

February 15, 2016

Flavio Cavanna  
MS 309

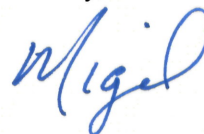
Dear Flavio,

Thank you very much for your presentation: "*protoDUNEs*" at the January meeting of the Fermilab Physics Advisory Committee (PAC). The Committee explicitly mentioned its appreciation of the carefully prepared presentations for this meeting.

Progress on DUNE was an important topic at the meeting. Excerpts on DUNE from the PAC report are attached. As you can see, the committee noted that, "*ProtoDUNE would be the first major hardware effort by the [DUNE] Collaboration and its success is a key early outcome of the Fermilab-CERN partnership in neutrino physics as well as a demonstration of the important role the CERN Neutrino Platform has in the overall strategy for LBNF/DUNE.*" In addition "*The PAC endorses the recommendation of the LBNC that DUNE set out clear goals for the protoDUNE effort and appropriate oversight and resources be allocated to protoDUNE so as to maximize likelihood of useful running with beam prior to LS2.*"

I note the PAC comments and LBNC recommendations and would like to add my thanks to you for giving the Committee an informative summary of the protoDUNEs status and plans.

Sincerely,

Nigel S. Lockyer  
Director of Fermilabcc: D. Bortoletto  
G. Bock  
R. Rameika  
M. Procaro  
C. MosseyS. Geer  
T. Meyer  
A. Stone  
J. ShankJ. Lykken  
M. Thomson  
J. Kogut  
A. Rubbia



**Excerpts from the January 2016 PAC Report:**

There appears to be welcome close coordination between SBND and DUNE on TPC design and construction efforts, which could be critical given the tight schedules for both SBND and protoDUNE. While the primary goal of SBND is to provide the near detector flux measurement for the SBN program, technical coordination between SBND and protoDUNE, to the degree possible without compromising this mission, is encouraged.

Over the last 6 months, protoDUNE single and dual-phase has emerged as a critical near-term effort for DUNE. ProtoDUNE would be the first major hardware effort by the Collaboration and its success is a key early outcome of the Fermilab-CERN partnership in neutrino physics as well as a demonstration of the important role the CERN Neutrino Platform has in the overall strategy for LBNF/DUNE. The prototyping effort will validate the engineering design and physics performance of the DUNE Far Detector design options, as well as establishing the foundation for eventual full-scale factory production of TPC components. *The PAC endorses the recommendation of the LBNC that DUNE set out clear goals for the protoDUNE effort and appropriate oversight and resources be allocated to protoDUNE so as to maximize likelihood of useful running with beam prior to LS2.*

*The PAC endorses the focus areas laid out by the LBNC for FY2016 and looks forward to progress reports in the identified areas:*

*LBNE:*

- *Execution against final design plan for CD-3a scope*

*DUNE:*

- *Progress against goals, milestones and plan for protoDUNE single- and dual-phase*
- *Progress against goals, milestones and plan for the three Task Force efforts (ND, FD, BO)*
- *Progress in software and computing, and automated reconstruction in particular*
- *Strategy for preparations in advance of CD-2/CD-3c*
- *Progress in developing a responsibility matrix for protoDUNE (near-term) and DUNE construction (longer-term)*

