

# ICEBERG: Status & Plan

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On Behalf of ICEBERG (Fermilab, BNL, LBNL, CERN, Bristol(UK), UPenn, UCI, UF-BU, CSU,...)

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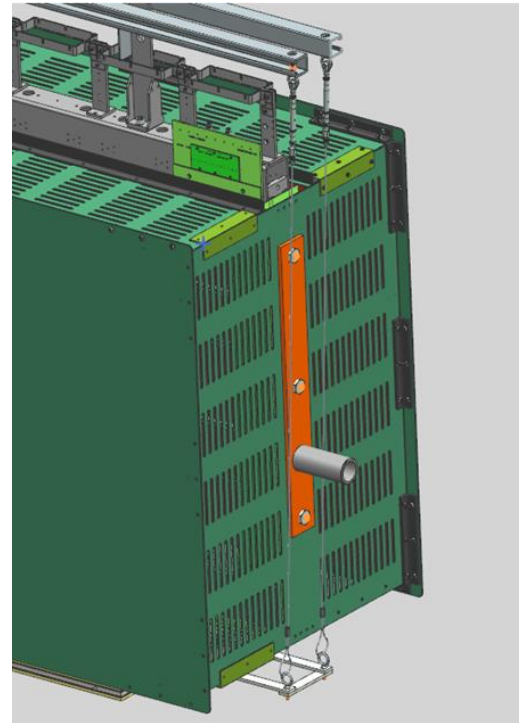
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# ICEBERG TPC

- ½ DUNE Anode Plane Assembly (APA) 1280 channels.
  - 10 Front End Mother Board
- 1/6 DUNE APA Wire length
- Two Drift Volume of 30 cm each
- Two cathode Planes and 1” spacing Field Cage
  - 500 v/cm field gradient
- Adding 1 X-ARAPUCA VD-Photon Detector



# X-ARAPUCA in ICEBERG



DAQ with DAPHNE V3 and Ether DAQ  
Study of PD Trigger through TLU

# Run 9 Status

- DUNE-DAQ-WIB-Ether (Done)
  - WIBMOD work in progress
  - DQM using DUNEsw (Done)
- PTCv4 Commissioned (Done)
- DUNE-CE-Interlock (Done)
- WIBs/FEMBs and Data/Power cables (installed)
- CTS test of 10 FEMBs (Done)
- Data from 8 FEMBs analyzed through DUNEsw (online and offline software ready)



# ICEBERG Plan: Run 9

- 2 WIBs have been shipped from BNL to Fermilab
- X-ARAPUCA has arrived at Fermilab
  - Additional parts to arrive soon
- Install and test all 3 WIBs and 10 FEMBs
- Clean, and rebuild TPC
- Test TPC in air
- Install X-ARAPUCA at the bottom of TPC
- Test X-ARAPUCA with its electronics and DAPHNE-V3 → DAQ
- Regenerate ICEBERG Filter
- TPC Moved to cryostat
- LAr Fill (Mid to end of Feb 2024)
- Start of Run 9 (March – May 2024)