

Notes from EIC Steering/Convener's Meeting 4/14/2009

The Meeting was moved at the last minute from SBU@Manhattan to BNL
Present: Aschenauer, Guzey, Morrison, Venugopalan, Vogelsang, Deshpande
Phone : Sichernmann, Ullrich

Steering Committee/Conveners Meetings

The number of conveners/steering committee members present for this meeting was small. Having such meetings and pulling through the huge amount of work necessary for the preparation of the EIC for the next LRP is too critical and important. It was hence suggested that instead of organizing these meetings on a need based basis, we should go back in to the PRE-LRP07 mode and have these meetings *regularly*. We suggest:

EVERY LAST FRIDAY OF THE MONTH AT 1:30PM If this time suites all, we will go ahead and fix this time and reserve a permanent bridge line for such a meeting. If for some reason that last Friday is not suitable, we would hold the meeting a week before (same time, on Friday).

--Action item for YOU: send an email to Abhay on the suitability of this time. We hope to have the 1st meeting at the end of May.

The low number of conveners and steering committee members attending the meeting was further discussed: Distraction due to RHIC operations was perceived as the main culprit for the BNL associated folks. Incidental and other commitments which could not be avoided was the reason for others.

BNL Task Force on EIC

One of the main reasons behind today's meeting was to introduce the new task force established at BNL (Elke and Thomas, as leaders) with a focus on EIC/eRHIC. Since most of the people attending were already aware of the development, we will have this item on the agenda for the next time. In the meanwhile, EIC steering committee members and conveners could check out the nice web page setup by Matt Lamont for this task force, located at: <http://www.eic.bnl.gov/taskforce.html>. I will send an email to the collaboration soon about the setup of this task force.

While the task force's activities are expected to be open, we should view this as a BNL group for all administrative and practical purposes. The physics discussions will be held in an open meeting with the phone line etc. advertised on group list server, but formally it should not be viewed as a WG

of the EIC collaboration. The BNL task force, will be part of and contribute to the EIC physics through the EIC Physics WGs.

Is there a similar task force structure setup or planned to be setup at Jlab? It is not quite clear whether there is a structure. Question for our Jlab collaborators: Is there a formal structure? If so, are the activities being archived on any web page?

The GSI Meeting of ENC/EIC:

The preliminary feedback is that not many of our collaborators nor the conveners/steering committee members may be attending this meeting at the end of May. The reasons discussed were many:

- other competing meetings which clash in time
- too close to other European and international meetings of the same sort making it prohibitive to travel in large groups
- lack of much updatable studies since the LBL meeting over all (although much has happened on organization of activities for future)

It seems like the accelerator group and their updates will be presented adequately in this meeting even in the discussion/parallel sessions, but the physics discussions may have to remain at the plenary level.

Future EIC Working and Collaboration Meetings

It was felt that rather soon a Working Meeting of people actually proposing to work on various physics topics will be needed. We may not call it a EIC Collaboration meeting. Possible dates need to be selected and such meetings planned. I expect that this will soon be taken over by the conveners. If not we will discuss this in the next Steering Committee meeting and I (Abhay) would be happy to organize this early/mid summer with the help of others on this group.

The location of the Winter meeting of the EIC collaboration needs to be fixed. Abhay is willing to hold it at Stony Brook in January 2010, but other institutes are welcome to host them. It was felt that in future, we should chose locations of EIC Collaboration meetings to be hosted by only those institutes which demonstrate their serious interest through prior activity/involvement in the EIC activities prior to hosting such a meeting.

Discussion of Physics and Strategy towards LRP

See my slides for some of the initial discussion. It was commented that the DOE is very receptive to the approach of having the EIC realized in a Staged way. Especially attractive is the comment we heard from the DOE to the management (BNL) that if the Stage 1 of the EIC is of the order of 150-200M, it may be possible to consider approaching this in a very different way and getting to NSAC before the LRP12. This would be consistent with the EICAC's recommendation of realizing collisions significantly earlier than 2020.

A long discussion took place on the need for luminosity (even at high energy) of $> 10^{\{34\}}$. The need for such luminosities for the EW and Physics BSM searches could be well understood, but that it was needed for detailed study of exclusive processes was not completely demonstrated. Revisit of some of the studies (exclusive charged pion production, DVCS) etc. was needed to remind us of the details. The experts on this from the Steering Committee were unfortunately absent to defend the numbers. Some of this was picked up after the meeting in private emails, over all I think a set of justification plots that justify machine to pursue such high luminosity are needed.

Physics of Stage 1:

Because of the not-so-high luminosity nor the center of mass energy, the anticipated physics is going to be incremental in spin physics and educational in non-spin nuclear DIS. We need to promote these appropriately with correct words. For many these are not too interesting in themselves, and may pose a significant hurdle for the stage 1 to realize. What role does transverse spin physics play in this? Crucial?

Near term activities and studies

The BNL Task force has started meeting every Wednesday at 10:00AM. Their present focus is on developing the eA physics MC generator. Elke has started working towards getting many of the crucial e-p MC generators collected together in a simple usable form on ONE web page. In the summer the task force and the people working around it will have many undergraduate

students to train. It is hoped that some of them will continue to work with the group and contribute to studies we need to pursue in near term.

To support the BNL Task Force Activities of the order of \$1M has become available for various studies to be initiated including pre-R&D studies for detector designs and technologies. Many proposals were made. They are listed on the task force web page (see left). Selection and approval expected by mid to late Summer 2009.

Tentative Date of the NEXT Steering Committee Meeting:

Friday May 22, 2009, 1:30PM BNL time

The date is not May 29 as that is also the day of ENC/EIC meeting at GSI. Please mark your calendars and plan to attend. I will send out the phone bridge line.