GAMMAMEV@H8 2023
Oct 25 - 29

M. Nicola Mazziotta

INFN - Bari

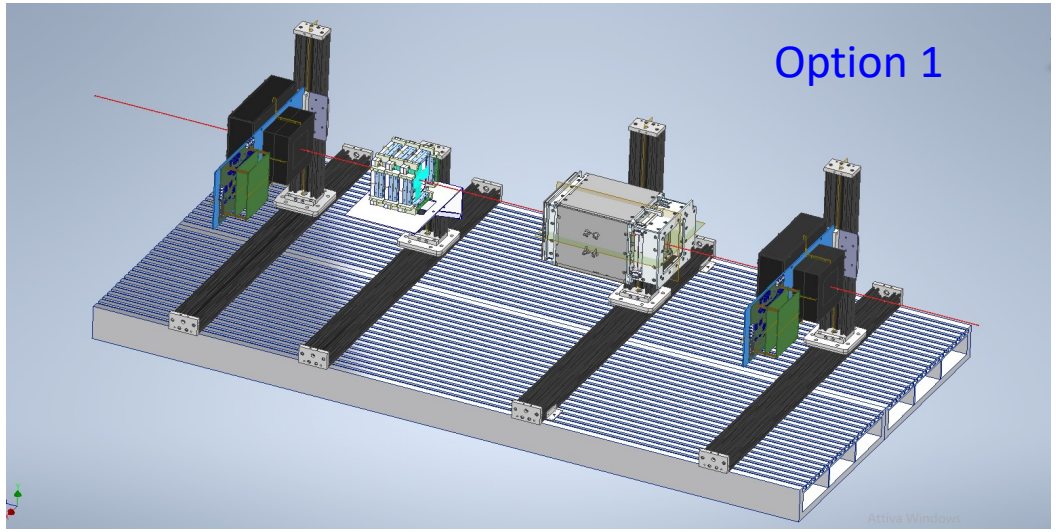
mazziotta@ba.infn.it

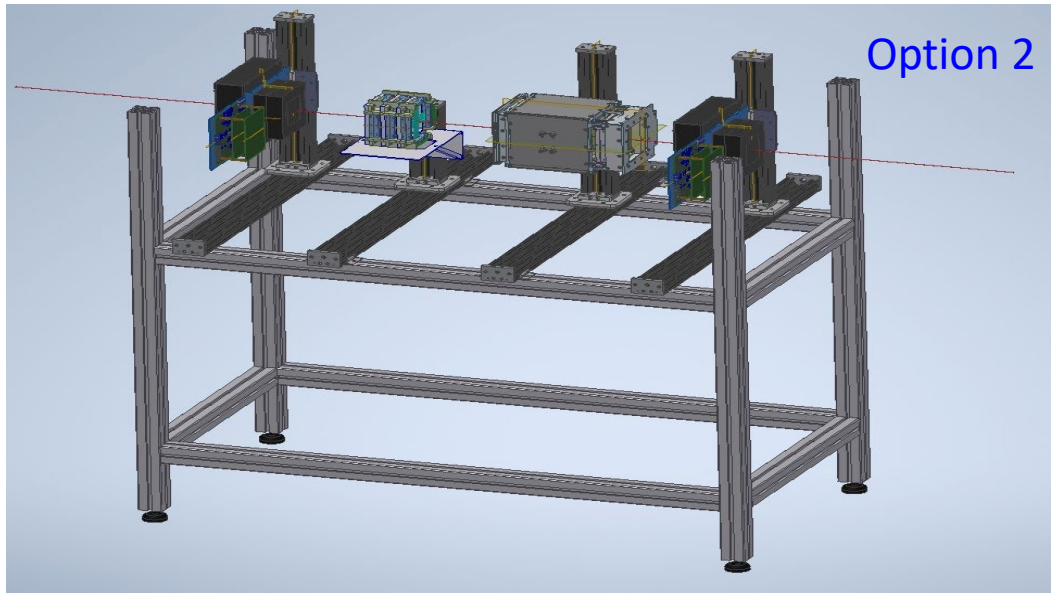
NA 2023 Ion Run preparation Sep 21, 2023

Test goals

- Development of a low energy detector for space application
  - Proton
  - Electron
  - Nuclei
  - Photons
- The prototype detector consists of:
  - Light scintillating fiber tracker readout by SiPM array
  - Stack of plastic scintillator tiles readout by different SiPM sizes
  - Matrix of small cube of crystals (LYSO/GAGG) readout by different SiPM sizes
- Beam test goals:
  - Tracking performance studies
  - Calibration, dynamic range, energy resolution, Z resolution

Set-up layout





- Set-up: similar to the one used at T10 in September
- Option 1
  - We would like to use a couple of bosch-like (box) tables as the one available in the T10
  - A couple of concrete blocks will be needed as basement: The beam should be at about +35 cm from the top plane
- Option 2:
  - Custom table assembled with bosh-like bars
- Ancillary systems:
  - Upstream/Downstream: Plastic scintillator fingers for external triggering purpose
- Beam requirements
  - Ion fragment
- Racks, tables and control room as usual

Timeline (tentative)

- Oct 25:
  - Set-up installation starting as early as possible in the morning
  - Safety clearance visit (4 PM ?)
  - Start physic runs as soon as possible
- Oct 26 – 29:
  - Data taking
- Oct 30 (I guess no beam):
  - Set-up dismounting early in the morning