THE FERMILAB USERS' EXECUTIVE COMMITTEE: ACTIVITIES & PERSPECTIVES

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- Fermilab users elect **12-member representative body**, the "Users Executive Committee" which conducts the affairs of the Users' Organization in between the Annual Meetings. There are 3 important functions:
    a. **facilitate communications** between the Laboratory and the users
    b. work toward better **quality of life** at Fermilab
    c. help the field of HEP **present its case** for community & gov't support

  Unlike the PAC or advisory groups, this is a service group and an advocacy group (internal and external).

- It's fair to say that the users' organization is at a **cross roads**. We will have several kinds of users in the near future.
    - Accelerator-based experiments at Fermilab (NOvA, MINOS, MINERvA)
    - Concluded exp'ts analyzing data on Fermilab computers (CDF, D∅, …)
    - Particle astro experiments that require support at the scale of national laboratory, but don't take place here (SDSS, CDMS, Auger, *etc*.)
    - Users doing R&D toward ILC, in collaboration with FNAL
    - The CMS users & LHC accelerator physicists in U.S.

  It's obvious each of these groups has a **different working relationship** they will want to establish with the laboratory which best suits their research needs. These may differ from our old model of experimenters coming in to set up experiments at the end of a beam line.

- The three main functions of the UEC still have some utility for the new kinds of users listed above, but clearly the **UEC must adapt itself**. While the present-day users are enjoying the positive data delivered to the Tevatron, neutrino experiments, it is clear that the user base will evolve. It is of interest to me, for example, that I do not always get a crisp answer from folks doing FNAL-supported research to the following question: "Are you a Fermilab user?"

- It cannot be overstated how much **we value the support of URA** in maintaining an independent users' organization. Comparison with other user organizations reveals how much we must be **thankful to URA** for the kind of its support of the UEC. Our user organization is **particularly vibrant** in comparison to others because HEP experimenters have longer connections to the lab (as compared to light source users), but importantly because of the support from URA.

- The **voice** provided by the UEC is **distinct** from advocacy done by experiments, laboratories, or geographical regions. We are **elected representatives** of users.

ADVOCACY WORK

- We have been going to Washington to do advocacy **on behalf of HEP** as a field. We do not go and talk about getting more money for MINOS or DES, though each of us who go clearly talk about what we do.
- The trip is **joint with the SLAC users organization**, since the two of us up til now mostly represented the US HEP community.
- Our emphasis this year during Congressional visits was:
    - We **acknowledge and thank the Congress** for past support of the sciences, especially in light of negative budgets from the President (we heard negative feedback of others' advocacy for not recognizing this).
    - We are supported by **DOE Office of Science** and by **NSF**
    - Ofc. of Science is **largest source** of support of physical sciences in the US
    - Users of DOE SC facilities come from **across the nation** and the world.
    - Users of different labs are from materials science, nanoscience, biology, chemistry, particle & nuclear physics, even NIH-supported investigators.
    - Discovery sciences **draw students** into science and technology. Many move on to other fields, very well trained in experimental skills.
    - We are **reaping data** from past investments in the Tevatron, neutrinos, B factory, satellites, and the community is really gearing up to reap the benefit of the most recent investment, the LHC.
    - 07 budget important because it commits to double phys. sciences in next decade, sends important signal to international partners.
- This year we visited the **offices of 137 members** of Congress. This is a pretty large number, and garners the healthy respect of other "mature" lobbying organizations like APS. I think the appeal we continue to have is that we are **"citizens" making constituent calls** to our representatives. This is a unique approach to science advocacy being done.
- It was our impression that the **Congressional visits went well**.
    - Strong appreciation of the "love of science" (esp. physical sciences)
    - Strong grasp of connection to the economy & education
- We also paid visits to members of the **Executive Branch**:
    - Ray Orbach (DOE)
    - Robin Staffin (DOE HEP)
    - Joel Perriot, Robert Dimeo, Jon Morse (OMB, OSTP)

  The visits to the Executive Branch posed some challenges.
- I see our future trips needing to **change in participation**, perhaps to include
    - US-ATLAS (since it has no lab)
    - US-CMS (as part of Fermilab UEC? Separate?)
    - ILC users (" " " " " or are they organizing?)

  although it is also essential to get ILC and CMS users to become vested Fermilab users and part of the UEC. Not sure how to do this, and have started making some presentations to those groups to get them involved.
- Other user organizations have **independent web sites and email lists** (non "dot-gov"). This might be of benefit to us, and I'd like to consider this next year. It would help get users involved in regular dialog with their representatives.

