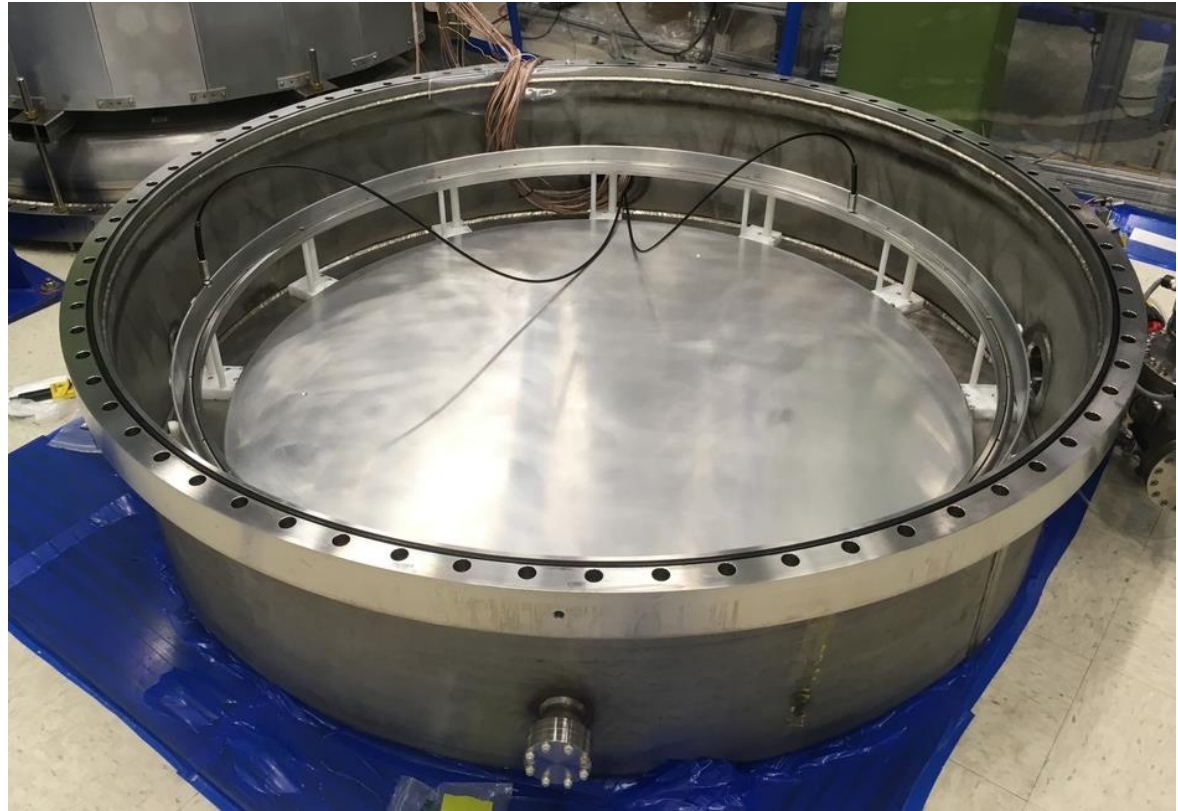


# Phase 2: The Early Days

Shaun Alsum

# Test Configuration

- Cathode ring in place with field hoop surrounding it. No grid.
- Reflector plate at the bottom grounded, both field hoop and ring connected to HV.

