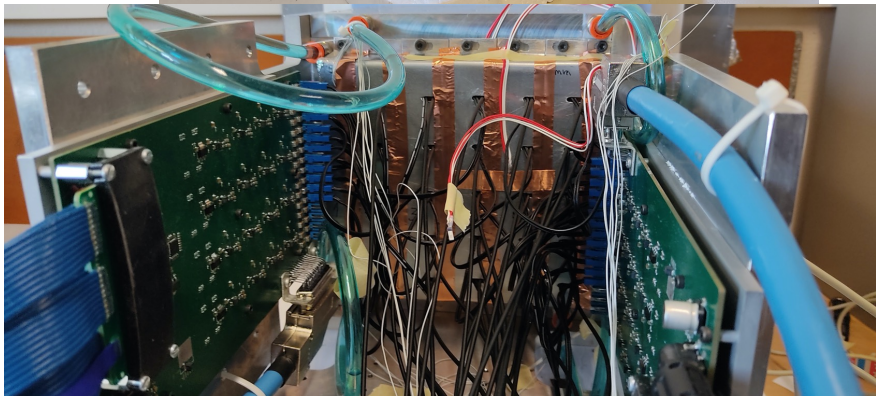
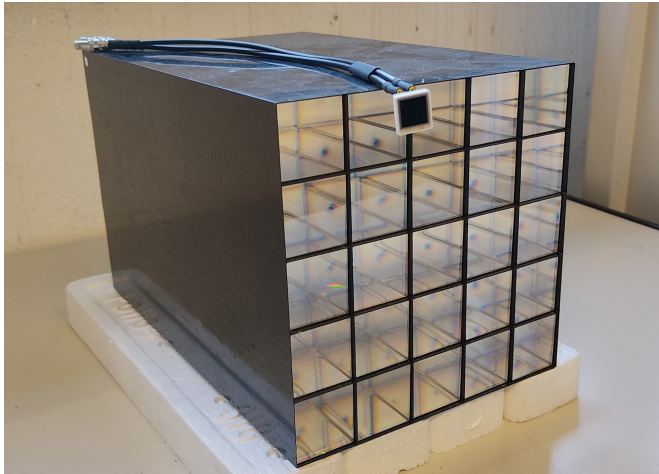


MUonE ECAL on H2 beamline 31 May – 10 June

E.Conti – INFN Padova

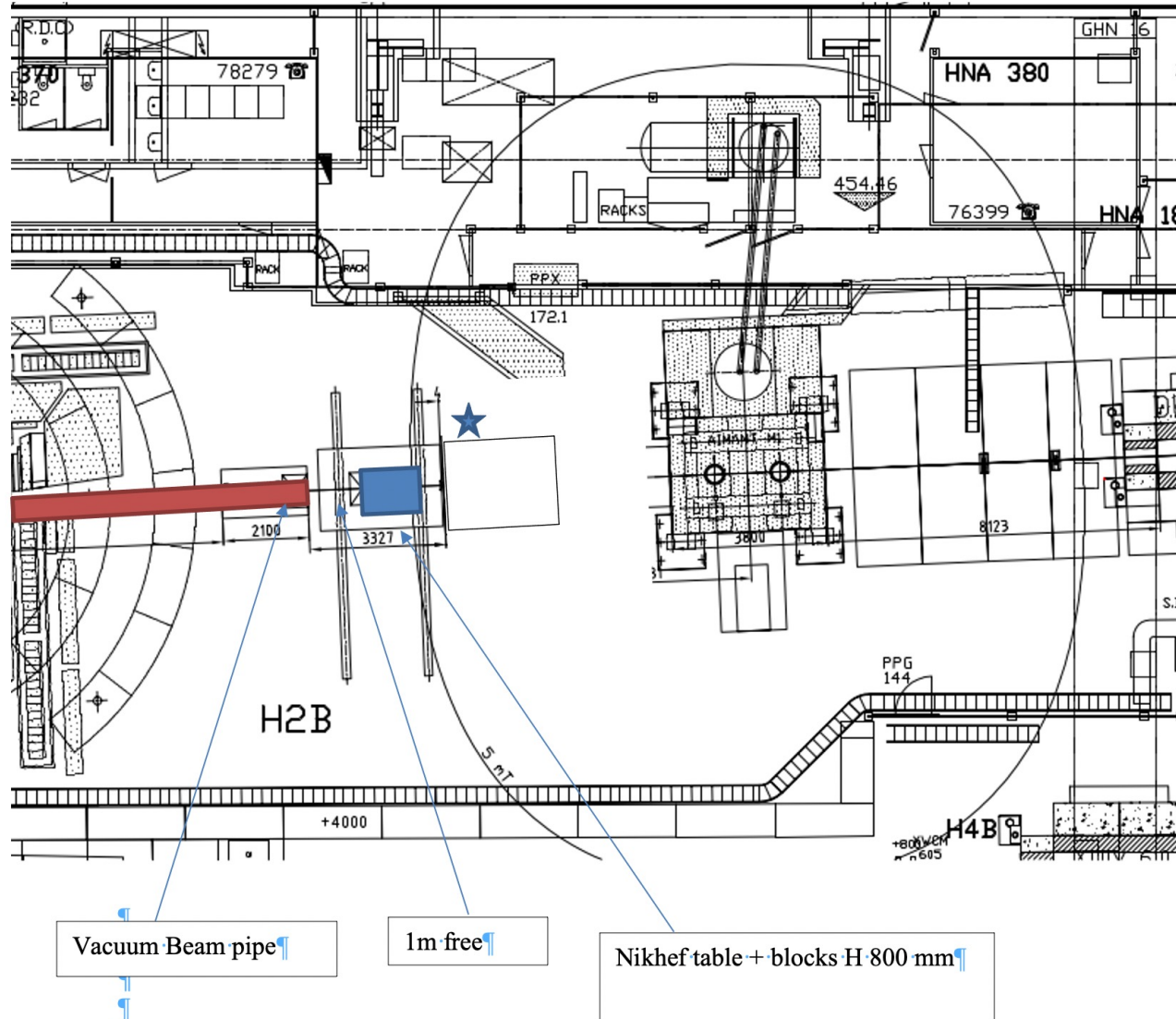
ECAL module

- Electromagnetic calorimeter prototype with 25 PWO crystals (from CMS calo) read by $10 \times 10 \text{ mm}^2$ APDs
- a laser system is used to pulse light signals to each crystal for calibration
- Temperature stabilization within 0.1 degC via water flux with chiller



- Final purpose: energy calibration of the ECAL module in the whole MUonE experiment range (1-150 GeV):
 - H2 beamline 20-150 GeV
 - later in June, at T9, 1-10 GeV
- Beam requirements:
 - momentum spread $\Delta p/p \approx 1.5\%$
 - spot size: sigma $\sim 20\text{mm}$ at low energy, $\sim 8\text{mm}$ at high energy
 - beam purity \rightarrow we do NOT request installation of Cherenkov beam counters
 - Intensity \sim a few 10^4 /spill
 - Energy scan: 150, 100, 50, 20, 75, 125 GeV
- ECAL on a moving x - y platform (NIKEF table) to illuminate each single crystal

Practical details



On the NIKEF table, so that the following group EP-FTS can stay in the downstream platform.

At the end of our period (Sat morning) we place down and apart the table so that there is no interference for EP-FTS. The final de-installation is done on following Wed (14 Jun).