

EHN1 status report

ProtoDUNE-SP ITI Meeting
February 22nd, 2018

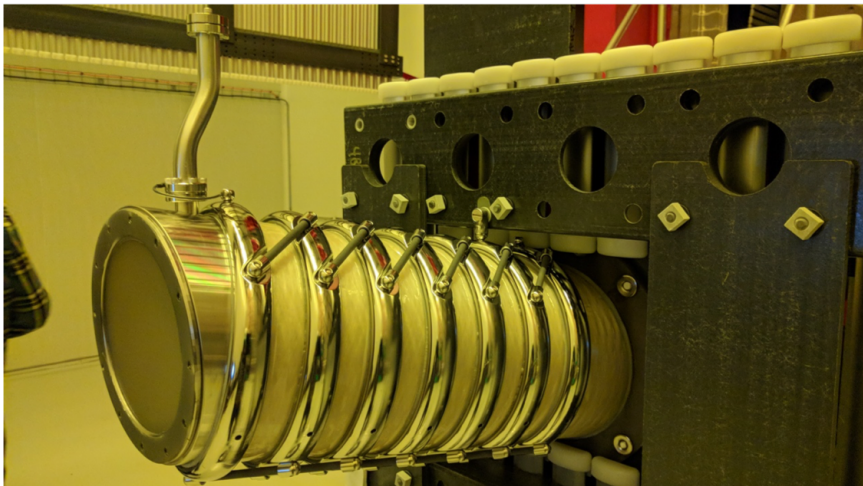
APAs' world

- APA 2 was extracted from the cryostat to remove plastic shims from the CE boxes, all boxes tested, and the APA re-inserted in the cryostat on Tuesday
- Warm cold box test of APA3: all CE boxes working, still some wireplane bias related noise on a small fraction of random wires (~10-20). Can this noise be filtered out?
- Final checkout of APA 3 (pictures, HV lines continuity check, nitrogen flushing) done on Wednesday morning. Wednesday afternoon APA 3 pushed in the cryostat: first ProtoDUNE wireplane is in the cryostat
- All three APAs are now hanging from the yoke, trolleys removed, their heights and position on the bridge beam fixed
- APA 4 arrived on Tuesday. Will be unpacked next week



Everything but APAs

- First End Wall inserted in the cryostat yesterday
- Beam Plug installed and its position on the panel surveyed
- Purge pipes welding on top of the cryostat ongoing – to be completed tomorrow
- Tee Pipes (holding CE and PD flanges) for south drift installed
- Identified false floor panels inside the cryostat to be re-shaped to allow for field cage deployment
- BU firmware re-installed on Cold Box WIBs for DAQ tests



- Scaffolding for field cages deployment identified and already available for us
- A fraction of CE boxes and PD bars for APA 4 are assembled/scan. The remaining ones are already at CERN and will be prepared for installation in the next days

Everything but APAs

- First End Wall inserted in the cryostat yesterday
- Beam pipe installed and its location on the panel curve et
- Purge pipes welding on top of the cryostat ongoing – to be completed tomorrow

WE GOT VALIDATION FROM HSE FOR ALL THE

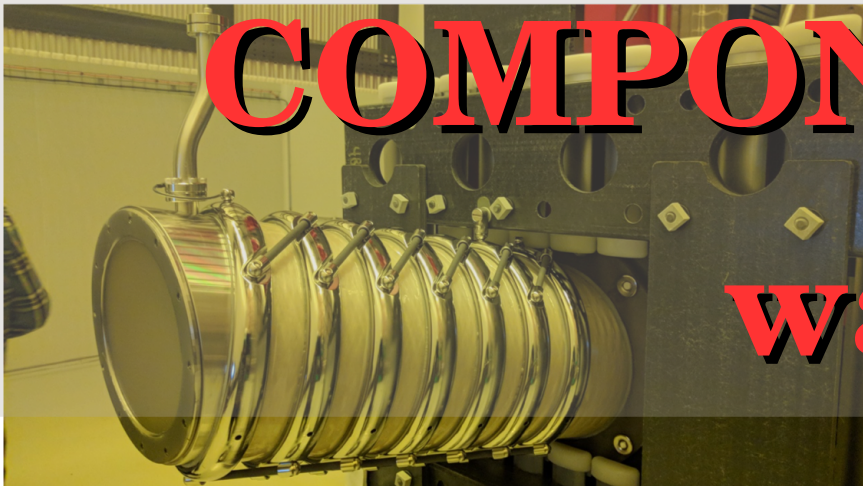
- Identified false floor panels inside the cryostat to be re-shaped to allow for field rig deployment
- BU firmware re-installed on Cold Box WIBs for DAQ tests

DETECTOR

COMPONENTS!!! (in

Stiffening for field cages deployment identified and already available for us

- A fraction of CE boxes and PD bars for (APAs) assembled/scan. The remaining ones are already at CERN and will be prepared for installation in the next days



Near future schedule

- Today/tomorrow
 - Put APA plane in position, start cabling with Ken, Manhong, Ash River crew
 - Electrical and mechanical connection of CPA plane, CPA QA tests
 - Assembly of Beam Plug end wall (tomorrow, 9:00 am)
 - False floor modification for first drift volume

- Week February 26th – March 4th
 - Move APA 4 into the Clean Room (Monday-Tuesday)
 - APA 4 wire tension measurement and PD installation
 - APA 1-3 cable routing (cold part) / work on warm part of the routing
 - CPA plane in position, QA tests
 - False floor modification for first drift volume

- Weeks March 5th – March 18th
 - APA 4 CE installation, insertion in the Cold Box (week March 5th- 11th)
 - APA 4 warm (week March 5th- 11th) and cold (week March 12th- 18th) tests
 - Field cage deployment + End Wall 3 and 4 assembly (order still to be defined)
 - False floor modification second drift volume