

# LAr R&D Progress Updates

Yichen

12/11/25



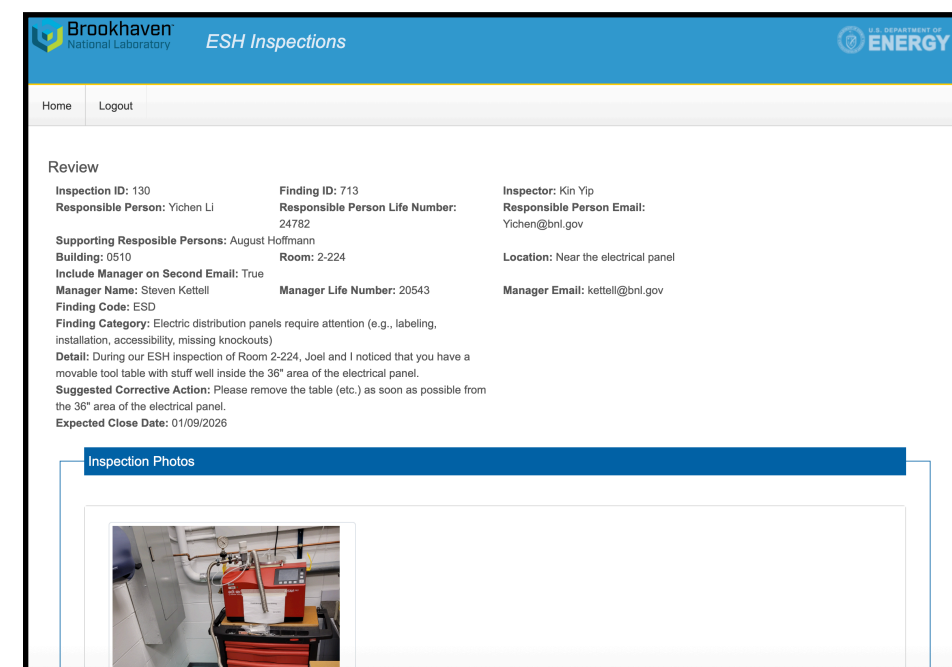
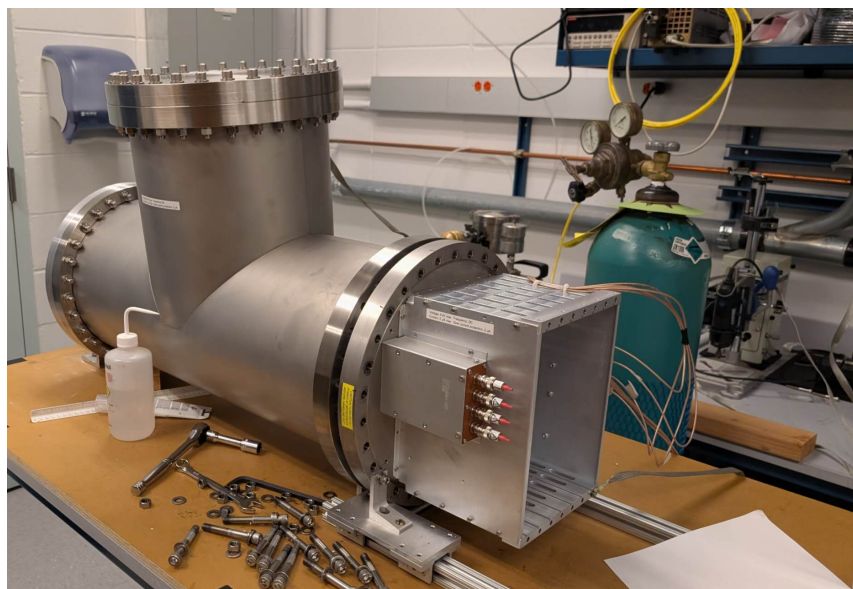
# Lab Safety and Space Management

## ► EEI inspections

- DUNE HV test chamber in RM 2-224 completed
- BPX 100 Xenon lamp for the SiPM test completed

## ► ESH inspection

- Formally called Tier 1 walkthrough, conducted once a month on Wednesday noon
- Safety officers walkthrough the Building 510
- The detector used for leak check of the HV testing chamber was found inside the 36" region
- An official inspection findings registered in the system
- Augie moved the leak detector out immediately
- The case is closed now



