

IFIC
12/07/2017

next steps

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IFIC - (CSIC & Univ. Valencia)

Next steps

from 6/06/2017

NEW

june

- Start calibration at pressure with LN2

july

- Start calibration with LAr

- Cable arrives to IFIC
- Cut cables and sold cables to sensors

august

- Installation of cable/sensor supports on pipes
- Installation of cryostat membrane sensors and cables (done by CERN)
- Calibration with final cables at IFIC

september

- Calibration with final readout at CERN

- Installation of cables and sensors on pipes

- Start calibration at pressure with LN2 (old vessel)
- Start calibration at pressure with LN2 (new vessel)
- Start calibration with LAr
- Cable arrives to IFIC
- Cut cables and sold cables to sensors (to sensor's supports)

- Installation of cable/sensor supports on pipes
- Installation of cryostat membrane sensors and cables (CERN)
- Calibration with final cables at IFIC

- Calibration with final readout at CERN (??????)

- Installation sensors on pipes

Next actions

- We need the sensor/cable supports by mid august
 - We should start prototyping
- We need the final calibration system by mid august

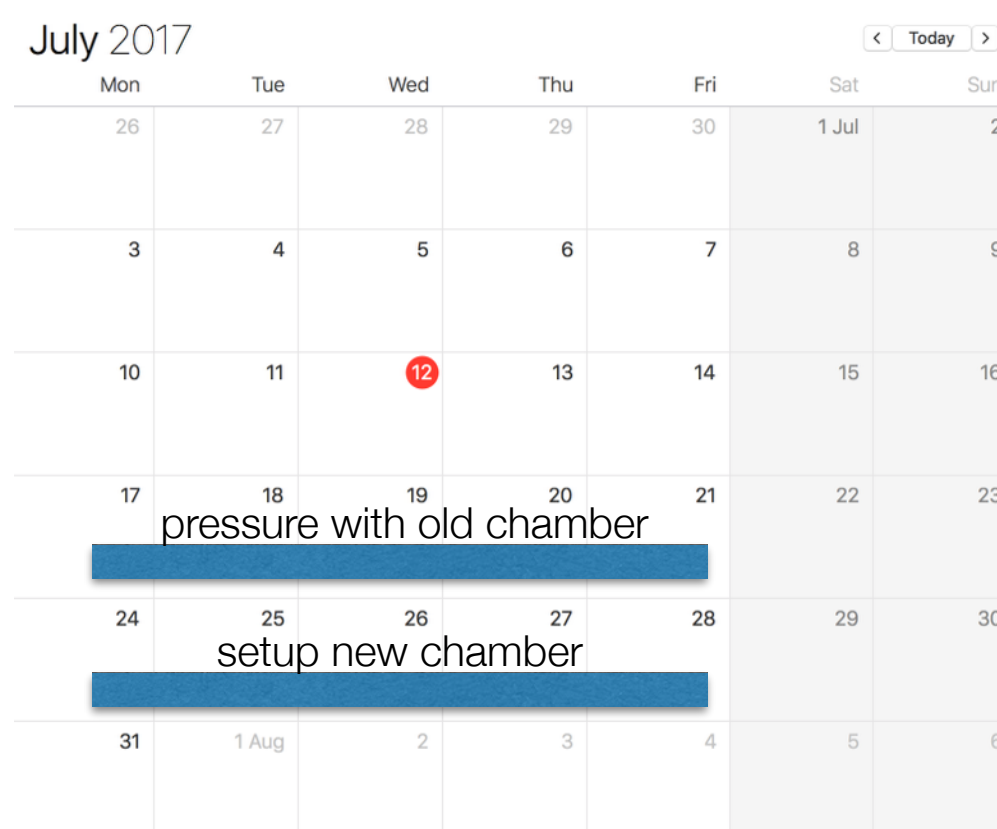
calibration

- Currently the calibration vessel is being used by NEXT. We could not use it for the last two weeks
 - Do calibration of readout with resistors
- New vessel was ordered a couple of weeks ago. It should be at IFIC next week. We will have all elements for the new calibration system:
 - CF250 chamber (current is CF160) and the two corresponding flanges
 - The T for the connection of the pressure gauge and
 - The CF63 flange with 2 SUBD-25 connectors
 - Release valve to keep the pressure below 2 bar



Calibration at pressure

- Done in two steps,
- first with the old chamber, using flanges already available from NEXT. This will be done as soon as NEXT finishes with their tests. Beginning next week ?
- Then with the new chamber, which we would like to have ready for the last week of July

