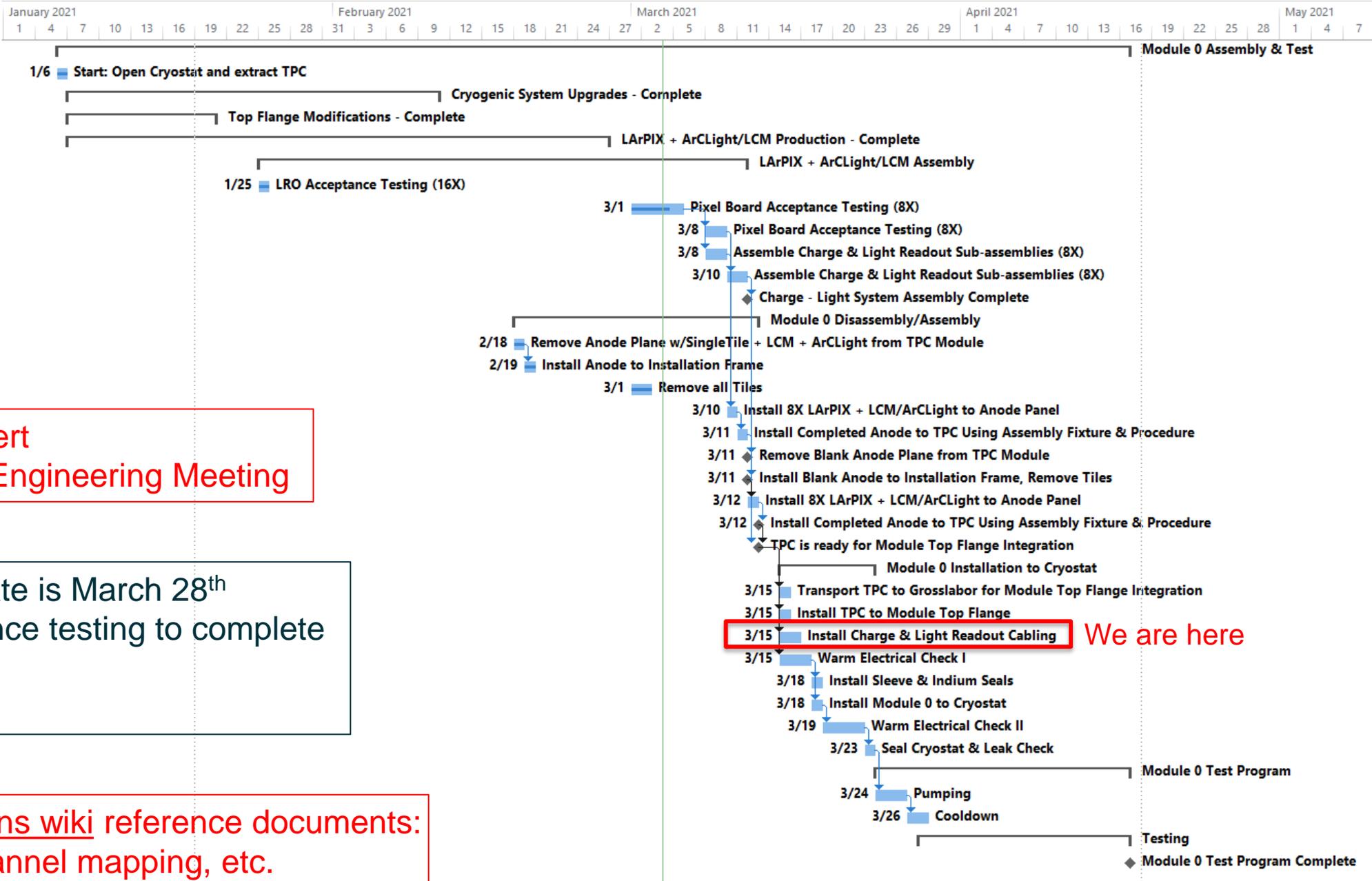


Module 0 Status

DUNE Pixel Readout Meeting
March 11, 2021

Module 0 Assembly & Test Schedule

03/04/2021



Slide from A. Lambert
3/5/21 ArgonCube Engineering Meeting

- Projected test date is March 28th
- Charge acceptance testing to complete next week

See [ND LAr Test Runs wiki](#) reference documents: run plan, run list, channel mapping, etc.

