

# eRHIC Bi-Weekly Status Report

August 7, 2017

## Recent Developments:

- The eRHIC Program Steering Group held its monthly meeting on July 28. The focus of this meeting was on the strategy around the expectation that we might expect a CD-0 for the EIC after the National Academy Study report release in early 2018. Possible eRHIC staging options were discussed along with detector scenarios. Timing for a follow up CD-1 was also discussed with the goal to move to that stage as quickly as possible.
- The development of the eRHIC organization was discussed at the two most recent PSG meetings and the organization continues to move towards what is needed to deliver the pre-CDR and prepare for a DOE CD-0 and the subsequent work towards CD-1.
- The next meeting of the National Academy Reviewers of the EIC will occur on September 11-12 in Woods Hole, MA.
- A kick off meeting was held August 2-4 on the collaboration with Fermilab on electron spin polarization, which is an essential part of the eRHIC physics program. Eliana Gianfelice from Fermilab, a well-known expert on accelerator spin physics, met with eRHIC accelerator scientists to discuss the workplan on polarization studies.
- Ferdinand Willeke has begun planning for the spring 2018 Pre-Conceptual Design Review. Efforts will be made to contact reviewers so that they can hold the date.
- The Energy Assessment Paper is now a BNL Formal Report (BNL-114111-2017) and it has been put up on the preprint server: See <https://arxiv.org/abs/1708.01527>
- The NPP Directorate is planning for a second strategic planning retreat in early September. This retreat is a follow up to an initial planning retreat that focused on an assessment of the current state of programs within the Directorate. This second retreat will explore future challenges within the Directorate, including our highest priority – eRHIC.
- The sPHENIX Director’s Review was held on August 2-4 and was led by Jay Marx, Senior Advisor for the LIGO Laboratory at Caltech. The review team consisted of both internal and external reviewers who reviewed all aspects of the project to assess the sPHENIX readiness for a CD1/3a review next fiscal year. The reviewers provided the team with good feedback, including recommendations to finalize the scope, conduct additional design/technical reviews, and to establish more formal agreements between the sPHENIX project and their collaborators/contributors. We expect the final report to be submitted in about one week.
- Microsoft Office 365 licenses are being procured for all individuals contributing to eRHIC. This license will give contributors the ability to access the eRHIC SharePoint site (including the teamsite for making contributions to the Pre-Conceptual Design report) and to access the NPP Directorate Document Management Center, which is under development. If you have questions about your access, please contact Alyssa Petrone at [apetrone@bnl.gov](mailto:apetrone@bnl.gov).
- The next Bi-Weekly eRHIC Coffee Break is planned for Thursday, August 10 in the C-AD Lobby (Building 911). Please join us at 3:30 p.m. and encourage others interested in eRHIC to attend.
- Thanks to the volunteers who contributed to a very successful RHIC Summer Sunday this past weekend! Over 1,500 of our neighbors, friends, and family came through, got to tour the RHIC tunnel, visit the STAR detector, and had the opportunity to “Stump a Physicist” (Tom Hemmick).

### Issues:

- The President's Budget Request (PBR) for FY2018 creates many uncertainties with significant implications on future plans and priorities. Encouraging recent developments are that the House budget mark for the DOE Office of Science proposes a budget that is flat with FY2017 appropriations and the Senate budget mark even advocates for a 3.0% increase.
- Additional strategies for CBETA cost/risk treatment are being finalized and will be confirmed by the BNL/Cornell Project Oversight Board in early August.
- An eRHIC pre-conceptual design organization and a management approach for matrix personnel needs to be finalized, approved, and communicated to relevant parties.
- Strategies will need to be developed for enlarging support for an EIC both within NP and within the broader science community.
- The ability of the NPP Directorate to successfully manage and complete the sPHENIX project is important to demonstrating to the DOE Nuclear Physics Program that we can successfully complete mid- to large-size construction projects. We need to support a successful sPHENIX CD-1 DOE Review in FY2018.

### Major Near Term Milestones:

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| • National Academy of Sciences Study            | 2017        |
| • National Academy Panel Report                 | Spring 2018 |
| • eRHIC Pre-Conceptual Design Report            | March 2018  |
| • eRHIC Pre-Conceptual Design Review            | April 2018  |
| • Ready for CD-0 Mission Need decision of EIC   | June 2018   |
| • Anticipated CD-0 (Mission Need Determination) | Late 2018   |

### Calendar:

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| • eRHIC Bi-Weekly Coffee Break – 3:30 p.m. in the C-AD Lobby | August 10, 2017         |
| • eRHIC Program Steering Group Meeting (1/2 day)             | August 25, 2017         |
| • National Academy Review of EIC (meeting 3)                 | September 11-12, 2017   |
| • Full day eRHIC Program Steering Group Meeting              | September 25, 2017      |
| • EIC Accelerator Collaboration Meeting (at BNL)             | week of October 9, 2017 |

### eRHIC SharePoint Site:

- Copies of these Bi-Weekly Reports and other information about eRHIC can be found on the eRHIC SharePoint site <https://brookhavenlab.sharepoint.com/sites/eRHIC/SitePages/Home.aspx>. If you have trouble accessing this site, please contact Alyssa Petrone at [apetrone@bnl.gov](mailto:apetrone@bnl.gov) or x7735.