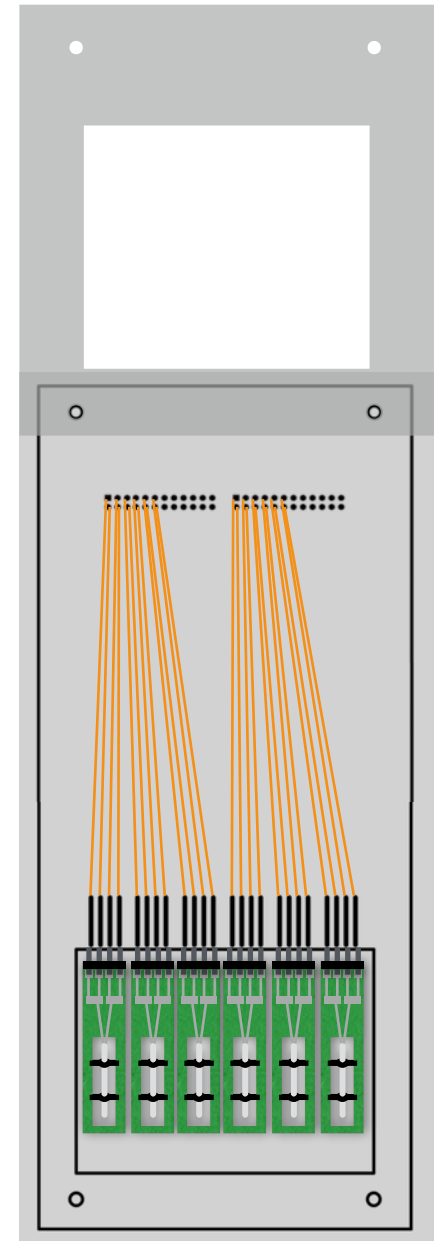
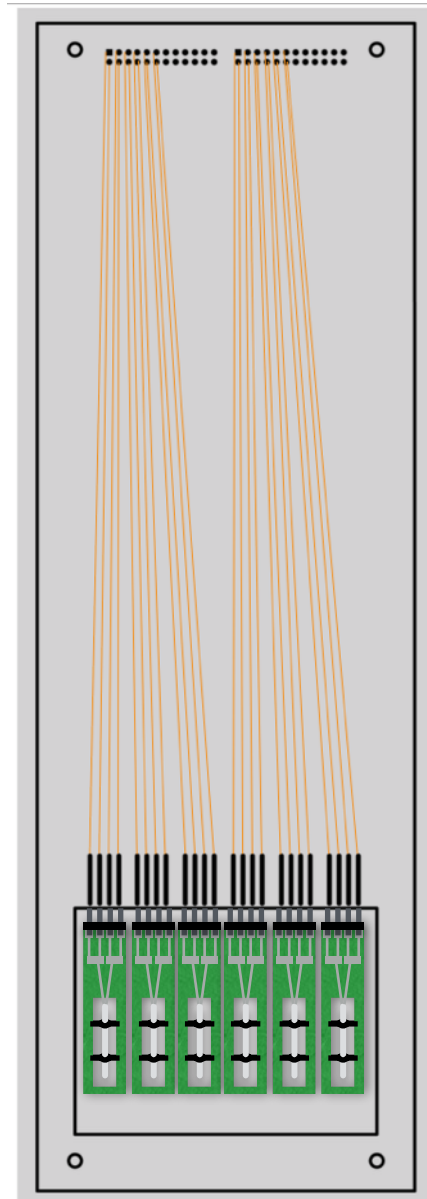