# Safety Trainings and Audit

## ▸ Kin looked up the training records when renewing our ESR

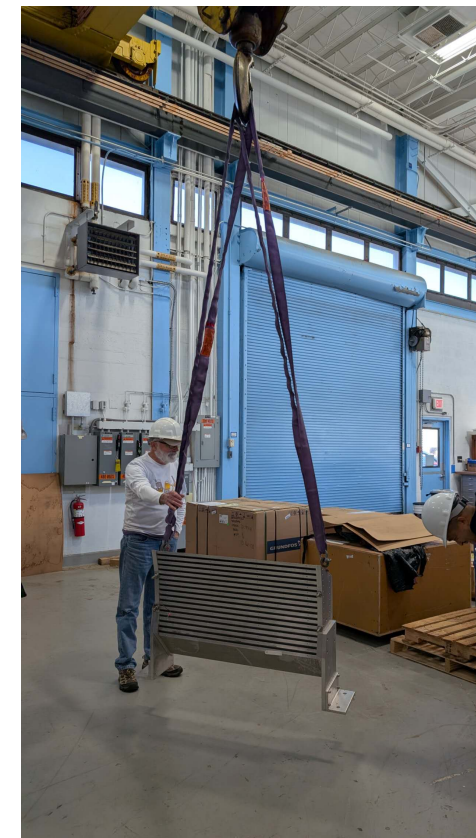
- My QEW 1/2 training was found expired
- My crane JPM training was found expired
- JPM on the crane finished today, I can operate the crane in highbay now
- All the trainings are up to date now

## ▸ Annual QCP Audits

- Lingyun, Shanshan, Volodya and Me needs to finish this annual audit before the end of the year
- Will repeat the practice last year, I conduct the audit to the others and ask Shanshan to conduct the audit on me.

## ▸ High bay temperature

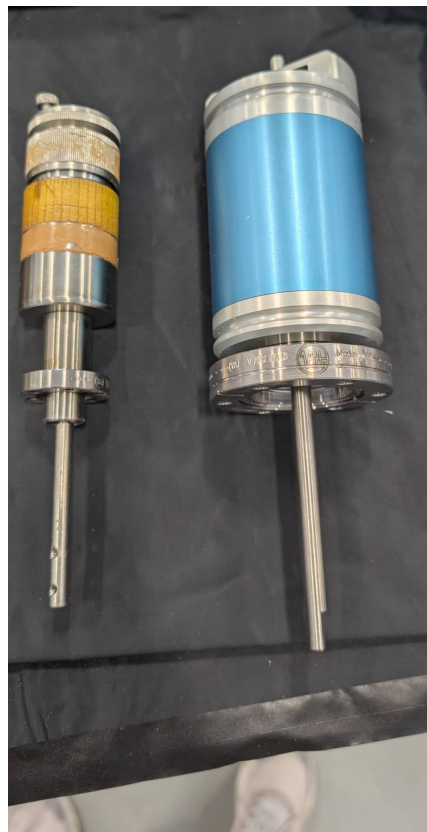
- The heating still now working
- The attempt repair last week seems to introduce more problem with leakage at the radiator
- The room temperature at highbay now is 49F





# SiPM test in 260L system

- Found many useful feedthrus in the abandoned storage cabinet by the condense matter physics groups
- The BNC signal feedthru found
- 15-pin connector feed thru from Aleksey
- Manual rotational stage, allowing moving of parts controlled from the outside the dewar
- Saved half of the cost from the previous estimation SiPM implementation in the dewar
- Will pay attention to the feedthrough in the leak check stage

