

EHN1 status report

ProtoDUNE-SP ITI Meeting
April 12th, 2018

In brief

- End Wall 3 assembled and inserted in the cryostat on Monday
- APA 5 inserted in the Cold Box on Tuesday, door closed yesterday, warm tests started today. Cooldown of the box foreseen for Monday afternoon
- To allow for Cold Box tests and cryostat cables installation at the same time, we had to remove the cryostat from building ground and put on detector ground. Found couple of shorts and fixed them. Cryostat will remain on detector ground during the tests
- APA 6 crate opened this week, yoke tested yesterday and yoke + lifting fixtures installed between yesterday and today. Ready to be moved inside the Clean Room tomorrow morning
- PD bars for APA 6 @ CERN and being tested. Part of CE boxes for APA 6 landing in Geneva tomorrow morning, @ CERN next week. The rest is coming with Ken next Monday. Missing CR boards for APA 6 also on their way to CERN
- SSPs for both drifts installed in the racks, with those on the beam right side powered up. Installation of fibers for PD flasher system ongoing
- Spreader bar for End Wall 4 (from Ash river) @ CERN, tested this morning. End Wall 4 panels moved to the Clean room this morning

18 days to TCO closing!

- This week
 - APA 5 Cold Box warm test
 - APA 6 insertion in the Clean Room
 - Ground plane current monitors QA tests
 - APA 6 PD installation

- April 16th → April 22nd
 - APA 6 PD and CE installation
 - APA 5 Cold Box cold test
 - End Wall 4 assembly and insertion in the cryostat

- April 23rd → April 29th
 - Complete APA 6 CE installation (if needed) and insert in the cryostat
 - Insert APA 5 in the cryostat
 - Route APA 4-6 cables out of the cryostat

APA5 test – schedule to discuss

- BNL testing until Friday for no gas HV tests
- DAQ testing from Friday-Monday with permanent DAQ firmware
- Test of frequencies injection inside the Cold Box on Monday morning (if Xavier available)
- Load the temporary BNL firmware on the WIBs ~4 hours before the cold cycle
- BNL tests during cooldown and for ~24hrs after at 180K
- Power cycle the WIBs to restore DAQ firmware when BNL tests are done
- DAQ tests until most of the way through warmup
- At 250K restore BNL firmware
- BNL testing with gas flow on for ~12 hours after warmup
- DAQ switched to new timing system firmware