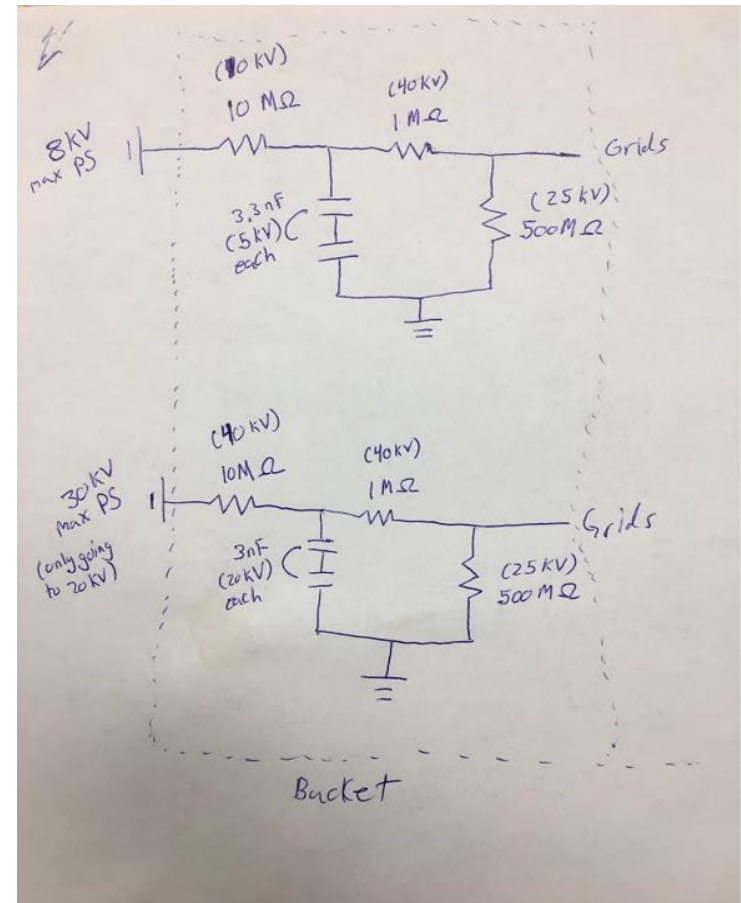


# Initial close up

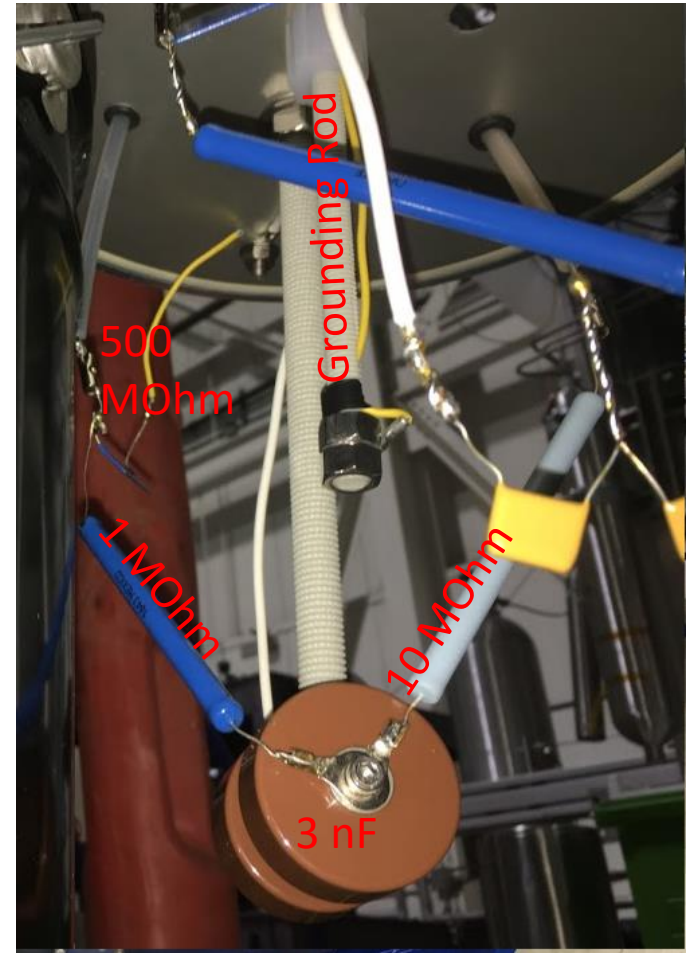
- All PMTs and Cameras pin-out and measure the correct resistances.
- PMTs all work with oscilloscope except PMT 17, which when biased up reads too little current. Must have somehow disconnected.
- Sealed and leak-checked. Leak of  $\sim 10^{-6}$  torr\*L/s on the north end deemed acceptable.

# Filter Box (Pail)

- Two low-pass filters. One rated to 25 kV (bottom), the other to 8 kV (top).
- 500 M $\Omega$  resistor is to allow discharge of the capacitors to ground upon power-off.



# Actual thing



# First Bias

- At vacuum, biased the ring to -22 kV. Then back down.
- Biased the hoop to 8 kV, then the ring back to -22 kV.
- No breakdown. Both cables and filter seem to be working!
- 30 kV glassman supply still manual, however, not yet connected to ignition.

# DAQ

- Switched over the first 32 cables from Phase 1 and were able to activate the DAQ.
- Took data of noise at vacuum to pick PMT thresholds.