

User Group Board of Directors Meeting - Agenda

June 19, 2008

9:00	<i>Christoph Leemann</i>	Lab Outlook: Recent accomplishments, expectations, budget
10:00	<i>Tony Thomas</i>	Outlook for physics
10:30	<i>Rolf Ent</i>	<i>12 GeV Project Status</i>
11:00		<i>break</i>
11:30	<i>Todd Averett</i>	area report - running experiments
11:40	<i>Ed Brash</i>	area report - computing
11:50	<i>Latifa Elouadrhiri</i>	area report - quality of life/women in physics/public affairs <u><i>Working lunch</i></u>
12:00	<i>Aidan Kelleher</i>	area report - graduate students
12:10	<i>Wally Melnitchouk</i>	area report - experiment / theory liaison
12:20	<i>Karl Slifer</i>	area report - postdocs
12:30	<i>Dave Tedeschi</i>	area report - space issues
12:40	<i>Larry Weinstein</i>	area report - PAC
12:50		<i>break</i>
13:00	<i>Kees de Jager</i>	Hall A Progress and Issues
13:30	<i>Volker Burkert</i>	Hall B Progress and Issues
14:00	<i>Steve Wood</i>	Hall C Progress and Issues
14:30	<i>Elke Aschenauer</i>	Hall D Progress and Issues
15:00	<i>Ron Gilman</i>	Issues and Other Business
16:30		End of Meeting

REPORTS FROM MANAGEMENT

Christoph Leemann and Tony Thomas:

It is too early to say anything about the FY2009 budget. Right now we have the same money available as in 2007, except for the increase for 12 GeV. The 12 GeV upgrade was the least impacted (only a 1% cut) by this year's budget. Through the end of the year, 12 GeV will be fine. From 2005, we have in real terms a decline in operations. ESH&Q has had increasing budget needs.

After the UG-BoD meeting, Christoph and Tony will talk to DOE, in a Mid-Year Report. The lab does a self-assessment in 3 scientific and 5 non-scientific categories. The report is reasonably good. It is important to have a good score, and part of this is that your performance matches your predictions. Promising 30 weeks of operations but delivering 24 gets a bad score from DOE. But promising 24 weeks of operations and delivering 30 is also not good.

With the new lab director coming in September, continuity of leadership is ensured.

In congress, right now the supplemental has taken over. The House passed the supplemental, which is in the Senate now. (Note added in proof: the FY08 supplemental budget increased DOE Office of Science funding for nuclear physics by \$1.5M, which all went towards RHIC operations.)

For the FY2009 budget, the House mark up is next Tuesday. The Senate will mark up in July. The budgets (in millions) are: FY08 Proposed=\$102; FY08 approved=\$94; FY09 Proposed=\$117.

The JLab strategic plan includes:

- 12 GeV: CD3 approval targeted for September 2008.
- EIC is a possible future project. We do not want it to compete with 12 GeV. If it happens, JLab will have competition for this project from other labs.
- Photon science and technology: the success of FEL, expertise and R&D program enable us to consider a role in a 4th Generation Light Source.
- Modernizing infrastructure.

Questions:

- * Ed: safety got a lot of money, so why is it one of the categories where our score is the lowest? Answer: It is hard to get better than an A- on safety.
- * Wally, about EIC: some of the land where EIC is supposed to build is Newport News land and it seems they are in the process of selling it. Answer: JLab is in contact with the city; for the north part we are in

contact with W&M

Rolf Ent: 12 GeV

Before CD3, a lot still has to be done: there is a Lehman Review on July 22-24 and the DOE Office of Science CD3 meeting in late September 2008. The requirements are to finish R&D, (nearly) finish Project Engineering Design, close out recommendations of IPR (and other) reviews, have check-out, test and commissioning plans in place, and develop MOU's. Rolf acknowledged the excellent preparation for CD3 reviews and the excellent work by users / halls. Rolf is really optimistic on the non-DOE scope. He presented some R&D specifics. Rolf talked about the 12 GeV issues and concerns: CD3 approval this September is critical. The official "start of construction" is October 1, 2008. Risk mitigation remains an open question.

Questions:

* Ed: Our field was very successful in developing and selling technologies. But now it seems that in projects like 12 GeV, DOE wants us to only use established conventional technologies, to avoid risk. Answer: Rolf agrees.

REPORTS FROM HALL LEADERS

Kees de Jager: Hall A

A recent highlight is the short-range correlation paper just published in Science. Kees also shows preliminary results from E97-110 (low Q^2 GDH) and G_E^n .

A PREX test was done with the help of D. Meekins, assembling a ^{208}Pb target between 2 diamond foils. From the test, we can be confident that the maximum current can be used. The Compton upgrade has a goal of 1% beam polarization uncertainty. The room temperature septum magnet can go down to a scattering angle of 5 degrees and reach a momentum of 2 GeV/c, with a solid angle of about 4.3 msr.