Charge Readout Acceptance Testing

16 anode tiles, cables, PACMAN v1rev3 and associated assemblies arrived at Bern Monday 3/1/21



- 12 of 16 tiles reliably self trigger with nominal rate ~ 5 kHz
- 4 tiles with intermittent high rate ~ 70 kHz \rightarrow these tiles were moved to instrument the bottom two anode positions in both TPCs
- Understand and resolve before LAr operation at the risk of running with 75% of charge readout

8-tile warm enclosure with custom G10 mounting sheets & operation length cables (ranging from 1.5 m to 2.25 m)



PCB feedthrough (inner-side)

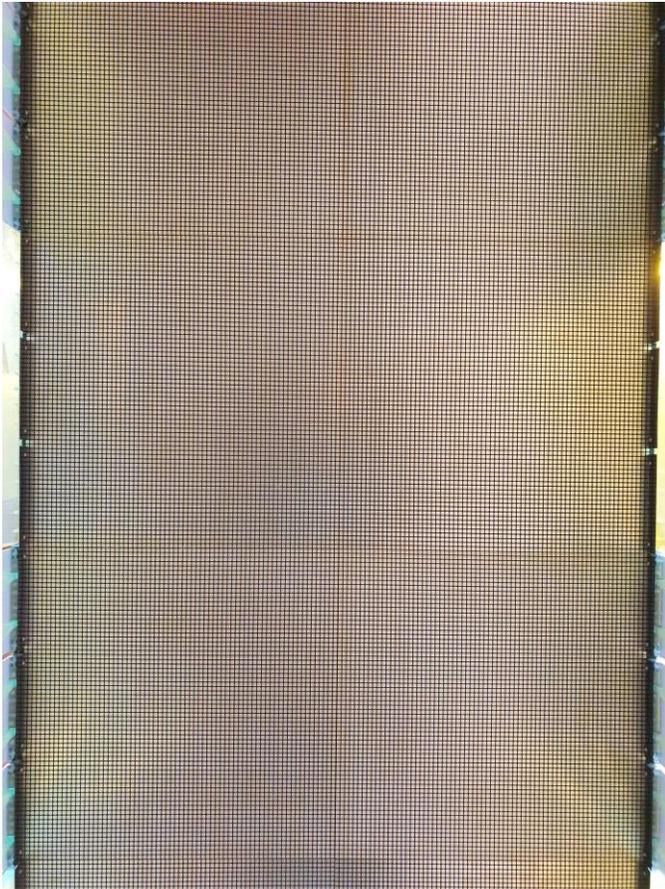
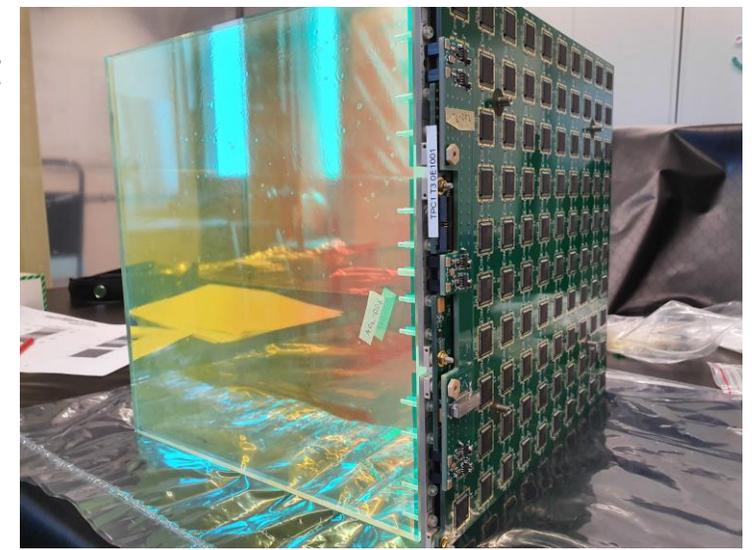


PACMAN assembly (outer-side)

