





2x2 Demonstrator Update

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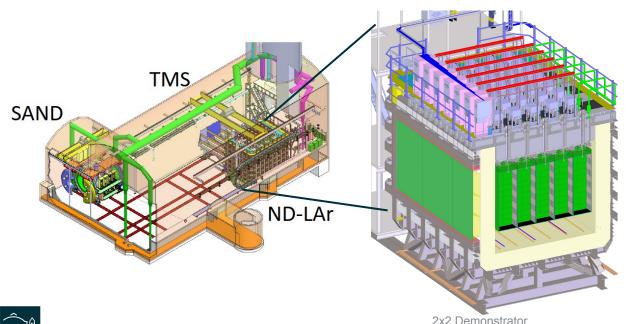
FNAL Proton PMG / All Experimenters' Meeting

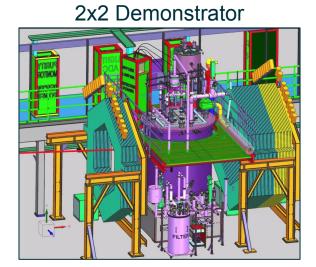
April 4, 2024

Overview



- Prototype / Demonstrator for ND-LAr, DUNE's LArTPC near detector component
 - 4 modules, each of which are ~60% scale (35 modules in ND-LAr)
- 2x2 is situated in the NuMI beamline: DUNE's first neutrinos!

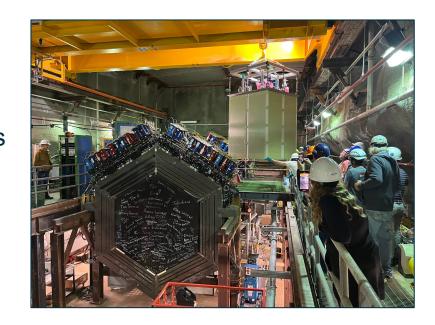




Current Status



- 4 Modules have been assembled and validated in cosmic data taking runs at Bern from 2021-2023
- Modules installed into the MINOS underground area October 2023
- Still have ~1 week worth of installation tasks to complete before LAr fill, but currently do not have access to the hall due to the primary elevator being out of service
- Conducting as many commissioning tasks as we can in parallel so we can transition to stable operations as soon as possible



Recent Activities



- Charge readout system is cabled up to the detector and all the controls are in place to exercise this system (without underground access)
- Using this opportunity to commission the system and exercise continuous readout with shifter support
- Pedestal runs, self-triggering runs



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