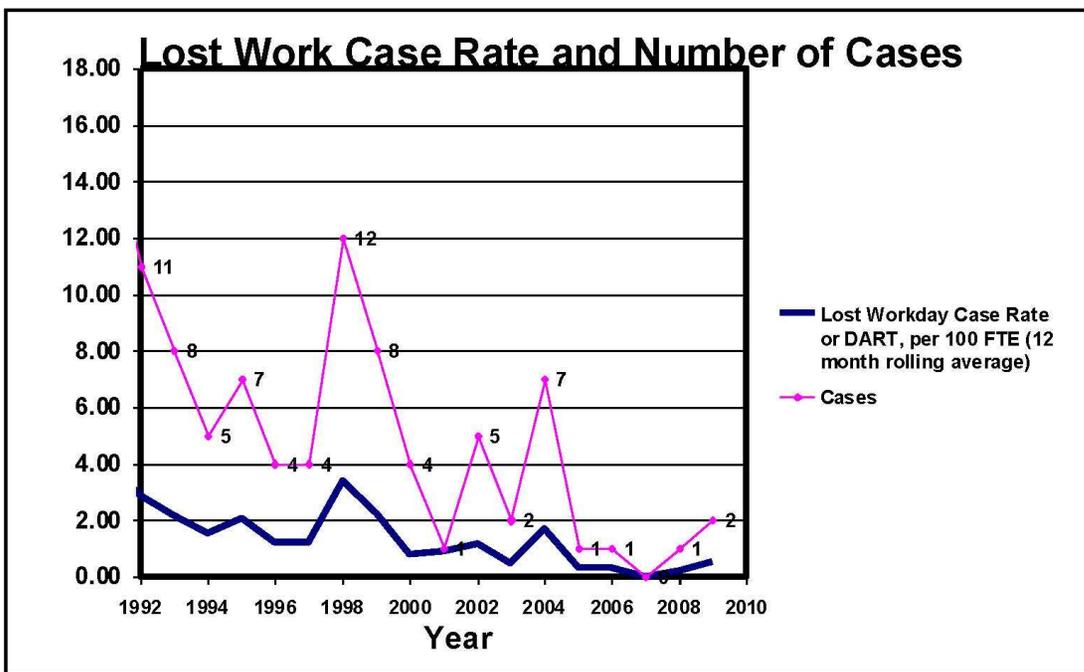
Administration



DOE's Nuclear Physics Program Office has provided FY 2010 funding to support RHIC operations and on-going Accelerator R&D as well as various accelerator upgrades. The program guidance received in December provided the Collider-Accelerator Department with FY 2010 funding of \$129M. Operating funds of \$123.7M are sufficient to support 25 to 27 weeks of operations. AIP funding of \$3.8M reflects the restoration of annual construction funding that had been redirected to EBIS over a four year period beginning in FY 2006. Capital equipment funding of \$1.5M also reflects a significant increase over prior years.

Guidance provided for the annual budget submission exercise is also more optimistic than that provided in recent years. Thus, we are encouraged to continue to move forward with plans to augment engineering and technical staff and continue our substantial investment in accelerator R&D efforts.

Safety Stats



C-AD Occupational Injury Statistics

For Year* 2008 For Year* 2009

First Aid Cases	6	5
Recordable Cases	3	2
Lost Work Cases	1	2

* Calendar Year

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

EXCHANGE DATE: FRIDAY, JANUARY 8, 2010

Pete Cirnigliario

happy new year

Arrival

Prerana Kankiya joined the department on December 7. She is working with Larry Hoff in the Controls Systems Group.

WELCOME!

Transfer

Tom Russo, Instrumentation Systems Group transferred to the Physics Department on January 4.

GOOD LUCK!

happy new year

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

happy new year

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



happy new year

C-AD Service Awards December

25 years	Larry Hoff
	Mike Jacobellis
20 years	Jie Wei

Congratulations!

happy new year

Get To Know Your Co-Worker



John Nicolellis, Communications & Electronic Support, has been at the lab for over 30 years. He currently works on calibrations, repair of instruments, network printer support and PPE calibration and maintenance. Prior to this John has worked at the AGS Tech Shop, S&EP, Instrumentation Division, ES&H, and the Radio Shop. He checked radiation device calibrations, radio services and seminar support and instrumentation. John enjoys kayaking, canoeing, fishing, hiking and camping. He has 3 children, Debbie is in Boston working at Boston University; Kevin is in Chicago, married with 2 children, and works on Computer Systems; Amy is in San Diego and she is in pharmaceuticals development. In John's spare time he is an active ARC instructor trainer - Aids, CPR, first aid, small craft safety courses [20+ years]. John is also an active Boy Scout. He now mostly trains leaders in the above [20+ years].

happy new year

Fun Time

Be sure to turn your music up and enjoy....very beautiful.

[New Year's Wishes](http://lerrah.com/newyearwishes.htm)

<http://lerrah.com/newyearwishes.htm>

happy new year

Did You Know

Steve Vigdor's presentation from the December 23, 2009 NPP All Hands Meeting has been posted to the Nuclear and Particle Physics website - <http://www.bnl.gov/npp/>

This message is sent on behalf of Derek Lowenstein:

From: "Selvey, Robert L" <selvey@bnl.gov>

Subject: Call for FY2010 S2 Proposals

The Safety Solution (S2) Programs is open for FY2010 submissions until 01/30/2010.

