

# MICROBoONE

## INSERTION INTO THE CRYOSTAT AND CABLE INSTALLATION

WESLEY KETCHUM (LANL)

ALL EXPERIMENTERS' MEETING

# PMT SYSTEM

## Installed!

- Testing of PMTs and LED calibration system done
- TPB plates attached
- Ready for the TPC to be inserted



# TPC SYSTEM

## Final preparation

- Wire carrier cover strip
- “Smooshed” elbows
- Field cage tubes
- Electronics checkout

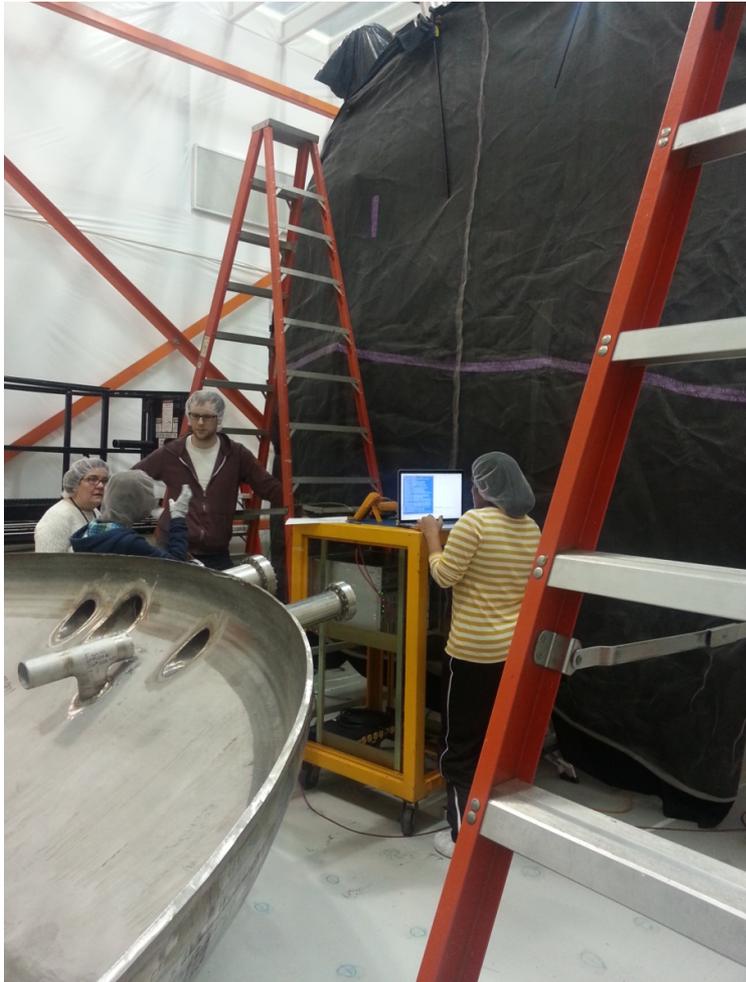


# TPC SYSTEM

**Installed in cryostat!**



# POST-INSERTION ACTIVITIES



## Low-voltage tests

- Verified proper delivery of voltage from cathode to anode
- Watched for sparks/ unexpected discharges

**All good!**

# POST-INSERTION ACTIVITIES

## Feedthrough installation

- Installed all TPC feedthroughs
- Attached cold cables
- Verified all electronics survived the insertion
- Took (better) measurements of response
  - Much-reduced noise!

**All good!**



# POST-INSERTION ACTIVITIES

## **Metrology**

- Measurements of TPC and PMT racks relative to cryostat

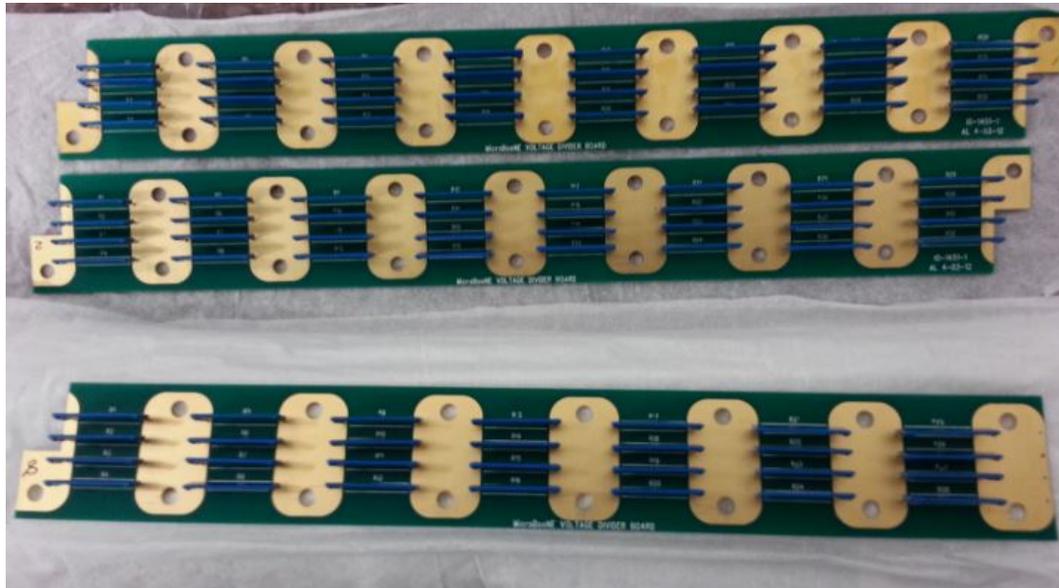
## **Welding**

- Work underway to prepare for cryostat move
- End-cap welding sometime in February

# POST-INSERTION ACTIVITIES

## Resistor chain design

- Installed resistors may fail in certain HV discharge scenarios
- Number of solutions identified
- Will weld end-cap once final decision reached



**THANK YOU**