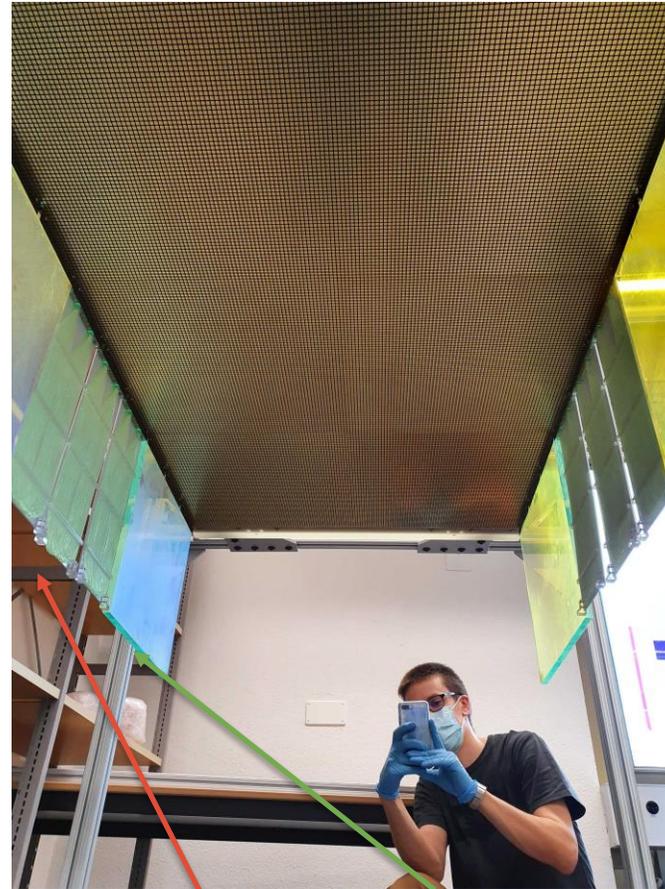
First Anode Install

Sunday 3/7/21

Single charge/light detector elements

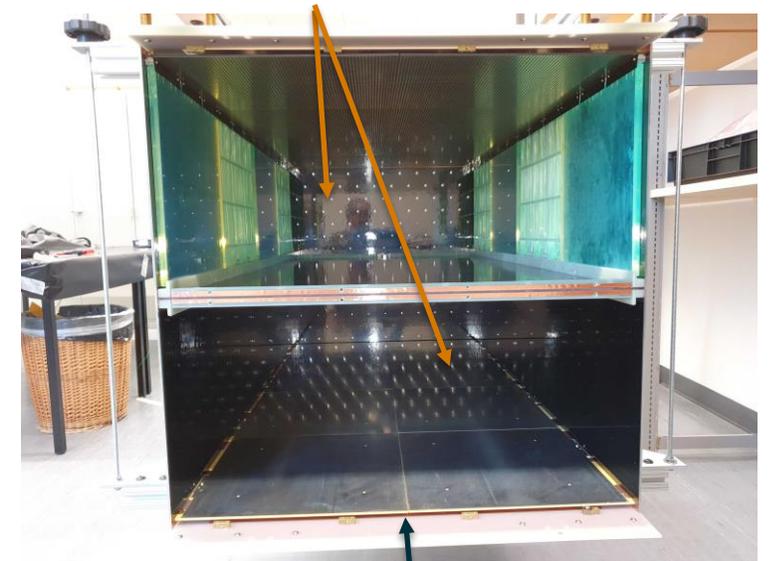


8 tiles, 39.2k channels