Please spread the word to those in your organizations. The funding total is \$20,000 this year.

The web page that describes the criteria and submission process is: http://www.bnl.gov/esh/shsd/OHSAS/S2_homepage.asp

Please encourage electronic submission in the Microsoft Word® format, as that make compiling the entries for the selection team the easiest.

Submissions should be e-mailed to [Robert Selvey](mailto:Robert.Selvey@bnl.gov) by 01/30/10.



Hi Everyone,

I would like to first thank my co-captains Christine Meyer and Arthur Fernando for all their help in making the fundraising efforts less daunting for me. I think we made a great team - Thank you!

I would also like to thank all the bakers that participated in the Bake Sale - we appreciate your time and effort!

Here are the C-AD fundraising totals donated to the United Way:

Pizza and Move: \$400.00

Bake Sale: \$325.00

Cake/Candy Sale: \$217.00

Coin Challenge: \$219.00

50/50: \$ 86.00 (collected \$172.00 - Congratulations to the winner: Mike Jacobellis)

Grand Total: \$1,247.00

Finally, I would like to thank all of you that donated, contributed, participated, and supported the United Way fundraisers to make it such a success.

I hope you all enjoy happy and safe holidays!

Ann

Submitted by Paul Callegari (Water Systems Group)

My 91 year old mother was driving on the Long Island Expressway on Thanksgiving

when her car got a blow-out. I want to thank the family who stopped to help her. They graciously gave their time and effort in changing the tire for her. My mother offered the children some money, but they said being Boy and Girl Scouts they were taught to do good deeds without monetary reward. My mom said they worked at BNL so I hope they will read this thank you. Your family made us thankful on Thanksgiving. With many thanks. Paul

Sad News - Ron Schroeder Passed Away

As you may have heard, our friend and colleague Ron Schroeder (Beam Components & Instrumentation Group), passed away Friday evening, December 4. The service was held on December 12 at the Bellport Methodist Church.

Get Your Online Safety Info Here . . .

By Sam Aronson (from Monday Memo, January 4)

As we pursue improvements in our safety performance, one key aspect is enhancing two-way safety communications across the Laboratory. We want to ensure that everyone on site has easy access to current safety news and information, injury reports and lessons learned, and other useful data, as well as multiple means of providing input and feedback. Enhanced safety communications is one of the top priorities spelled out in the Leadership Action Plan.

Today, we're launching a new safety website that will help us achieve these objectives. The site includes a highlighted monthly topic; videos (including Lab managers speaking about safety); summaries, lessons learned, and photos from recent injuries and incidents; employee stories; links to important safety information, including ES&H coordinator contact info, the safety observation database, and a safety suggestion form; and other useful information for managers/supervisors.

The site will be similar to our intranet home page in that we'll be updating it on a regular basis with new videos, news articles, and features. Those updates will be advertised on the home page, in Monday Memo, and in The Bulletin. Since the site is for all of us, we encourage everyone to provide feedback on what you'd like to

see there.

The safety site can be found at <http://intranet.bnl.gov/safety>. Please take a look.

happy new year

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. Your continued support is appreciated.

Thank you.

happy new year

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

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



happy new year



January 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1 Lab Holiday New Year's	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18 Lab Holiday 	19 Physics Colloquium "Special PHENIX/ STAR Colloquium" 3pm, Bldg. 510 Large Seminar	20	21	22	23 Eighth Annual 'Gathering of the Slides', Berkner, 8pm

24 31	25	26 Physics Colloquium "Sam Lindenbaum - the Early Days" Satoshi Ozaki, 3:30pm, Bldg. 510 Large Seminar	27	28	29 C-AD AP Seminar "Advanced Chromaticity Correction Schemes for IRs in Electron- Hadron and Muon Colliders at C-AD/CASA Accelerator, S. Alex Bogacz, CASA, TJNAF, 4pm, Bldg. 911B LCR	30
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February 2010

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2 Groundhog's Day	3	4	5	6
7	8	9 Physics Colloquium "TBA", Arlin Crofts, Columbia U., 3:30pm, Bldg. 510 Large Seminar	10	11	12 Lincoln's Birthday	13

<p>14</p> 	<p>15</p> <p>President's Day</p>  <p>Lab Holiday</p>	<p>16</p> <p>Physics Colloquium "Many-body systems and gauge theory", Nikita Nekrasov, SUNY SB, 3:30pm, Bldg. 510 Large Seminar</p>	<p>17</p> <p>456th Brookhaven Lecture by Ralph James, BNL, 4pm, Berkner</p>	<p>18</p>	<p>19</p>	<p>20</p>
<p>21</p>	<p>22</p> <p>Washington's Birthday</p>	<p>23</p> <p>Physics Colloquium "The SNS Neutron EDM Experiment", Martin Cooper, LANL, 3:30pm, Bldg. 510 Large Seminar</p>	<p>24</p>	<p>25</p>	<p>26</p>	<p>27</p>
<p>28</p>						



We Remember Trade Center

Sept. 11, 2001

[USS New York](#) - A ship forged from the steel of the World

Editor: [Pamela Manning x4072](#)