WORKING WITH OTHER USER ORGANIZATIONS

- I **organized** a meeting of all the **chairs of the user organizations** from all the DOE user facilities March 28-29, 2006. This group, which is called the "National User Facilities Organization" at present consists of those groups from Office of Science laboratories.

- The theme of the meeting was National Academies' *Gathering Storm* report, the recent visibility of basic research in the physical sciences and its effects on economic competitiveness. The goal of the meeting, however, was to extend the uniformity of message supporting the Office of Science that has been achieved with the SLAC users' organization to all the user laboratories. At present, each subfield passes through DC in the months of Feb/March for individual advocacy (while it's good that each user organization goes to DC, it's not clear to what extent these are at odds).

- The web site for the meeting is at **http://www.hep.utexas.edu/~kopp/nufo/**

- Speakers at this meeting were
    - Dr. Cherry Murray, Deputy Director LLNL and co-author of the *Gathering Storm* report.
    - Eli Kintisch, AAAS and reporter for *Science* magazine
    - Mike Holland, Rep. Biggert's staffer on U.S. House of Representatives' Science Committee
    - Deborah Koolbeck, legislative fellow in office of Rep. Rush Holt
    - Steve Pierson, American Physical Society
    - Mark Marin, Lewis-Burke & Associates
    - Neil Calder, Director SLAC Public Affairs Office

- It has been my initiative to further **expand our advocacy**. We often go on behalf of HEP in the Spring, when budgets the White House are first announced. I would like to start a Fall trip, when Appropriations votes are about to happen. This year, I am trying to get the **UECs from all DOE labs** to collaborate with us on an "Office of Science" trip to the Hill. The notion is to sell the brand of the Office of Science, just like people sell the brand of the NIH. All the speakers were helpful in reinforcing the themes of **working together** and **no squabbling**.

- Initial feedback from other UEC's has been positive, though it's clear that such a joint trip will be a challenge to marry the "relevant" sciences and the "discovery" sciences and come up with a message everyone is happy with.

- On a related note, it is important for the Fermilab UEC to start developing some ties with US-CMS and ILC users, as note above.

FACILITATING COMMUNICATIONS

- The monthly meetings have been a traditional opportunity for our committee to discuss issues of relevance to the users and **disseminate information** through our **minutes** sent to userorg@fnal.gov (I know these are read because errors are discovered within hours and I hear comments!).

- Some examples of things we heard about and discussed this year:
  - Irwin Gaines, FNAL Computing Division, "Computing security measures, requirements for laptops, etc."
  - Bruce Chrisman, Assoc. Director for Admin., "Fermilab ID badge security and potential new measures required by DOE under Homeland Security Presidential Directive 12"
  - Martha Heflin (PPD) and Mary Logue (ES&H), "New Procedures to Assure User Compliance with FNAL Safety Requirements, and offsite access to training materials". We are working with them to develop better means of tracking users needing safety training.
  - Dave McGinnis (AD), "Accelerator Division Studies critical before the start of the shutdown".
  - Keith Gollwitzer (AD), "Lessons learned in pBar Stacking Studies"
  - Developing better means of publicizing events at Fermilab (P5 reviews, DOE reviews, workshops, etc…). I know I have found it challenging to plan my own travel, sometimes lacking advance knowledge of events here at the Lab. I had been hoping to work on a better 'long range calendar' to facilitate users' travel planning, but still no resolution.

- Additionally, we heard several presentations **advertising resources available to users** at FNAL:
  - Rocky Kolb, "FNAL Astrophysics Center"
  - John Cooper (PPD), "Getting involved in NOvA, and the NOvA Review Process"
  - Bob Kephart (Assoc. Director for ILC), "The recent reorganization of how the lab supports ILC research"
  - Eric Vaandering, "Meson Area Test Beam Facilities"
  - Sarah Eno (U. Maryland), "LHC Physics Center"
  - Erik Gottschalk, "LHC@FNAL -- Remote Operations Center"
  - Young Kee Kim, "Where do Fermilab Users Come From"

- Although this seems like a fairly banal activity, I hear **very positive feedback** on this particular function of the UEC.
  - Off-site users can find it difficult to learn the goings-on at FNAL
  - We can call in busy people to report on important issues
  - We can collect feedback to the Lab

  We are **very grateful** to members of the laboratory & directorate, and the Director, for making time to meet with us and inform the user community in this manner.

