

# LArFCS Cryogenic System Progress

Yichen, Sergey

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# 6000 gallon LN2 re-commissioning

## ► Initial Cooling-down of the tank

- The strongly recommended pressure relief device manifold on order
  - 3-way valves and relief valves in-stock, burst disk on factory order
  - Burst pressure 112.5 psi, lower than more recent tank
  - The lead time of burst disk is expected to 6-8 weeks
- Inquired for initial cooling-down with lab safety with current pressure relief device
- CAD cryogenic team will install the new pressure relief manifold once delivered
- Mike Gaffney checked the refurbished plumbing and valves on the tank
  - Need temporary labels on the valves matching the P&ID chart
  - Tried to operate the valves during cool-down
- Approval received from the lab safety to cool down the tank, documented: [BNLIF docdb#331-v1](#)



# 6000 gallon LN2 re-commissioning

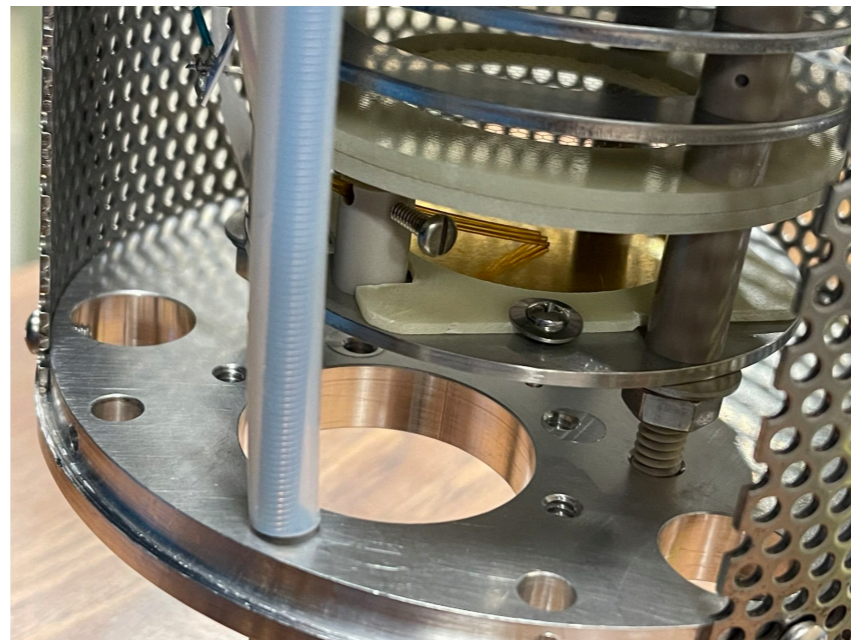
## ▶ **Arrangement for the cool down**

- The first purging and initial cool down requires a separate PO
  - The process is expected to take several hours
  - The Airgas will do the purging and install a level gauge with remote monitoring
  - Contacting Airgas for the quote, estimated cost ~\$1000
- **Consulted with Cheryl from procurement and Bill from Mag. Div.**
  - An open delivery order can be set up for such tank
  - The delivery can be arranged with 2 options:
    - Filling point at certain level monitoring by the vendor from remote (Auto refill)
    - On demand delivery by request(By request)
  - The tricky part is the estimated amount of contract
    - The annual total amount < \$25k has to be sent out for bidding
    - If the total amount is <\$25k, the contract can be given to Airgas w/o bidding
    - Getting a total estimation with the cold electronics team.

# LArFCS Construction

## ► PrM progress at UCI

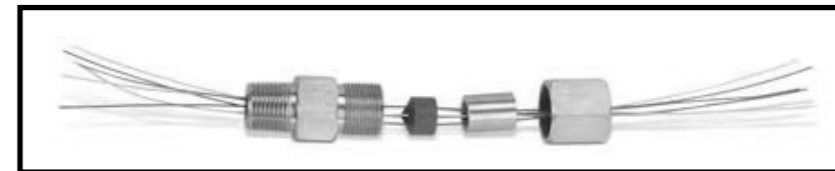
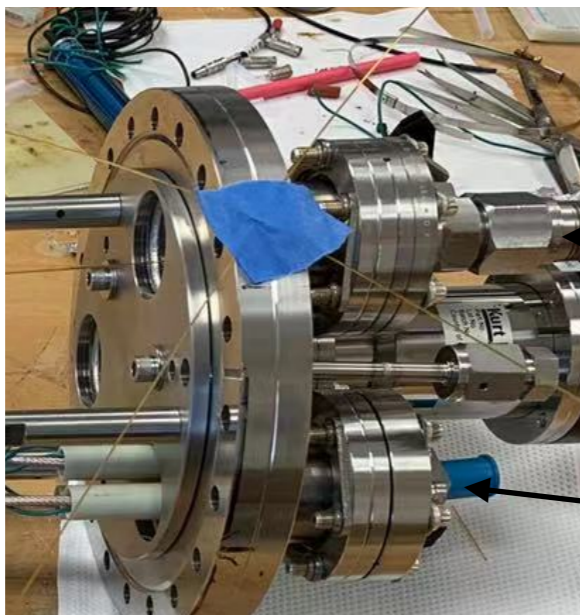
- Jianming and I agreed the construction is complete at his side, ready to ship back to us
  - One last thing is to replace the photocathode on our PrM stack
- PrM ran into problem last week, lost all the signals
  - Still looking for the problem
  - No visual damage on the hardware parts
  - It is most likely due to electronics



# LArFCS Construction

## ► PrM Preparation

- Hamamatsu Xenon Lamp on order
- UCI can provide a new HV+Signal readout flange
- The fiber feedthrough and fibers are on order
- Plumbing for the activation and sampling



HV+Signal