

LAr R&D Progress Updates

Yichen

11/25/25



Lab Safety and Space Management

► 6000 Gallon LN2 tank refill

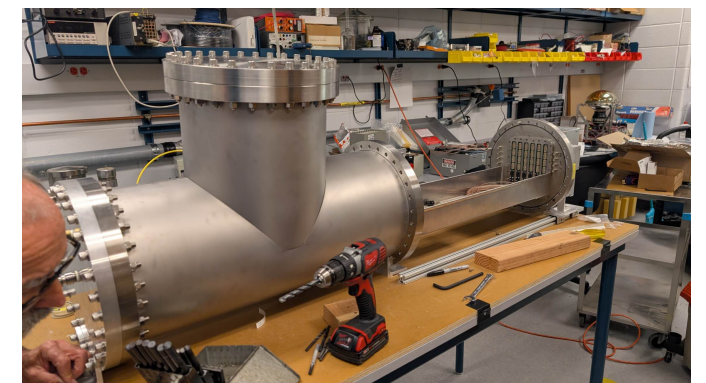
- The tank has been topped off last Wednesday, before warming up
- There is an offset on the pressure-differential level gauge of about 50"
- Started to track the number of refills to track the use

► DUNE HV testing EEI

- Following up inspection for the chamber with DUNE feedthru
- Augie is making the chamber