QUALITY OF LIFE AT FERMILAB

- Availability of the email center and computing resources: with the re-opening we inquired about how users can better "pre-scan" their laptops so they are not so quickly blocked when they arrive site.
- Upon inquiry from a user, we worked with the Housing Office and Assoc. Director Chrisman to establish a Women's Dorm Wing in the Village (in Aspen East). This is being done on a 1-year trial with 6 rooms in one corridor (started March 1, 2006), and if booked could be enlarged to become one of the small dorms (eg: Dorm 3 which is 8 rooms).
- Development of new web-based "Guide to Life at Fermilab"
- We worked with George Scheetz, Director of Batavia Public Library, on the possibility of extending library services to guests in the Village. Currently, these folks, even if on site long-term, are not officially residents of any township or library district.
- We have been learning about the proposed Suburban Transit Access Region (STAR) link proposal, which might include light rail access to FNAL on its east side. We are working with Mayor Michael Fortner (West Chicago) to place FNAL users on community committees on STAR-link.

OUTREACH

- We've been discussing how we could put together a particle physics **"traveling exhibit"** for museums around the country which would have drift chambers, RF cavities, etc, and a live (fake) control room of an experiment(s). The idea is to have this move to users' towns and generate a little excitement about our field (we all have the difficulty of telling people about our work, but never being able to show directly what our 'lab space' looks like). This is still in its infancy, and will require us to understand what equipment is available, sources of funding, *etc*.

ANNUAL USERS' MEETING

- We are focusing on two themes:
  - Getting users involved in the science policy discussion
  - Opening a dialog about the ILC
- Keynote speakers at this meeting include
  - Norman Augustine, chair of *Gathering Storm* panel (public lecture)
  - Rep. Judy Bigger (R-IL), co-chair Congressional R&D Caucus
  - Robin Staffin, DOE HEP
  - Harold Shapiro (Princeton), chair of EPP2010 panel
  - Michel Della Negra, spokesperson of CMS
  - Hiro Aihara (Tokyo), ILC & T2K in Japan
- Additionally, we are trying to do a better job of showing off the talents of users
  - Featured graduate student presentations (open competition for 4 talks)
  - Poster session during the Users' Meeting

PERSPECTIVES

- I wanted to close this presentation with a few perspectives on
  - Key user needs met by the Laboratory
  - Several concerns from the user community
- First, I want to convey the immense respect and regard the community has for the laboratory for the successes of the Run-II upgrades, delivery of beam to the neutrino experiments, and launching of new R&D initiatives.
- The community & Laboratory share a common interest in the success of the ILC. That said, both need to **maintain a solid intermediate-scale science program**
  - If FNAL is the sole HEP lab, its strength to bid to host is weaker without an operating accelerator program
  - How to attract students in the field? Can LHC + astro accommodate all users in HEP for the next 10-15 years?
  - At present, the list of users of FNAL beyond 2010 might include a subset of CDF+D∅ doing analysis of old data, MINOS, CMS, Astro users, and some users collaborating on accelerator (ILC?) R&D, which potentially is a significant drop from the present level.
  - Beneficial to have small experiments running too (*eg* MINERvA).
- While clearly the Laboratory has constraints from the funding agencies, it would be beneficial if **more control was exercised at the Laboratory level**, not above. Cancelled efforts such as TeV silicon, Proton Driver (3 rounds!), BTeV, while significant challenges to the Laboratory, are devastating to the university community. This is perhaps best directed to DOE, but it merits wide discussion.
- We applaud the Laboratory's effort to **collaborate with the universities on ILC**
  - Harness resources of university community
  - Develop intellectual partners in universities
  - First step toward what must be a globalization of collaboration (significant beyond what has ever been done – even on the LHC).
  - Such has a (small-scale) history in the Lab's development of accelerator collaborations for the neutrino program + Run-II, for example.
  - The laboratory has been a leader in enabling such collaborative research by university users.
- The Laboratory provides **infrastructure in support of users** that may not be readily appreciated. We all know of the technical resources, but in addition there are facilities are not afforded by smaller university groups
  - Housing
  - Computing
  - Travel Office
  - Video Conferencing infrastructure
  - Office space
  - The LHC Physics Center
  - Accounting, billing, procurement

  The above don't increase the luminosity or the number of neutrinos delivered to experiments, but they are essential to support users doing their research here. Users very much appreciate the Lab staff's efforts in these support areas.