LArFCS Progress Report

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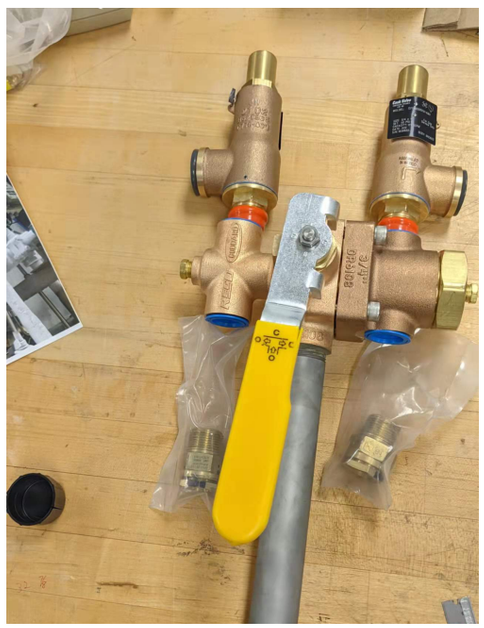
1/25/22

Lab Safety

- **ESH Safety inspection of area L1**
  - Routine inspection similar to previous ones
  - All 1st floor and Highbay will be inspected on Tuesday Feb.1st @1:30pm
  - Shanshan, Eagle and I will be onsite attending the inspection
  - We did well in the previous inspections so far
  - I will make the lab is well prepared for the inspection

6000 gallon LN2 tank comissioning

- **6000 gallon LN2 tank preparation**
  - Advised by Airgas tech to modify the pressure relief devices before initial cooling
  - The new pressure relief devices delivered today
  - Contacted RHIC cryogenic team leader Andy for installation
  - I was just advised by Mike Gaffney and confirmed by Andy this can be done by plumbers, no need cryo involved
  - Checking if it is a plumbing work can be done by ourselves



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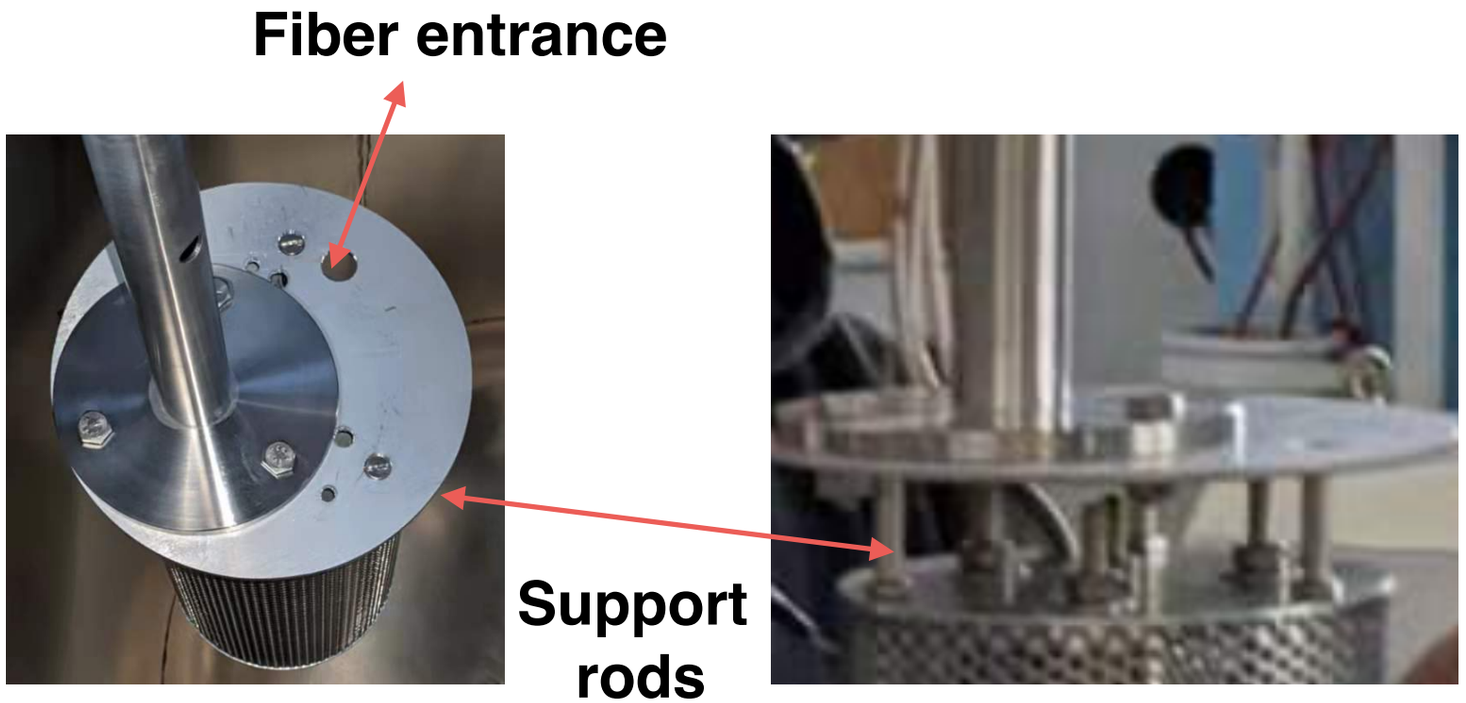
- **PrM stack installation to the top flange**
  - An adapter plate machined to mount the PrM stack
  - Adapter plated mounted to the original PrM adapter
  - An off-center configuration used to maintain clearance
  - 3x SS spacer rods mounted on the field cage rod to ensure rigidity and clearance to the PEEK rods



