

LAr R&D Progress Report

Yichen, Jay, Sergey, Steve

1/16/24



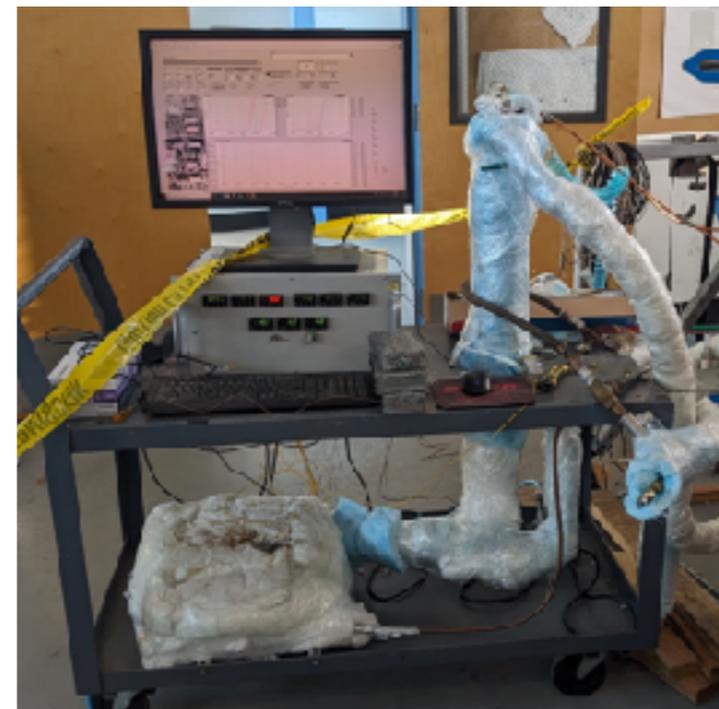
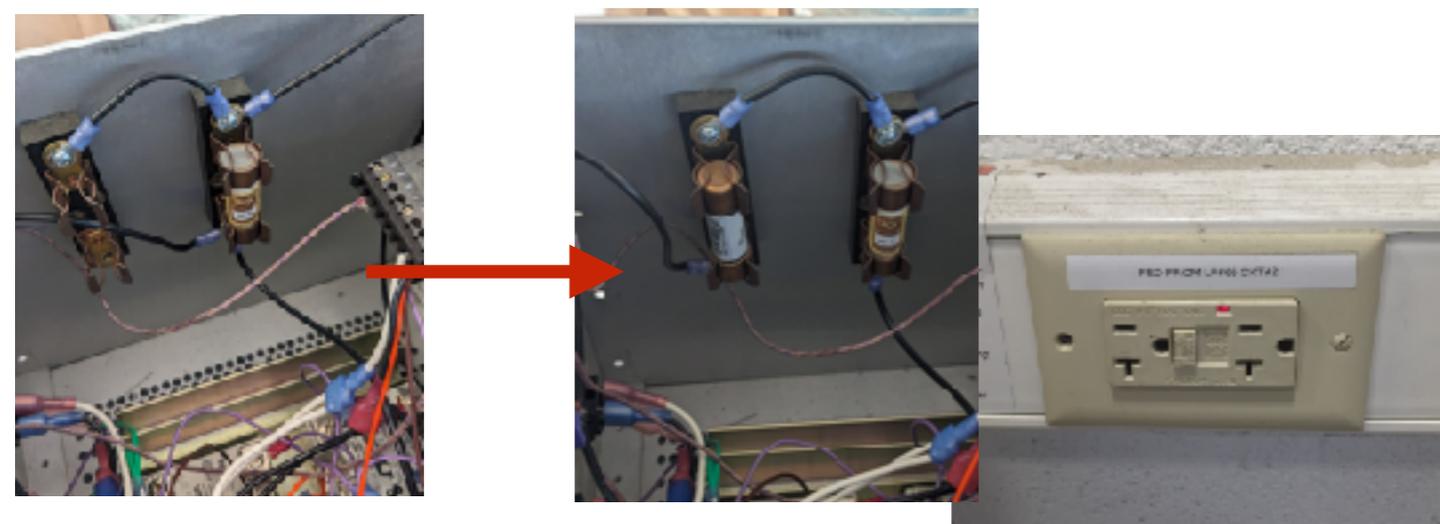
Lab Safety and Space Management

- COVID-19 hospital admissions level at Suffolk County: HIGH, hospitalization 100k in the past week: 24.8
 - Face mask is again REQUIRED onsite at BNL
- Slippery conditions outdoor
 - I shovel the entrance to the highbay lab with ice melter applied
 - Please be careful when walking outside
 - No roof leak was observed this time
- LN2 plumbing construction
 - The vendor provided the quote for the site survey to generate the engineering drawing for the fabrication
 - In progress of making arrangement for the vendor's visit with MPO



Preparation for the next purity run

- Inline filter activation
 - Problems found at the beginning of the activation with tripping AC power outlet
 - The controller and heater were powered from a GFCI wall outlet with a long extension cord
 - The total power of the heating tapes of 1455W are below the power limit of the outlet
 - The GFCI outlet randomly trips even 5-60 mins
 - I measured the grounding of the controller/heater, shows no grounding fault
 - All the accessible 110V AC outlets in highbay were occupied
 - The temporary solution is to get the power across the door to the corner room with protection
 - The activations finished in ~10 hrs



Preparation for the next purity run

- On-system purifier activation
 - The controller was brought over to the 260-L system to conduct the activation
 - With sufficient length reserved on the sensor and heaters, activation can be done without interrupting the pumping
 - The activation was completed in ~11 hrs yesterday, the purifier cylinder is still cooling down
 - Setting up the plumbing for LAr fill