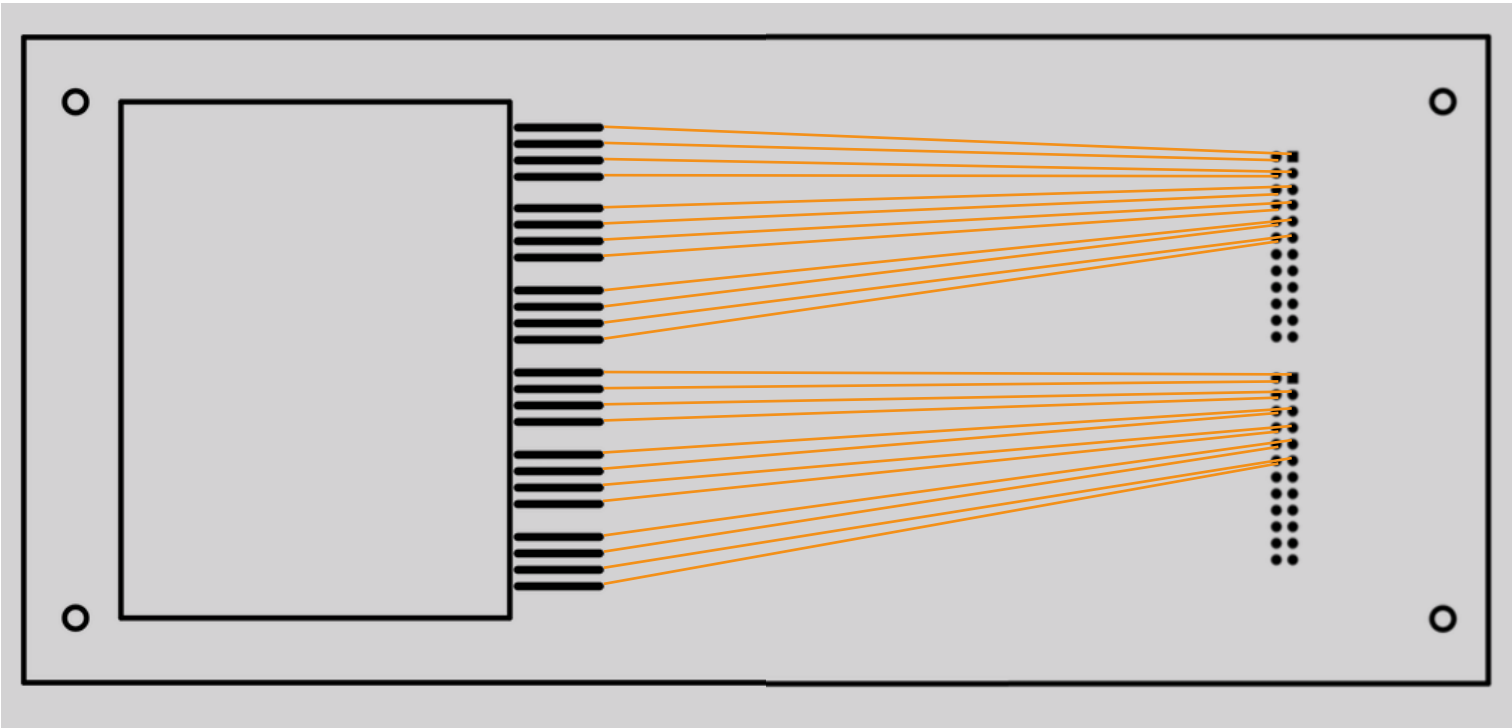
Problems

- The new calibration chamber is a heavy system
- We need to use the aluminum structure to move it around (we can temporarily use the one of NEXT)
- We need a system to open the chamber and hold the flange with no much effort

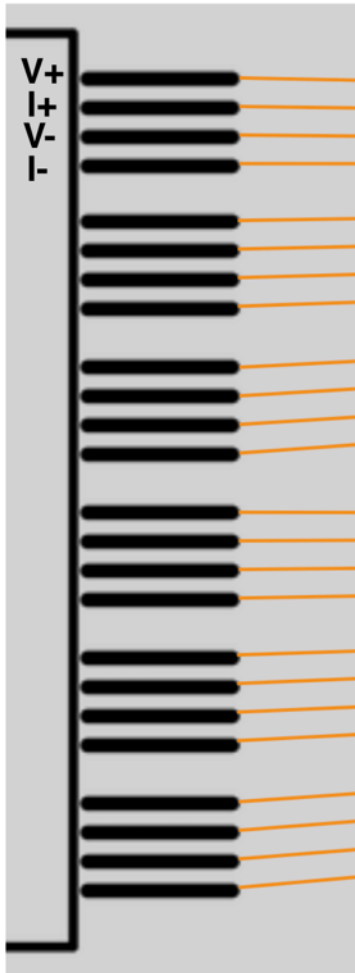
Support for calib

- Current design for support. Problem is that it is ~31 cm long but PCBs are A4 (27.8 cm)
- Talking to Paco it seems that is better to do it much smaller and add an Aluminum extension
 - It can be designed such that it facilitates the cable routing
 - The PCB could be reused for the new vessel, which is longer, by fabricating a different aluminum extension

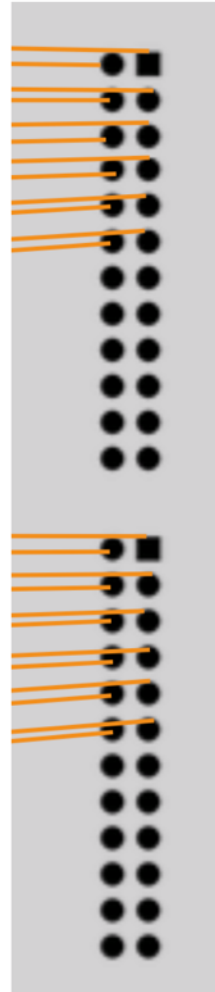




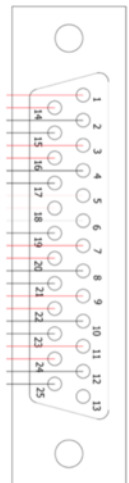
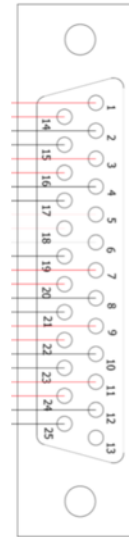
12 sensors



2 IDCs



2 SUBD-25



12 lemos

1-14-2-15
 3-16-4-17
 5-18-6-19
 7-20-8-21
 9-22-10-23
 11-24-12-25

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