

# LArFCS Cryogenic System Progress

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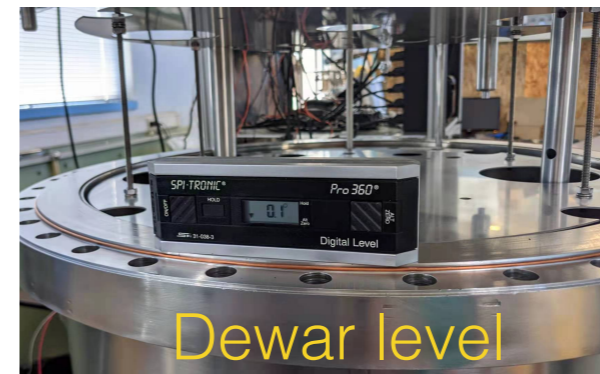
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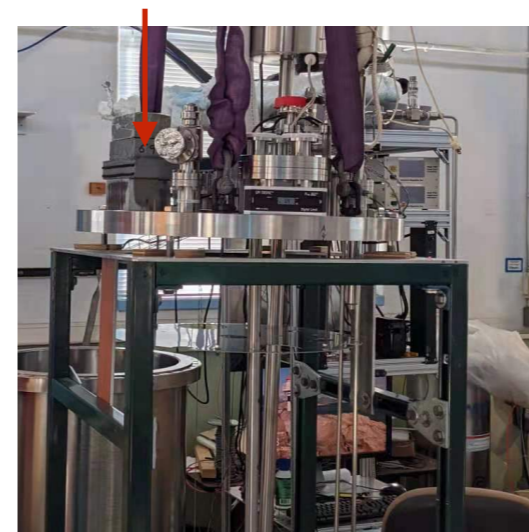
# LArFCS Construction

## ▸ LArFCS PrM mounting structure installation test

- Crane operation conducted
- un-leveled main flange created problems in installation
  - The plate at the bottom touching the dewar wall
  - Leveling is more important with PrM stack
- Lead brick counter weight added to adjust the top flange leveling
  - Top flange leveling adjusted to be parallel to the dewar
  - No more contact to the dewar wall



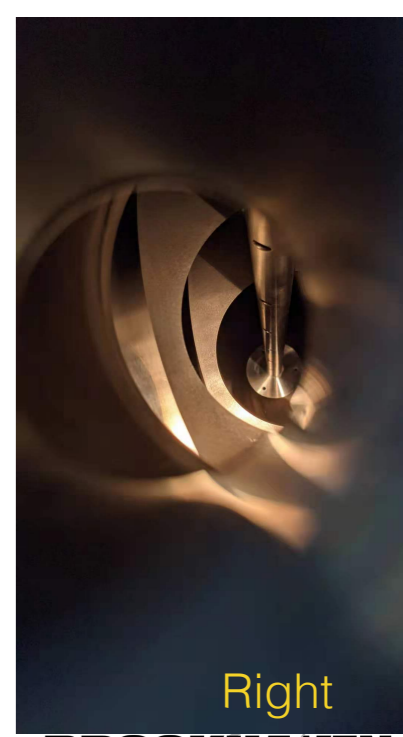
Lead brick added



# LArFCS Construction

## ▶ LArFCS PrM mounting structure installation test

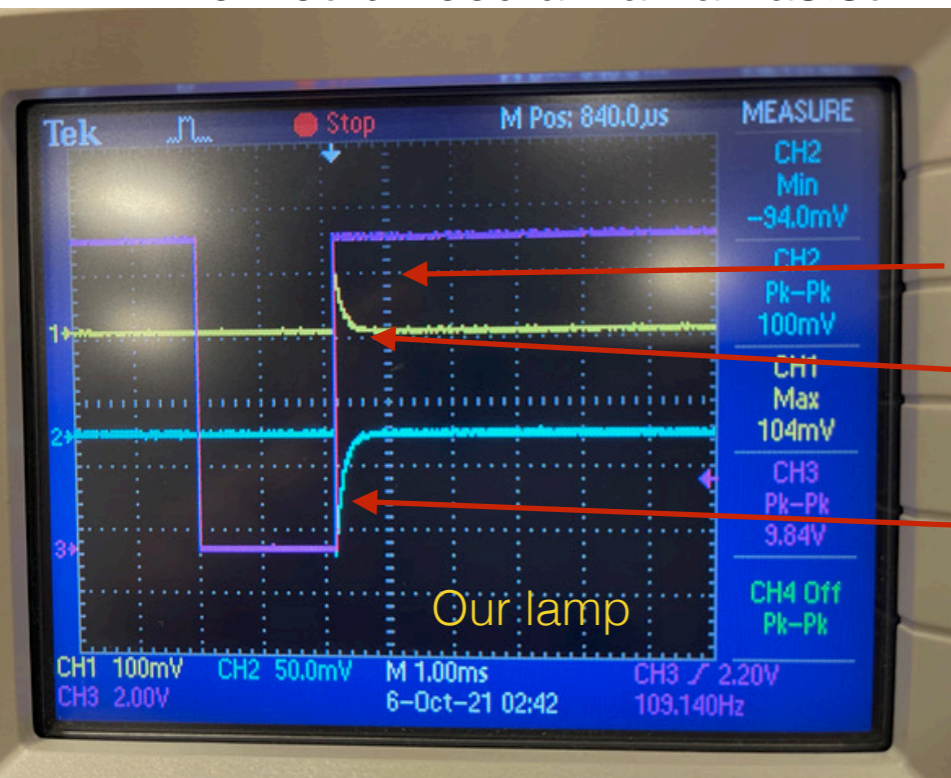
- 3 orientations tried
  - Middle position is too close to the wall
  - Left/Right position is okay
  - Baffle plate has interference with the tube->need slight machining
- The mounting rod for the PrM perpendicularity is good



# LArFCS Construction

## ► Our PrM test in vacuum with Our Xenon lamp

- Our Xenon lamp is test with our PrM in vacuum
  - The fiber is mounted with a house-made plug to the output port
  - Position adjusted for the maximum signal amplitude
- Amplitude is much lower than Hamamatsu lamp
  - Hmts. signal  $\sim 1.5$  V, Our signal  $\sim 100$  mV
  - Signal amplitude in LAr with our Xenon will be invisible
  - Hmts. power=60W, Our lamp=5W
- Fiber number is not very critical and can hardly be increased for our lamp
- We would need a Hamamatsu Xe lamp, now the price is reduced by 1/2



Xenon Lamp trigger

Anode

Cathode