8 interleaved ArCLight and LCM light traps

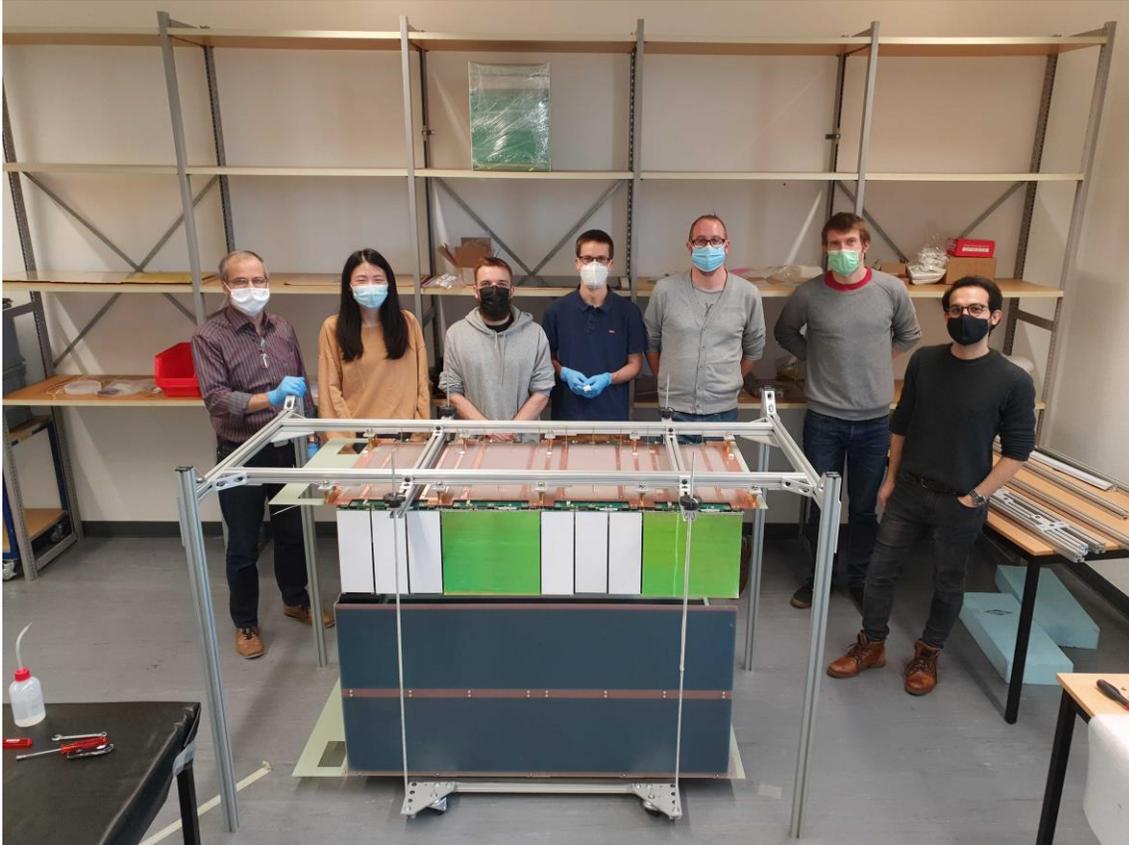
Perforated bottom panels (top not shown)



Laminated high-resistivity polyamide film on G10 panels for low-profile field structures⁴

