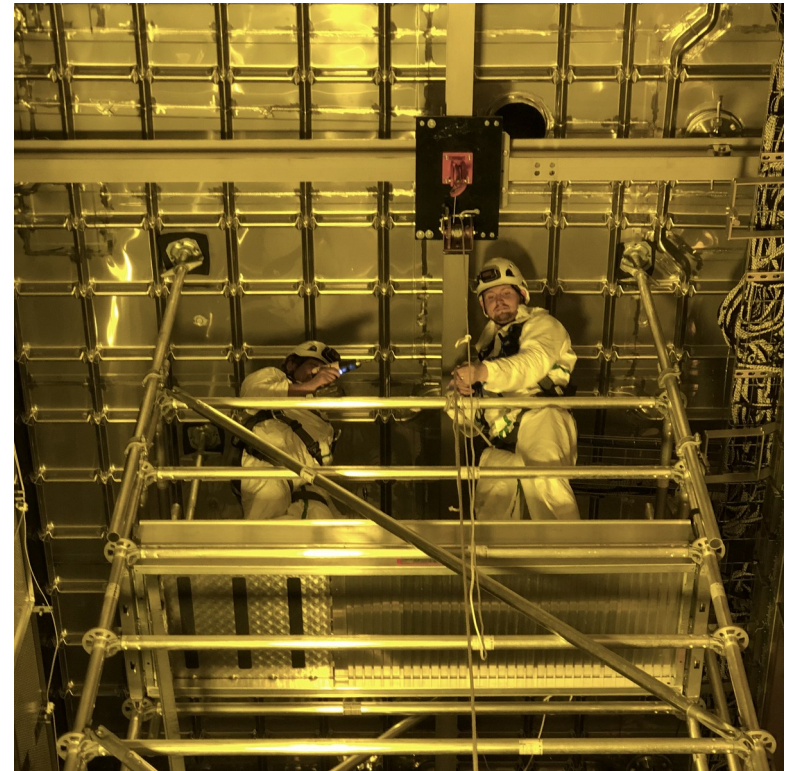
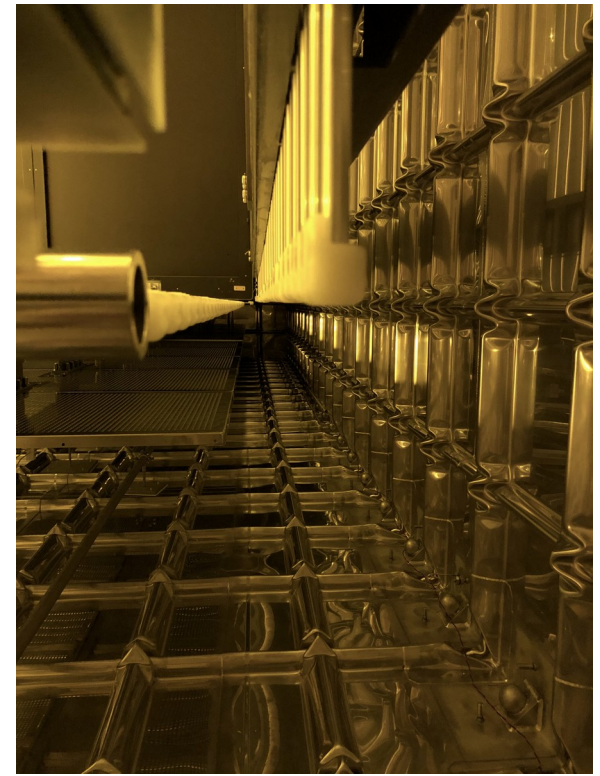


Installation: some information

ProtoDUNE-SP DAP Meeting
June 21st, 2018



21/06/2018

Current Status and next months schedule

- First field cage set (upstream one) deployed this morning! Working on mid-stream section now
- First camera (Bo camera) on upstream APA latch installed (cable to be fully routed)
- Camera lights on the upstream cryostat wall installed (cables to be routed)
- All CRT downstream modules installed as of this morning
- Still in schedule to finish installation in the cryostat by Friday next week (June 29th)
- Last general checkout before manhole sealing possible between June 29th and July 2nd (Monday)
- **July 3rd**: Reception by HSE of the cryogenic connections to the safety system. Needs HSE approval (which should arrive the same day if everything is ok) to be able to operate the system. In addition, siren test in EHN1 from 6am to 9am: no access allowed before 9am that day
- **July 4th – 5th**: purging of cryogenic pipes with cryostat off the system (i.e., no Argon going into the cryostat)
- **July 9th** (Monday): cryostat purge start. 4 weeks allocated for purge and cooldown
- **August 6th** (Monday): cryostat filling starts. 4 weeks, 40 trucks, 2/3 trucks per day
- **August 30th: cryostat is full!**

Safety measures

- The safety measures which will be implemented by CERN during the cryostat purge, cooldown and filling foresee the definition of an area around the cryostat (including the DCS racks area) to which access will be forbidden.
- Such area will be smaller during the purge and cooldown phase, will then be extended at the start of the filling procedure, and finally be reduced again after the cryostat is half-full
- **Starting from July 9th (maybe even from July 4th) access to the cryostat roof and DCS racks will be forbidden until the cryostat is full and in stable (cryogenic) condition, i.e., up until August 30th**
- The area will be delimited and violation of this rule will constitute a professional fault. Access to the area will only be granted in emergency cases, according to the following conditions:
 - the access needs to be justified (of course)
 - access time needs to be reduced to the minimum
 - Olga or Letizia will escort the people accessing
 - **the cryogenic operations will be halted during the access**

Safety measures

- The last point is the most critical one: while stopping the purging and cooldown for an amount of time has some effect on the procedure itself, stopping the filling even for just an hour will result in a loss of argon and time which will delay the whole filling procedure much more than the simple access time
- This will have an impact on our commissioning plans as well, since it will be much harder now to go and fix problems on the cryostat or DCS racks during July and August
- It also means that all the warm cables should be routed within the first week of July...
- During the summer all the doors will be modified to allow access only with a dosimeter
- From next week we should receive instruction on additional trainings to follow and procedures to obtain a permanent dosimeter
- All the people coming to CERN for only a short time (beam run shifts) and anyway for less than three months can instead apply for a temporary dosimeter