

Fermilab Community Advisory Board

March 23, 2017 Meeting Minutes

Prepared by Katie Yurkewicz

Welcome and lab news

Katie Yurkewicz, Communication Director

- The Fermilab homepage (fnal.gov) has a new look with news highlights at the top and social media streams.
- The lab held its first-ever Spanish-language Ask-A-Scientist program on March 12. About 100 members of the community attended this program, which offered a presentation about neutrino science, a tour, and Q&A with scientists. The lab thanks its large group of Spanish-speaking scientist volunteers for making this event a success.
- Fermilab partnered with the PechaKucha Batavia organization to hold their first event of 2017 in Ramsey Auditorium on February 16. It was a different model for the lab, with the PechaKucha Batavia group selling tickets, and alcohol being served before the event and during the intermission. The event went well, setting a new record for attendance for PechaKucha Batavia (318 people, with the previous record being 200 attendees). Plan to host the event again at Fermilab in February 2018.
- The Deep Underground Neutrino Experiment (DUNE) collaboration has reached a new record level of participation: as of January there are 950 scientists from 30 countries signed on to participate.

Update on DOE budget

Tim Meyer, Chief Operating Officer

- 2017 fiscal year budget not yet passed by Congress; continuing resolution at last year's levels expires on April 28. The LBNF/DUNE flagship project was looking toward a funding ramp-up this year to begin construction work.
- The President's "budget blueprint" for the 2018 fiscal year was released on March 16. This includes a high-level look at the proposed federal budget, but no details for Fermilab or for the DOE's Office of High Energy Physics. The blueprint does include a \$900M (17%) decrease for the DOE Office of Science, in which the Office of High Energy Physics lives. DOE must now make a plan to fit within that decrease, the lab does not know how much of the decrease it may receive.
- The "budget blueprint" is the President's first draft of a proposed budget. The detailed proposed budget will be released on May 15. Then Congress takes over to make the final decisions. At the next CAB meeting on May 25, the lab will know the details and will be able to answer further questions from members.
- Fermilab's flagship project that will do the best neutrino science with the international community remains attractive, both to international partners and stakeholders within the United States. Fermilab Director Nigel Lockyer just returned from a trip to several countries in Europe where international partners reaffirmed their commitment.

- Q&A
 - Q: Are the Congressional Science Caucuses engaged? A: There are several caucuses that focus on science and national labs; their leaders maintain their commitment to the values that brought the caucuses into being.
 - Q: What would be the point at which the LBNF/DUNE commitment would be reevaluated? A: If LBNF/DUNE funding remains at the \$25M level for 3 or more years in a row, a reevaluation may be needed.
 - Q: Is the lab looking at ways to accommodate a 17% cut? A: The lab is working with DOE to look at various budget scenarios and ways to accommodate new funding levels. This process will accelerate after the budget details are made available on May 15.

Update from the Tritium Task Force

Don Cossairt

- See presentation [Add link]. Summary: Don Cossairt presented an update on the work of the Tritium Task Force, which is tasked with minimizing the amount of tritium released on the Fermilab site. A more comprehensive presentation was delivered in September [Add link]. Fermilab continues to release very small amounts of tritium off-site via surface and sanitary sewer water. Detectable levels of tritium (far below regulatory limits) have now also been found in Ferry Creek, which flows into Warrenville.
- Q&A
 - Q: What is the detection threshold for tritium in water? A: 1 pCi/milliliter. This is also the level at which we must report to regulatory authorities. Rainwater background is 0.3 pCi/mL, so it is not meaningful to measure tritium concentrations at or lower than 0.3 pCi/mL.
 - Q: Do we send our samples off-site? A: Fermilab has its own lab on-site; we cross-calibrate to ensure that our measurements are correct.
 - Q: How does the CAB feel about these levels? A: Upward trend is a concern. Don Cossairt: If we had a brand-new sewer and water piping system, this may be different. AS with many municipalities, the sewer pipes are not perfect and leak-free.

Feedback on Fermilab anniversary activities to date

CAB Members

- The Warrenville staff are stealing the 50-in-cupcakes idea for their 50th anniversary. Everyone is invited May 21 from 2-4 p.m. in the Leone Schmidt Heritage Park. Memorialize 50 years since Warrenville was incorporated.
- Reception was well presented and well done. Lecture could have been less technical.

What is a muon? Why do we care?

Chris Polly, Muon g-2 Project Manager

- See presentation [Add link]. Summary: Introduction to experiments with muons at Fermilab, the first of which will start this spring/summer. Overview of the experiments and buildings that the CAB will tour following this presentation.

Tour of Fermilab Muon Campus

Adjournment

Next meeting: Thursday, May 25, 2017