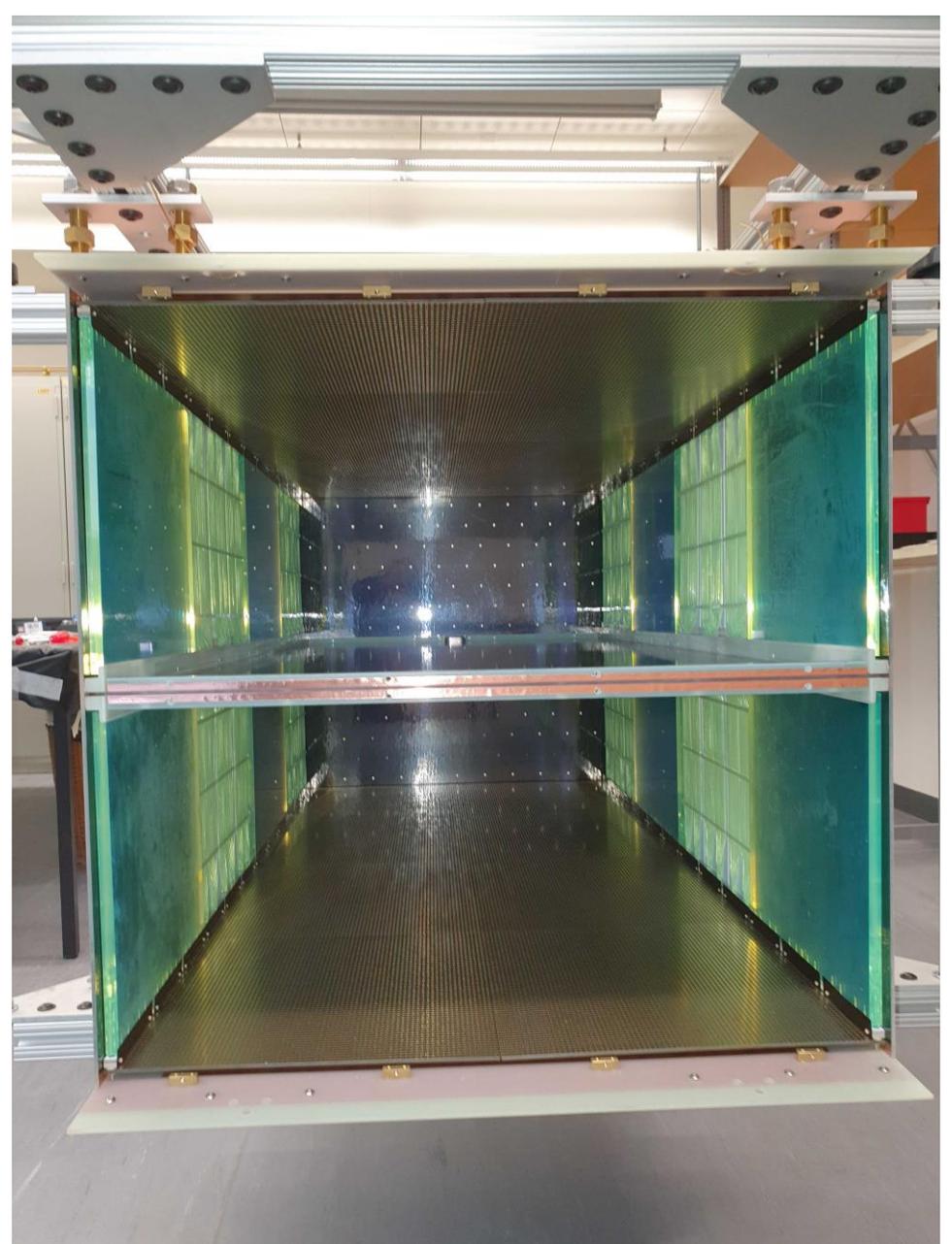
Second Anode Install

Wednesday 3/10/21



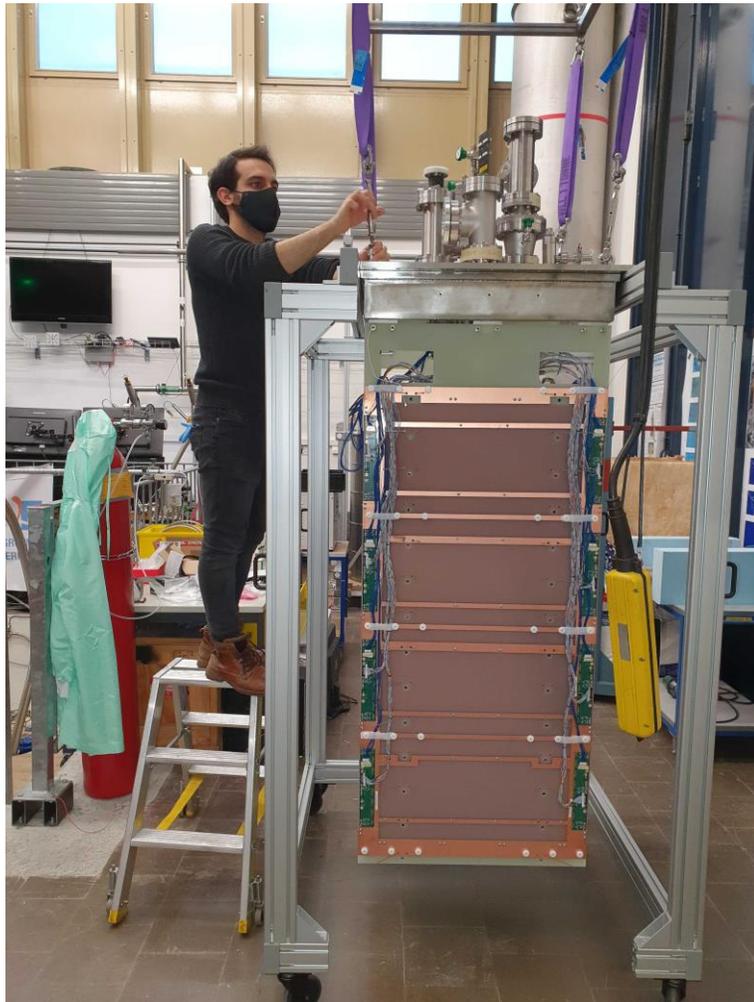
Many thanks to the tireless work from the on-site Bern team!!