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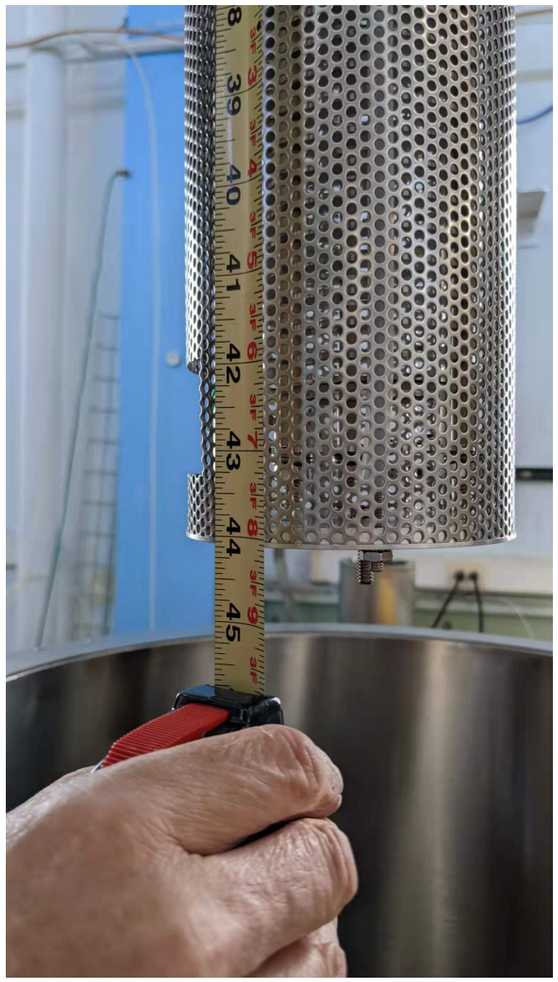
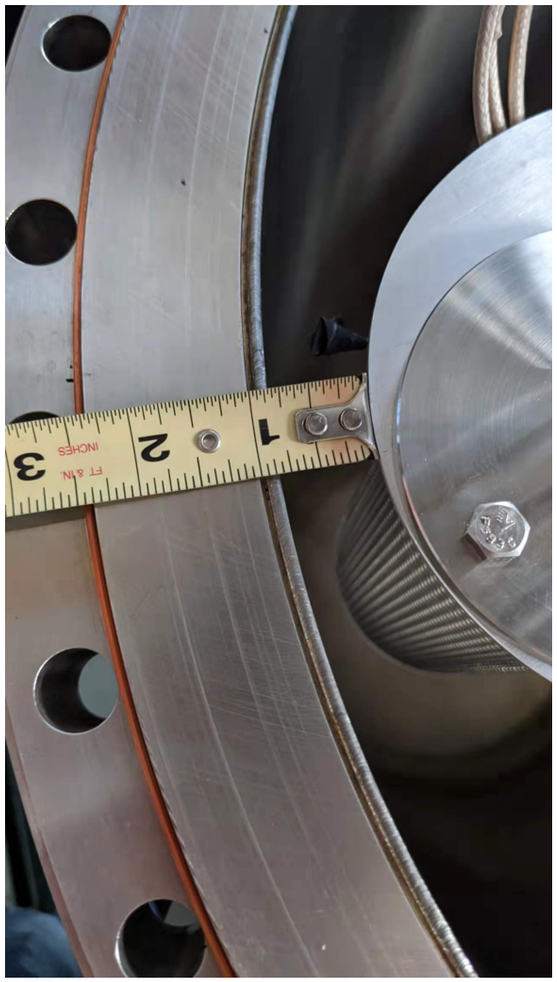
- **PrM mechanical assembly test**
  - The PrM is planned to bottom of the dewar
  - The distance showing on the model is < 1 inch
  - Conducting an assembly to confirm the clearance to the wall and find the optimal positioning





