

**From the ALD's Desk**  
**RHIC News Bulletin Update**  
*December 2016*

As we reflect on the Holiday season, it is timely to remind ourselves that an important element of our culture is the daily practice of the qualities that make it possible for a large and diverse community to work together -- tolerance, openness, and respect – regardless of nationality, ethnicity, race, gender, sexual orientation, religious belief, age or disability. The management of Brookhaven National Laboratory is committed to vigorously uphold these principles in accordance with our expressed values. However, creating such a culture of inclusion, mutual trust and respect cannot solely rely on official policies and practices, but depends on everyone's personal action and responsibility. We urge you to commit yourself to helping us sustain such an inclusive environment at BNL and at all professional venues where BNL users are present.



*André Michalek*

**RHIC Run-17:** Preparations for Run-17, which is scheduled to commence on February 6, 2017, are continuing apace. The 24 cryo-week run plan includes 12.5 weeks of transverse polarized p+p running at 510 GeV, 4 weeks running of Au+Au at 62.4 GeV, as well as 1 week for the RHICf experiment and 2 weeks dedicated to the Coherent electron Cooling (CeC) Proof-of-Principle experiment. The 510 GeV p+p run, which addresses NP Milestone HP13 (measurement of the sign change in the proton Sivers function), has an integrated luminosity goal of 400 pb<sup>-1</sup> and was assigned highest priority by the 2016 PAC.

**sPHENIX:** The sPHENIX Upgrade project was granted Critical Decision 0 (Mission Need) by the Office of Science on September 27. The CD-0 designation expresses the commitment of DOE to carry out the project, if the funding environment permits it. The sPHENIX project team, led by Ed O'Brien, is now busy preparing for the CD-1 review for alternative selection and determination of a cost range for the project, which is currently planned for June 2017.

**RHIC Users Meeting:** The 2017 RHIC/AGS Annual Users Meeting will be held June 20–23 at BNL. The Users Meeting will feature a special session dedicated to BNL's 70<sup>th</sup> anniversary next year.

**eRHIC R&D:** The EIC Accelerator R&D Community Panel chaired by Kevin Jones (ORNL) met November 29 – December 2 in Rockville, MD to receive input from BNL, JLab and university scientists on R&D needs for a future Electron-Ion Collider. The

panel had asked for a prioritized list of R&D needs from the two labs and will issue a report with priorities for the EIC R&D program in January 2017. Nuclear Physics is expected to announce a \$7M competitive R&D program in the spring of 2017 as soon as the FY17 budget becomes clearer.

NAS Panel on EIC: The National Academy Panel that will study the scientific case for a U.S. based Electron-Ion Collider will commence its work in early February 2017. The panel is co-chaired by Ani Aprahamian (Notre Dame) and Gordon Baym (UIUC). The other members are: Christine Aidala (Michigan), Richard Milner (MIT), Ernst Sichtermann (LBNL), Zein-Eddine Meziani (Temple), Thomas Schaefer (NCSU), Michael Turner (Chicago), Wick Haxton (UC Berkeley), Kawtar Hafidi (ANL), Peter Braun-Munzinger (GSI), Larry McLerran (UW), Haiyan Gao (Duke), and John Jowett (CERN). The committee has been asked to address the following four questions:

- What is the merit and significance of the science that could be addressed by an electron ion collider facility and what is its importance in the overall context of research in nuclear physics and the physical sciences in general?
- What are the capabilities of other facilities, existing and planned, domestic and abroad, to address the science opportunities afforded by an electron-ion collider? What unique scientific role could be played by a domestic electron ion collider facility that is complementary to existing and planned facilities at home and elsewhere?
- What are the benefits to U.S. leadership in nuclear physics if a domestic electron ion collider were constructed?
- What are the benefits to other fields of science and to society of establishing such a facility in the United States?

Quark Matter 2017: The 26<sup>th</sup> International Conference on Relativistic Heavy Ion Collisions and Quark Matter will be held in Chicago, February 5-11, 2017. The RHIC and LHC heavy ion experiments will present their latest data, including those from the recent high-luminosity Au+Au and d+Au runs at RHIC and the new high-energy Pb+Pb, p+p, and p+Pb runs at the LHC.