

DUNEprism Issues

- **January workshop:** the ND Concept Study is asked to make a **recommendation on whether to continue to pursue the PRISM concept**. This recommendation should take account of the physics case and the cost implications for the Near Site facilities. The recommendation will be considered by the EC.
- The following steps are contingent on a positive recommendation:
 - **March 2018:** draft a **report giving quantitative results** elucidating the benefits of PRISM concept, assuming the previously agreed layout.
 - **March workshop:** the ND Concept Study is asked to **make a recommendation on the PRISM concept, based on the scientific merits as documented in the report**. The report, including any recommendations, will be delivered to the EC.
 - **April 2018:** the EC will consider the recommendations of ND Concept Study.

DUNE PRISM

- Questions to be addressed
 - How well can PRISM address the beam-related systematic issues in the oscillation analysis?
 - How can it help to decouple the beam-related systematic uncertainties from those coming from cross section and energy scale?
 - How does it improve CP sensitivity? A full study to address this would be the best, but maybe a few case studies are adequate.
- The PRISM working group is making good progress in answering the questions
 - A copy of the draft document is available at <https://indico.fnal.gov/event/16205/>
- ND Concept Study recommends the PRISM working group to continue with their study

Perhaps easy:

- Is the flexibility to do ~DUNEprism something the concept study group wants to recommend?

90 degree rotation of (50% enlarged relative to CDR) hall
(also maybe ask for more depth along beam direction)

➤ Harder:

What else do we recommend? Is there a timetable to lay out?
What studies to do?

- What moves?
- What stays on-axis?
- Run plan (rough)?

These questions couple with the other concept decisions.