Capital funding presented includes Hall A design manpower. The reduction in capital funding in FY08 was of \$0.4M. So we will need a jump in the capital funding, or we will be unable to run some upcoming 6-GeV large installation experiments.

QWeak (in 2010-11) and HKS (in 2009) are driving the long-term schedule. The parity experiments have to run before Qweak. So the polarized ^3He experiments have to be over by summer 2009. If we could shift the long term schedule by 3 months, everything can run. If we get too long a continuing resolution, for example, the spring 2009 polarized ^3He experiments will get canceled.

One issue brought up was how the choice is made about canceling or redirecting experiments to 12 GeV. Various criteria might be considered. One criteria is that some experiments at 6 GeV will help the design and optimization of 12 GeV running. Another is that some experiments are key for some tenure track decisions.

Questions:

- * Todd: All 6 GeV experiments were evaluated (approved and rated) at a time when the budget was not such a big deal. Why don't we get a new evaluation? Answer: Dennis Skopik answered that experiments which will make the textbooks are on the schedule: Hall C Qweak, Hall B missing resonances, Hall A parity.
- * Ed commented that users are totally excluded from the scheduling process. Dennis said that Larry's plan has always been to include everybody in the final process. Kees added that when the budget clears, the schedule will be sent to users for comments and then sent to the PAC for recommendations. Dennis summarized the two big issues we have not had to face in the past: the fixed dates for the 12 GeV upgrade and the tight budget. In the past, if we had problems the schedule slid a bit and everything was okay. If the 12 GeV dates slid, the pressure on 6 GeV would be eased.
- * Ed asks about experiments being completed. Gep-III was 80% completed and asked for, but did not receive, an extension. People agree that generally a 10% increase in uncertainties should not be critical for an experiment. Dennis adds that the Qweak collaboration was asked to present the impact of 80% completion.

Volker Burkert: Hall B

The Hall B publication rate is about 12 per year. This year Hall B is on track to reach this number. The g12 experiments ran since the last UGBoD meeting: E04-005, E04-017, and E08-003 which is a C3-rated experiment. Hall B users got DOE funds to fill the Cerenkov. New equipment includes the new multi-trigger processor and monitor and the forward pixel detector.

The experiments scheduled to run during FY09 are e1-dvcs, eg1-dvcs, and eg6. But if the budget is bad, these experiments' running time will likely be shortened by a third.

Hall B went through 3 successful reviews since the last UGBoD meeting.

Steve Wood: Hall C

Three experiments were completed during FY08: E04-019/E04-108 (G_{e^p-III} / $G_{e^p-2\gamma}$) and E07-002 (RCS). Preliminary results show no strong two-photon exchange effect on G_{e^p} . E07-002 required moving BigBite from Hall A to Hall C, to use as a sweep magnet. Preliminary results from E07-002 seems to favor a Constituent Quark Model calculation.

In addition, some tests were done parasitically for SANE, Qweak and the SHMS bender magnet.

The schedule for Hall C until 12 GeV is simple: SANE+g1d, HKS, and finally Qweak.

Hall C has obtained the HERMES lead glass blocks which will be used for the SHMS calorimeter.

Steve also advertised the Hall C Summer Physics Workshop: Physics opportunities in Hall C at 12 GeV, August 4&5, 2008.

Elke Aschenauer: Hall D

The Hall D collaboration is still on the small side. A workshop was organized in March 2008 to extend the physics range of Hall D and also to attract new collaborators.

Hall D is going through one review per month. The complete design is now ready.

Elke suggests that the Users Meeting should have a session explicitly devoted to 12 GeV and Hall D.

REPORTS FROM BOARD MEMBERS

Todd Averett: Running experiments

Issues in recently completed experiments include:

In Hall A:

- E03-101 (Hard photodisintegration of pp in ^3He): HRS Q3 tripped off and could not be used for the last ~ 3 days of the run. This also affected the subsequent last few days of the helium form factor run.
- E05110 (Coulomb Sum Rule): commissioning of NaI detector took longer than expected.
- E08-007 (proton form factor ratio): Ice buildup in the cryotarget led to running with the fan off and somewhat reduced statistics.

In Hall B:

- E04-116/E07-005 (Two-Photon Exchange e^+e^- elastic engineering run): Identified two sources of significant background (target and tagger beam line) to be addressed for full run. Lumi monitors not working sufficiently to allow absolute flux measurement. Suggested Modular Chicane System to allow easier installation.
- g13/E06-103 (π^+/π^- photoproduction using polarized beam and target): frequent energy and pass changes due to L/T separations in Halls A and C did not allow

stable conditions to be reached for linearly polarized beam in Hall B - but the linear polarization was an extra for this, not PAC approved.