Special thanks to Roman & Igor

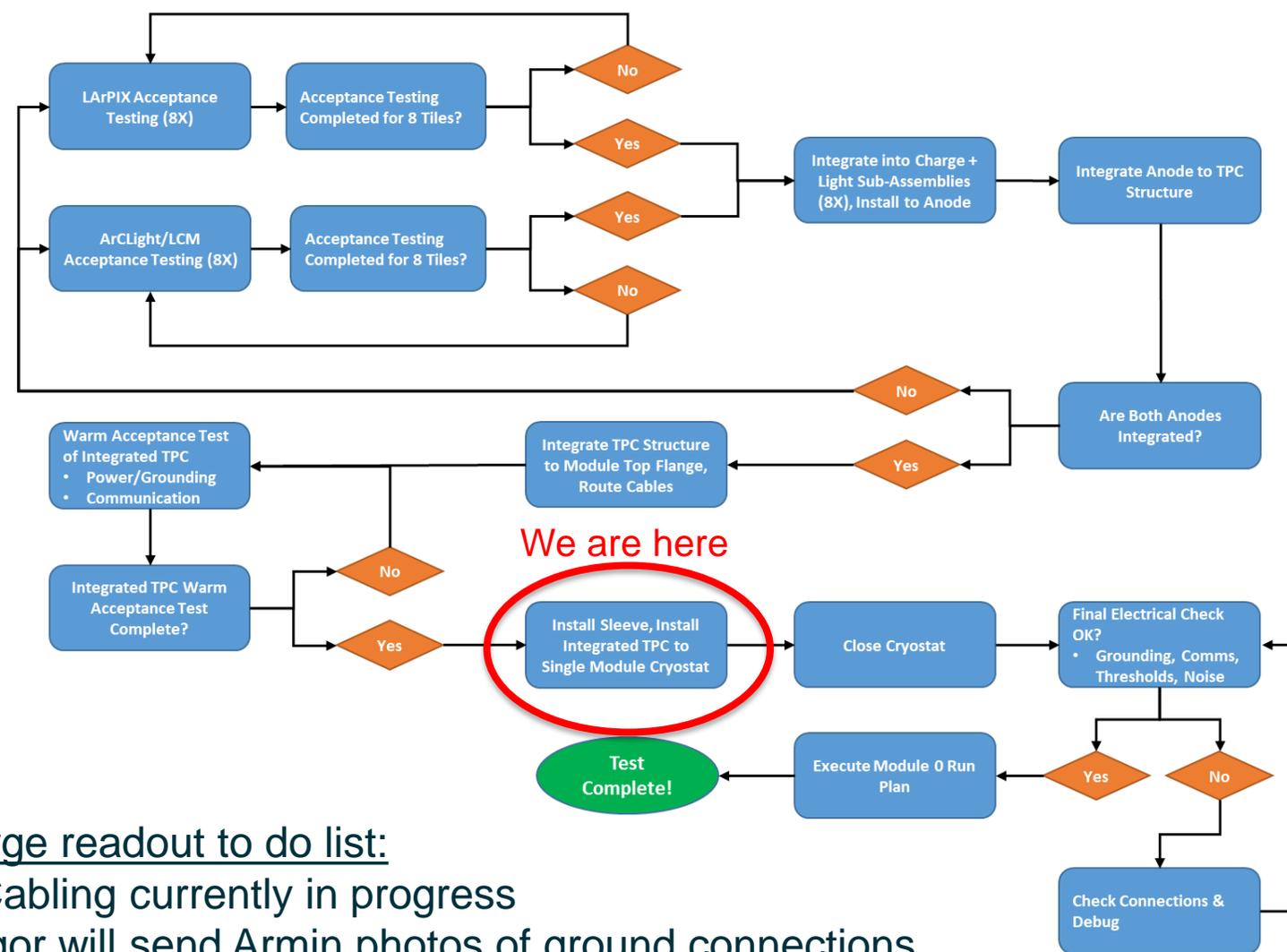


Fully-instrumented single module

Approaching the final electrical checkout



Today 3/11/21



Charge readout to do list:

- (1) Cabling currently in progress
- (2) Igor will send Armin photos of ground connections
- (3) With Armin's approval, close cryostat & perform final electrical checkout (tonight or tomorrow) → *pedestal & self trigger measurements as each electrical TPC connection is made*
- (4) With approval from Dan/Armin, seal cryostat & initiate run plan

LAr cooldown tentatively scheduled for Monday 3/22/21