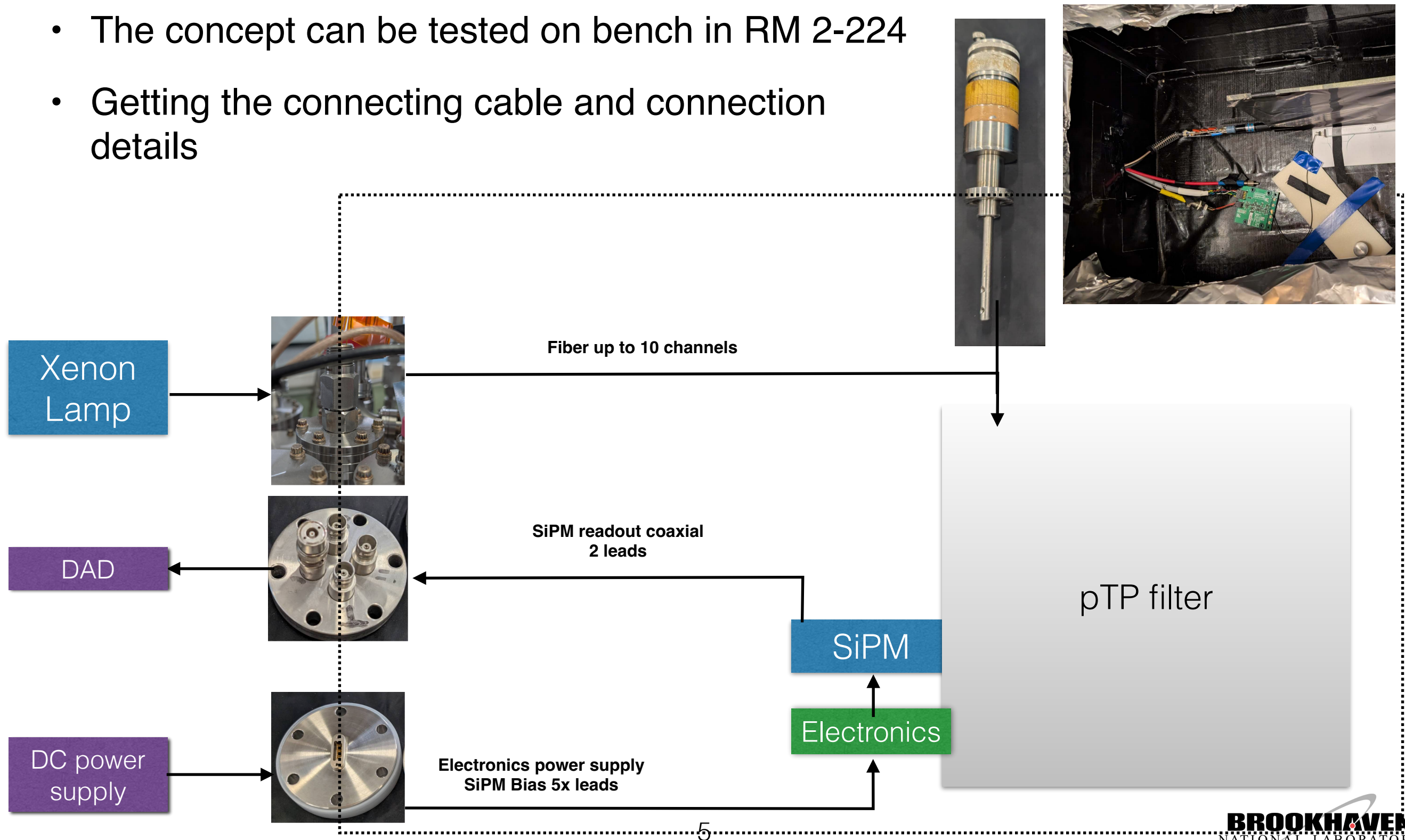




# SiPM test in 260L system

- Concept design of the pTP test inside 260L system
- The concept can be tested on bench in RM 2-224
- Getting the connecting cable and connection details

Dark Box at RM 2-224



# Cryogenic Run Plan

- Just get the crane training complete for moving the top flange
- Going to open up the system and moving the top flange to assembly frame tomorrow
- Modification expected
  - Installation of the conflat feed thru found to verify the leak tightness
  - Mounting plate for the pTP samples for cryogenic test
    - Need to machine a simple plate out of aluminum in house to accommodate the hanging rods on the flange
  - 3 pTP sample on to the mounting plate
- Planned starting date
  - The cryogenic operation needs daily replacement of LN2 once started, Christmas holidays land on Thurs. and Friday this year
  - now planning for start the running after Christmas on Dec 29th.