H6 Beam Line 2022 User Meeting

MALTA Telescope SPS 2022



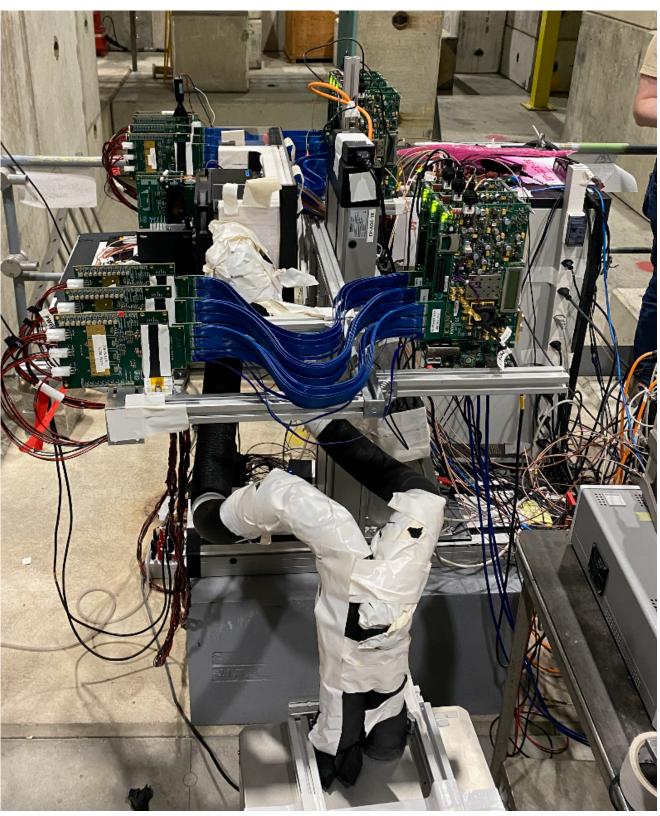
MALTA Telescope

- MALTA: Depleted Monolithic Active Pixel sensor with small collection electrode
- Module dimension: 2*2 cm², pixel pitch 36.4µm
- MALTA telescope full operation @ SPS 2021 (may nov)
- This year: characterisation of MALTA2 in terms of radiation hardness & timing performance for post-processed samples
- Beam area (telescope area ~ 2m x 3m):
 - Telescope
 - Computer +services (power supplies etc)
- What we need (already in use / installed since last year):
 - N2 (~L/min to keep dew point low in cold box)
 - Chiller in 32A plug
 - Linear stage
 - No direct need of HV (unless clients require)
- Beam parameters:
 - Hadrons, beam size max 2*2cm², p_T >60 GeV
 - Possibility to cope with high beam rates



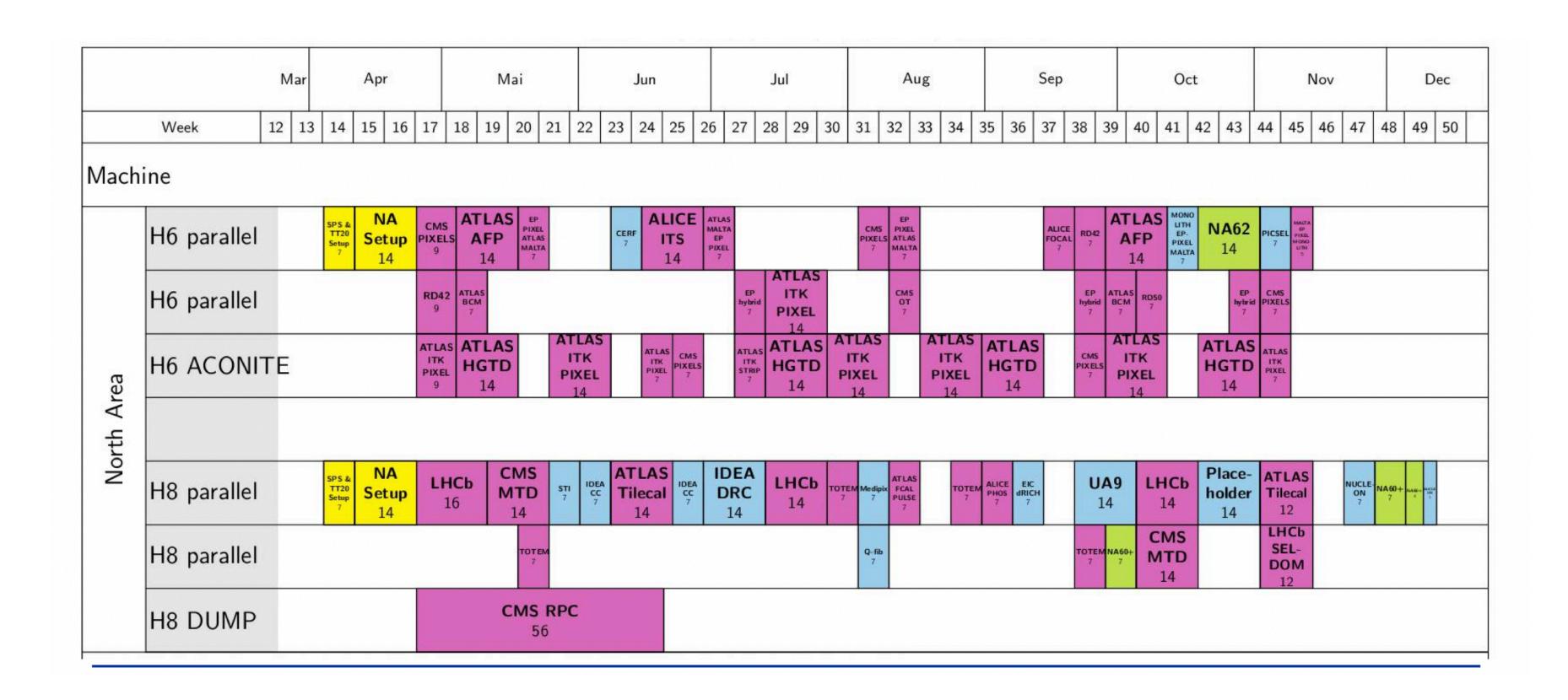


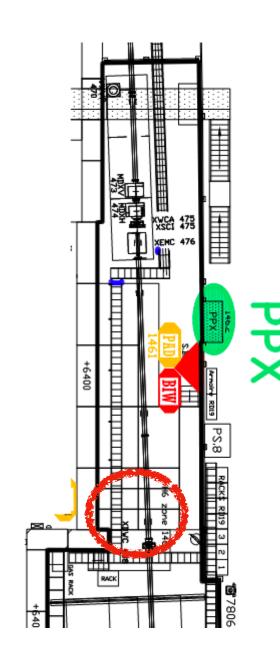




MALTA Telescope

- Strong preference for:
 - Remaining at a permanent location during the entire TB period
 - To profit of as much beam time as possible in parasitic mode
 - Several groups have expressed interest to use our telescope infrastructure





PPE146 Zone "g"