

Exploiting the Fermilab Long Baseline Neutrino Facility

From: Fermilab Directorate

To: All interested principal investigators

November 5, 2014

Dear Principal Investigators,

Fermilab established an interim International Executive Board (iIEB) this summer to begin the process of forming an international collaboration interested in exploiting the proposed Long Baseline Neutrino Facility (LBNF) at Fermilab in order to pursue an accelerator-based long-baseline neutrino experiment as well as neutrino astrophysics and nucleon decay. Information about the iIEB can be found at <https://web.fnal.gov/project/iIEB>.

The iIEB has met twice and has drafted a letter of intent (LOI) that will provide the basis to form the new ELBNF international collaboration. This document will be the starting point for the LOI to be presented to the Fermilab PAC in mid-January 2015.

In the near term, two meetings, to be retransmitted via video, have been scheduled to bring together those who are interested in developing this science and in pursuing what is being proposed. The meetings will take place on December 5 at CERN and December 12 at Fermilab. All scientists wishing to join and contribute to this developing opportunity are encouraged to participate in both meetings if they can, either in person or by video.

A process to form the collaboration has begun around the concepts outlined in the LOI. The goal is to found a new international collaborative proto-structure soon after the meetings. The process, to be discussed at the meetings, will include discussions about how to form an Institutional Board and how to move towards selecting collaboration leadership. PIs will have an opportunity to sign the LOI at either of these meetings or by email if they are unable to attend in person.

While the meeting agendas are not final, we expect to have several short presentations outlining the LOI, including the scientific goals and strategies, the expected parameters of the near and far detectors, the characteristics of the beam and other infrastructure that make up the facility, and timelines both for developing a full proposal and for building and executing the experiment. There will also be presentations on ideas about how to move towards formation of the new collaboration and on the status of the development of the international governance framework under which the collaboration will operate. Following those presentations, a round table discussion will take place during which people can interact with the iIEB members, ask questions, and provide input for the LOI and the process going forward.

The times of the meetings will be set to minimize the inconvenience to those in distant time zones.

December 5, CERN Council Chambers; 1 pm – 6 pm local time

December 12, Fermilab 1 West; 10 am – 3 pm local time

Additional information about these meetings will be made available soon, including draft agenda, links to the draft LOI and other relevant documents, how to enter CERN or Fermilab for those who do not have access cards, registration, etc. We hope that you will be able to join these events and look forward to seeing you at these meetings to hear your feedback to the process and to develop together the international ELBNF program.