

H6 Beam Line 2022 User Meeting

MALTA Telescope SPS 2022



MALTA Telescope

- **MALTA: Depleted Monolithic Active Pixel sensor with small collection electrode**
- Module dimension: $2 \times 2 \text{ cm}^2$, pixel pitch $36.4 \mu\text{m}$
- 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 $\sim 2\text{m} \times 3\text{m}$):
 - Telescope
 - Computer + services (power supplies etc)
- What we need (already in use / installed since last year):
 - **N₂ ($\sim \text{L}/\text{min}$ 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 $2 \times 2 \text{ cm}^2$, $p_{\text{T}} > 60 \text{ GeV}$
 - Possibility to cope with high beam rates



