

260-L LAr System Progress Report

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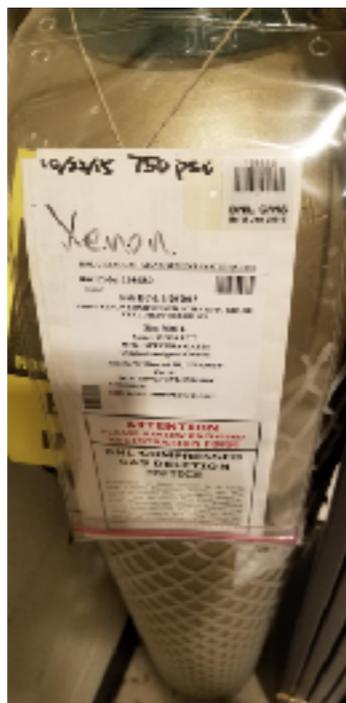
Lab Safety and Space Management

- A serious safety accident occurred at FNAL
 - Hand-on work stopped for a week until tomorrow
 - Please read the updates from FNAL director and pay attention the lab safety
- I'm assigned to a new safety role as **Electrically Competent Person (ECP)**
 - It is for the better compliance of NEC/NFPA starting in 2024
 - Training will be held on June 20th
- **Safety review for Xenon extraction for PIONEER test**
 - Invited Mike Gaffney for a lab visit to discuss the batch transfer test
 - It will be considered as compressed gas handling, no full cryogenic safety review needed
 - Need to use a cryogenic compatible cylinder with a DOT certificate
 - Need control the volume of LXe in the cylinder < 60%
 - The equipment and process need to be reviewed, controlled (documented) and verbatim compliance is required for trans filling of cylinders.
 - Document at [BNLIF-doc-339](#)
 - Talked to Achim about the safety management
 - Given it is a one-time operation, no full ESR is needed. It can be done with a Work Permit

LXe Collection for PIONEER Test

▸ LXe for PIONEER test at PSI

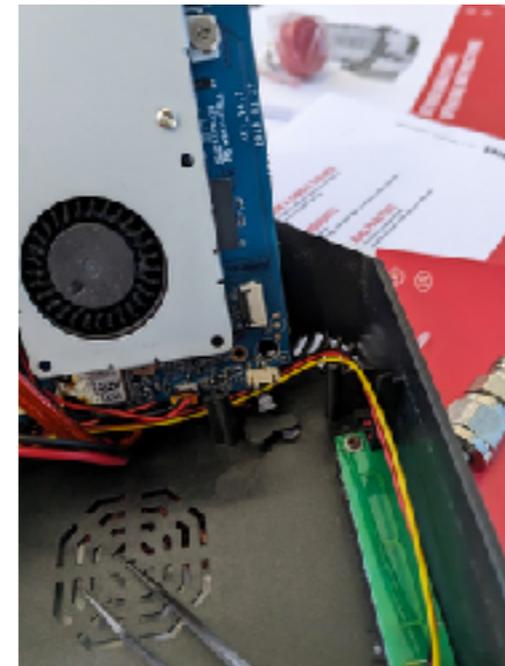
- The total LXe needed is ~ 100 L
- Brookhaven promised ~ 20 L, the total estimated amount from the 14x Xe-1001 gamma detectors
- Accidentally found a Xenon gas cylinder under my name during the recent inventory check, with ~1 L LXe
- Additional Xe resource
 - Thomas has ~13 L in his lab
 - Edward O'Brien with a full-cylinder Xe, amount unknown, est. ~10-15L LXe
 - Hanguo (Princeton) gave a cylinder of Xe back to Alvine Kamada(UCLA), ~10L LXe



260-L System 2nd purity run

▶ Activation of the inline filter

- The activation started last Friday
- The heating process was interrupted due to the control mini PC crash
 - Showing BIOS error with the indicator
 - After consulting the manufacturer. It was fixed now after full disassembly with BIOS reset
- To avoid the occurrence of such incidents again
 - A mocking heating process run for over 24 hours since yesterday, pretty stable
 - Ordering new Mini PC for replacement
- Expected to restart the activation process tomorrow morning
 - Expected to finish with 48 hours



Procurements and Upgrading

- Leak detector delivered
 - The leak detector just arrived today
 - Mounted to the mobile cart, running initial test pumping on itself first
 - No BNL property tag found on it, contacting property rep.
- Part for future measurement
 - Flange ordered for accommodating feedthrus