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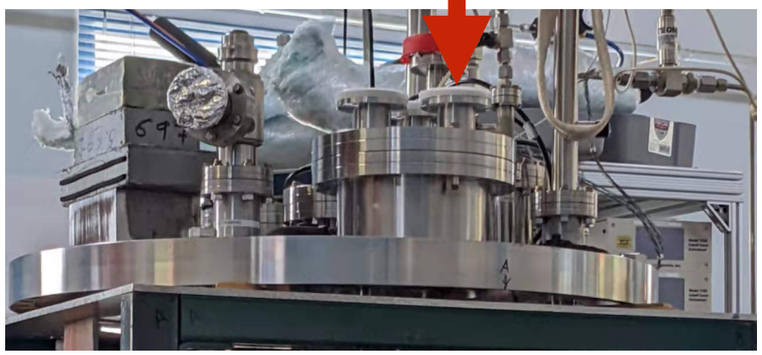
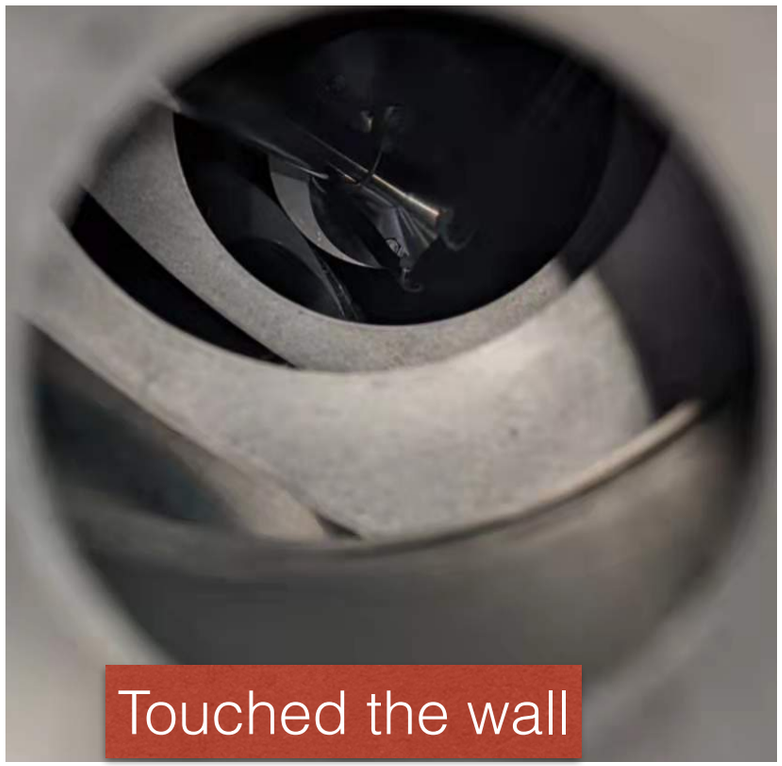
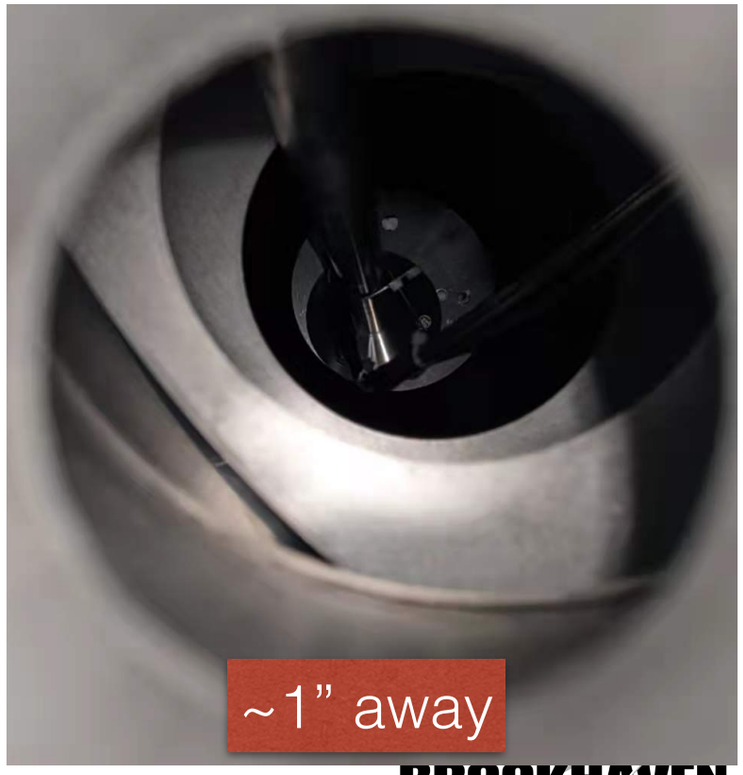
- **PrM mechanical assembly test**
  - View from the top sub-flange
  - Stack position can be adjusted by rotating the 8” flange
  - The bottom clearance validate
  - Optimal position found







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- **PrM on flange bench test**
  - A mobile crate hosting NIM module will be used for the PrM
  - Light source is planned to install on the same crate
  - Sufficient distance flexibility with HV/signal cable and fiber