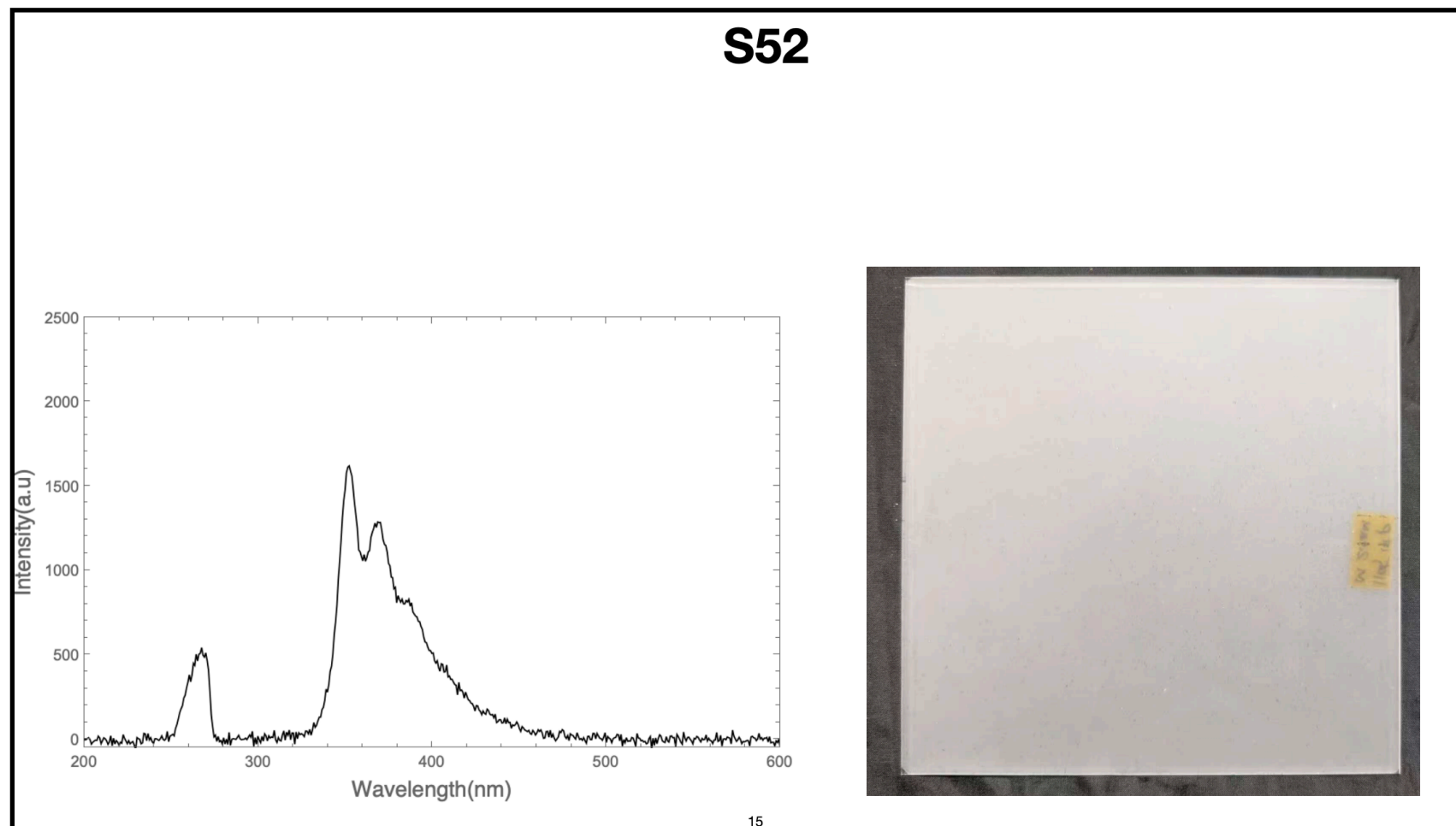
► High Bay Temperature issue

- Steam still not fixed, today's indoor temperature is 54F
- Reported to the building manager and Kin, Kin cced Paul and Hong
- The work order has been put in since mid-Nov.
- Steam shop is short of hands with backlogged schedule
- The WO is scheduled for this week



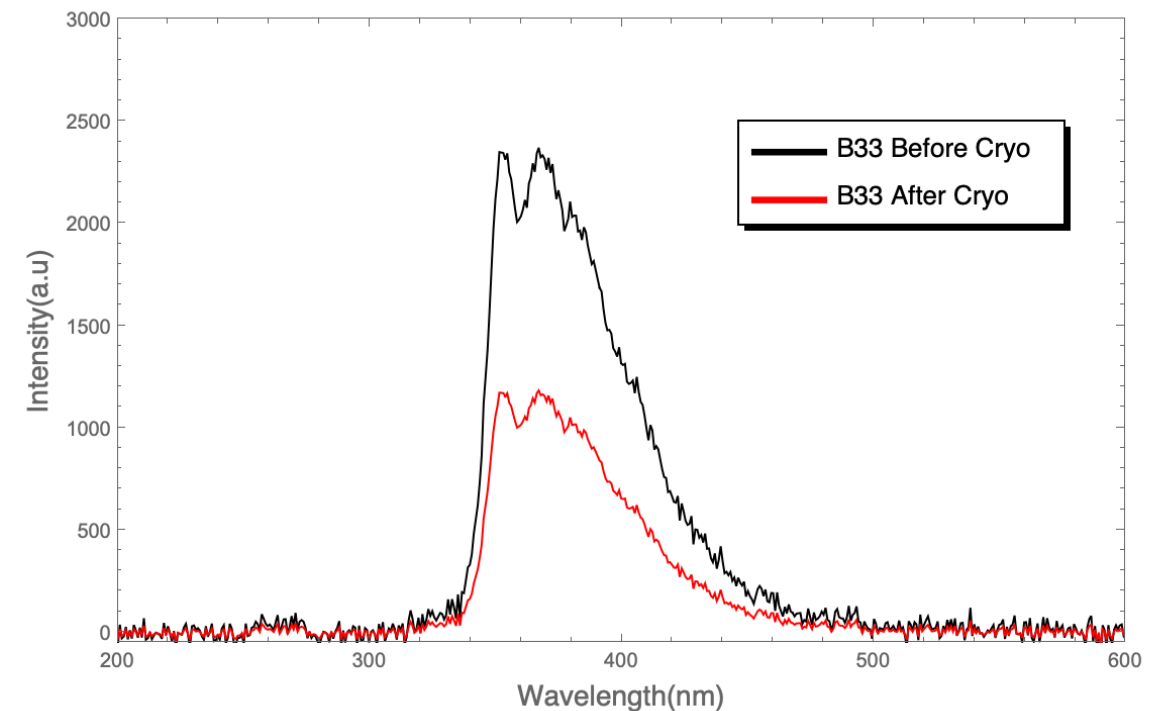
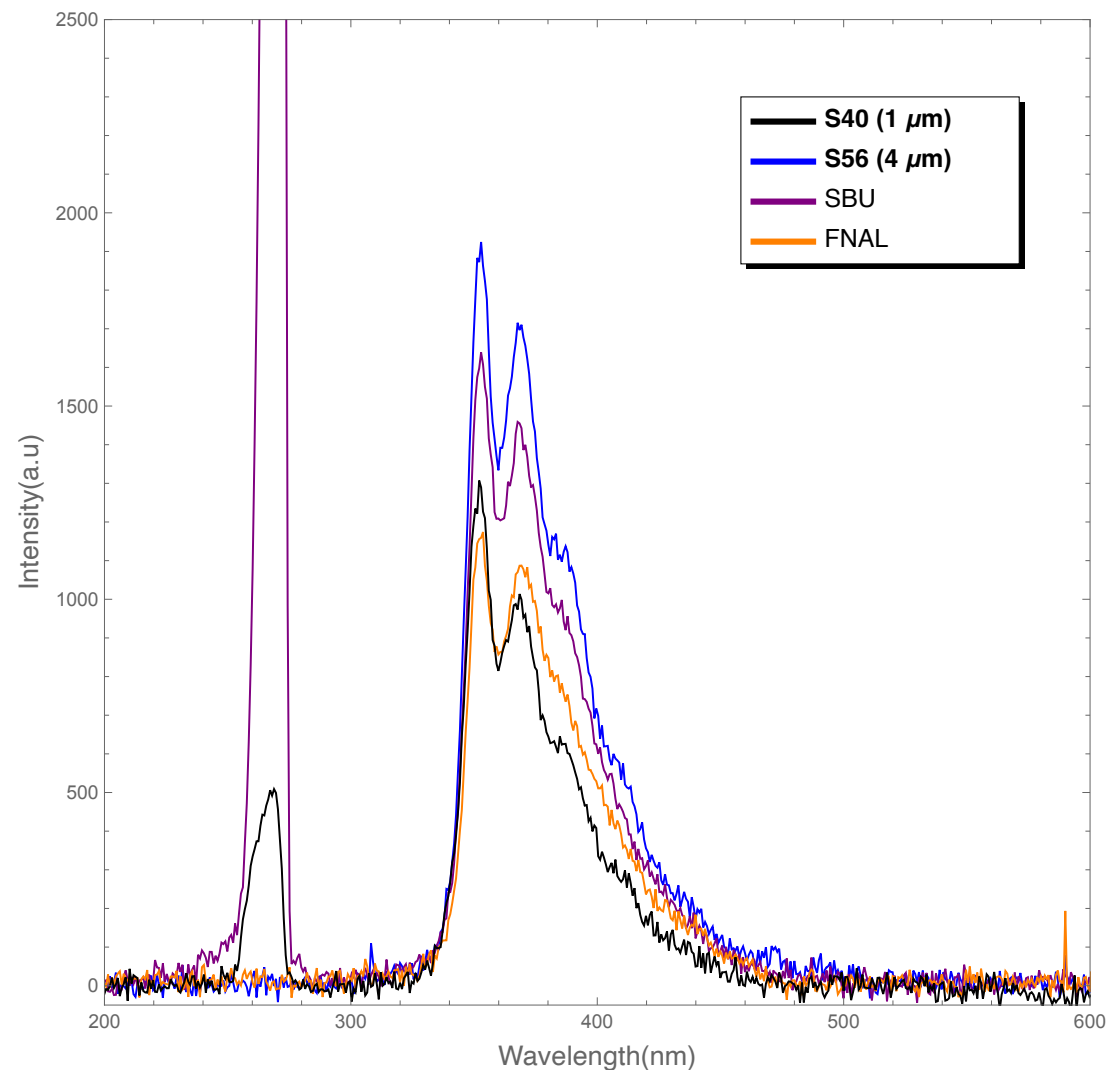
Sample data summary

- The summary of all spectra and surface conditions made
- Available on BNLI docdb #384
- https://www.phy.bnl.gov/bnlif/docdb/0003/000384/001/3rd_pTP_summary.pdf



Paper updates

- Fig 6 and Fig 7 updated with the 3rd batch data
- Statement about the 266nm peak added
- Revising the text for the changes



Cryogenic Run preparation

- We plan to conduct a cryogenic operation before the end of this year
- The goals are
 - Demonstrate the 260L system is operational
 - Repeat the previous cryogenic test on the pTP samples. The results of the coating condition changes dominated by the moisture condensation on the filters
 - The running length of this operation is 2 weeks with low fill of the main dewar
- Plan for this week
 - Control PC needs to be replaced, the new desktop was just received from ITD
 - Installing LabVIEW and transferring the control program
 - Crane operation training
 - Renewing my trainings and just found the evaluator for the field practice
 - LN2 supply
 - Coordinating with CE test to secure 2x 50 Psi dewars for the cryogenic operation
 - Resolve the room temperature issue in high bay
 - In progress
 - Disconnecting the plumbing to be ready for moving the top flange to the assembly stand