

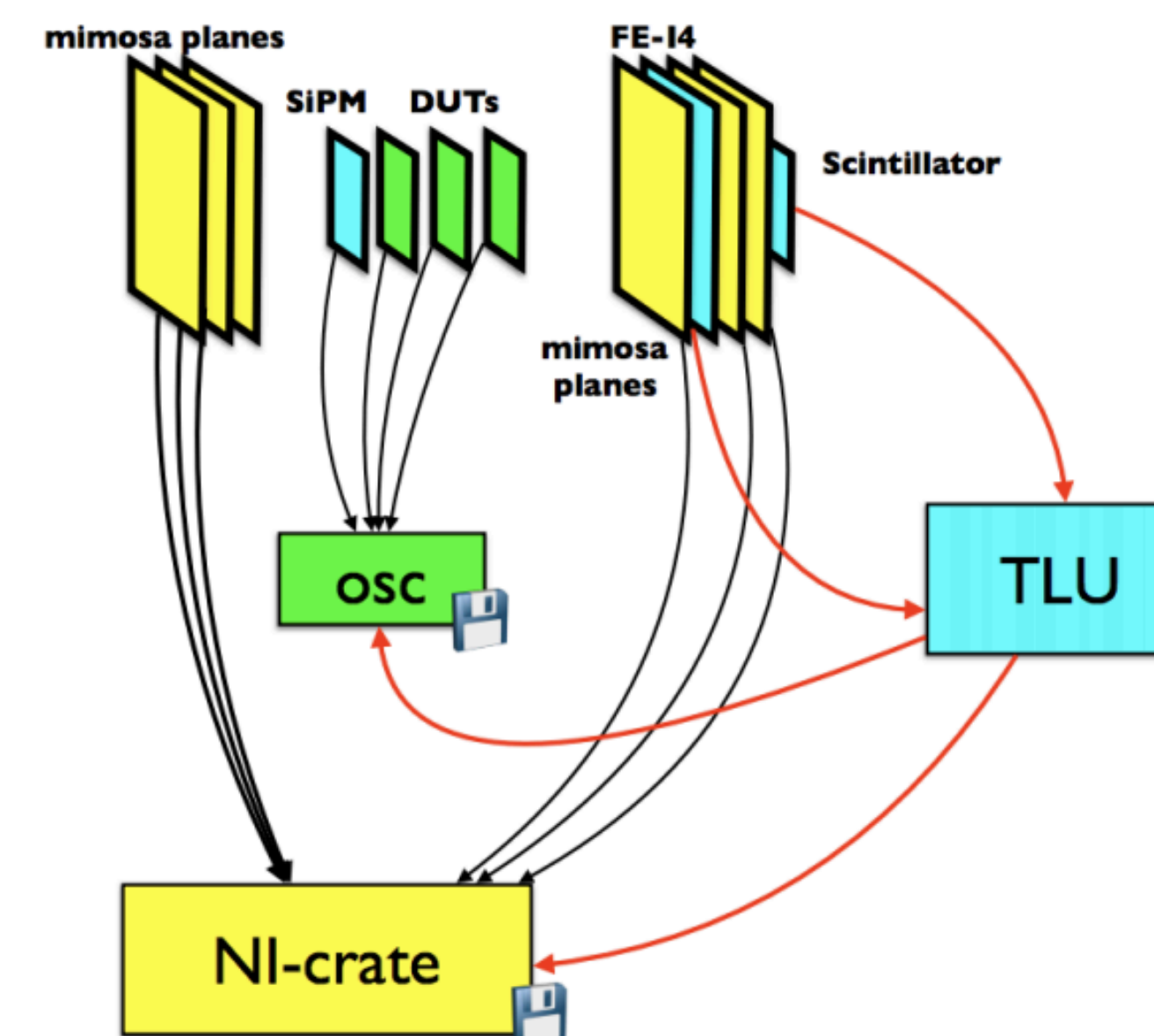
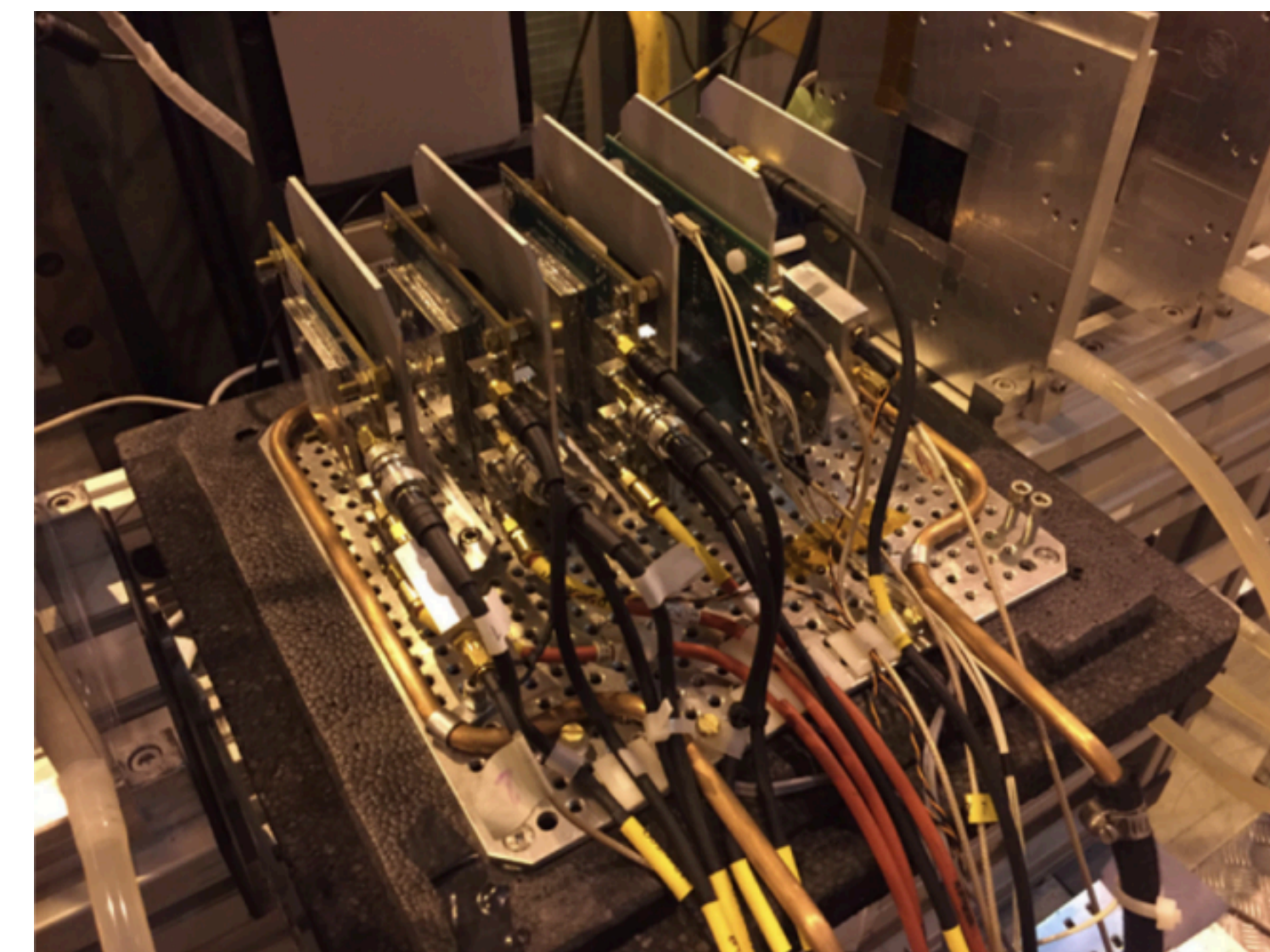
D. BOUMEDIENE, ON BEHALF OF HGTD — 01/04/22