- $g_9a/FROST$ (meson photoproduction): The many pass / energy changes of the concurrent Hall A experiment negatively affected the efficiency of our data taking.

In Hall C:

- E04-019 ($G_{e^p-2\gamma}$): Many ROC failures in the HMS due to radiation with the lower beam energy and proximity of HMS to the beam dump. Replacing the ROCs with older ones resulted in high DAQ dead time. In addition there were some issues with the efficiency of the new HMS trigger that were fixed after the first half of the measurements at this kinematic point.
- E07-002 (polarization transfer in WACS): none.
- E04-101 (PV in N to Delta transition, run with G0): The original proposal called for 3 incident beam energies to extract the asymmetry at 5 values of Q^2 . Two beam energies were run, and they were lower than proposed. Two major consequences: a) only 3 Q^2 points will be extracted, and, b) the inelastic rate was lower, resulting in poorer statistical precision.

There was a consistent message from the experiments, that Hall technical staff, designers, physicists and postdocs, and MCC crews were all critical to the success of the experiments. There was a lot of praise for these groups from users in all halls.

Ed Brash: Computing

On the problem of computer network connections for visiting off-site users: the Computer Center will set up a connection to a JLab web page containing all the documentation needed to go further.

The Board agreed on pursuing the idea of helpdesk having hours in the morning and in the afternoon (10-12 and 2-4, for example). (Note added in proof: for the summer, students will be available so that the helpdesk is open all work day.)

The upgrade to Federa 8 is going slowly, allowing users to test their codes.

Peter Bosted is still pushing for the availability of old data through a "JLab database":
Response from the Board:

- having all data available from a common site would be a great idea
- Database model needs to be determined. Possibly the task should be separated between the 3 halls.
- Question: at what level to make the data public?

Wally Melnitchouk commented on the fact that the web pages for the 3 Halls are really dissimilar. It does not send the image of a Lab but of 3 Halls. He also volunteered to help the new board member responsible for computing with the database.

It is important for the Board member assigned to Computing attend CC meetings.

The Board recognized that the Feedback page is a great achievement. Thanks to Karl Slifer and Kim Kindrew.

The UGBoD webpage needs improvements: a list of old news as the default page looks bad.

Latifa Elouadrhiri: Women in physics

The talk at the Users Meeting was well received and generated lots of discussion. The committee will pursue the day care issue. A lactation room has been set up. A forum will be set up.

Aidan Kelleher: Graduate students

We had 17 posters presented at the Users Group Meeting. Lunches during the meeting were organized with scientists talking with the students to answer questions and concerns. The original idea was mostly physics discussion, but the topics discussed were mostly careers, quality of life, and job interviews. The students, while appreciative, would also would like something different from pizza occasionally.

The graduate student mailing list needs an update. It is right now difficult to have an idea how many graduate students work on JLab projects. No reliable database exists at this point.

The JLab tours with graduate students assisting and presenting JLab physics is a success. But we do not have enough graduate students giving the tours.

Karl Slifer: Post-docs and feedback page

John Arrington is pushing the idea of trying to help our post-docs prepare for interviews by giving colloquia to a non-nuclear physics audiences in institutions around JLab. Several people agreed to help within their institutions. A few years ago, Betsy Beise also brought up the subject of helping people prepare for the interview process.

The URL to access the feedback page has been shortened. A poster was designed by Michelle Folts to advertise the page and is posted in hallways at JLab.

An E-mail should be sent before UGBoD meetings to remind users to submit their issues on the feedback web page, in order to have input for discussions during the meeting.

One of the entries on the feedback webpage was about having video of talks, as is done at CERN. The board agreed that it is a good idea, but is concerned that videos will take too much space. An alternative was suggested by Kandice Carter, which is to record audio of talks. She has software which synchronizes the audio with the slides.

The board discussed the idea of Peter Bosted, who as a member of UGBoD suggested trying to make JLab "paperless". During his talk at the User Group Meeting, Andy Kowalsky talked about the near-to-come setup of new software that will allow monitoring of printing. Also, it is encouraged that large print jobs be submitted to the Copy Center - it is cheaper.

Wally Melnitchouk: Theory/experiment liaison

There is an issue for short term visitors who are not eligible to get a badge: access to JLab after hours is impossible for them. Also, there is a space issue during the summer - there are not enough seats for all the theory visitors. Ron added that often meeting room availabilities are pretty low.

GENERAL

- There should be a more ceremonial presentation of the Thesis prize winners in front of the users.
- The Board should actively work to promote APS fellowship for JLab research.
- The Board should survey the users to identify prizes from Universities and others.
- The Board should coordinate outreach to Congress.
- The Board should survey users on the preferred PAC time: Winter or Summer.