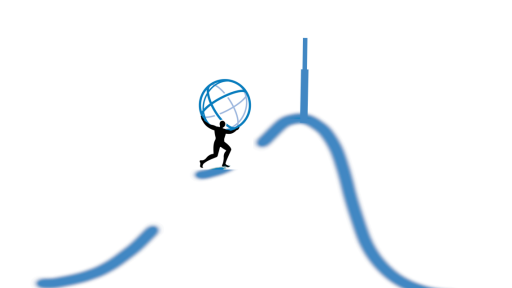
# ATLAS HGTD @H6 IN 2022



# ATLAS HGTD @H6

- ▶ **HGTD:** ATLAS phase-II upgrade project (installation in LS3)
- ▶ Several reviews in 2022 on sensors, ASICs, modules → these tests are critical
- ▶ DUTs:
  - ▶ **LGAD** silicon sensors (non-irr and irradiated): voltages of ~ 550V max (HV rack located in H6A) or **Modules** (LGADs+ASICs)
- ▶ Beam: pions at ~ **120 GeV, a few cm<sup>2</sup>, intensity ~ a few 10<sup>5</sup>**
- ▶ H6A (PPE-146):
  - ▶ **Chiller (on PI stage) + telescope (Aconite)** → EUDAQ 1.x/2.x
  - ▶ Use signal from scintillator(s) + external source for trigger: **TLU box**
  - ▶ Could need a second PI stage at the back-end of the setup – on a table
- ▶ **Chiller to -35 C** remote access from Control hut
- ▶ **N2 or dry air** to be placed inside box
- ▶ Readout in NI-crate (in rack) for telescope → remote access from control PC
- ▶ **Spill signal from SPS to read-out buffer from Oscilloscope**
- ▶ Tests were also performed using MALTA setup in 2021, can be used also in 2022





# EXEMPLE: HGTD @H6A IN NOVEMBRE 2021

