

Status of the MSD

L. Servoli for PG MSD GROUP

FOOT GENERAL MEETING - 2022 December 12-14

1) *HIT data taking periods at CNAO*

→ *July: G. Silvestre, F. Peverini*

→ *MSD configuration: DEDICATED for calibration: 6 x-y planes*
STANDARD for physics: 3 x-y planes

→ *MSD running smoothly*

2) *Two data taking periods at CNAO*

→ *November: G. Silvestre, M. Barbanera, L. Tosti*

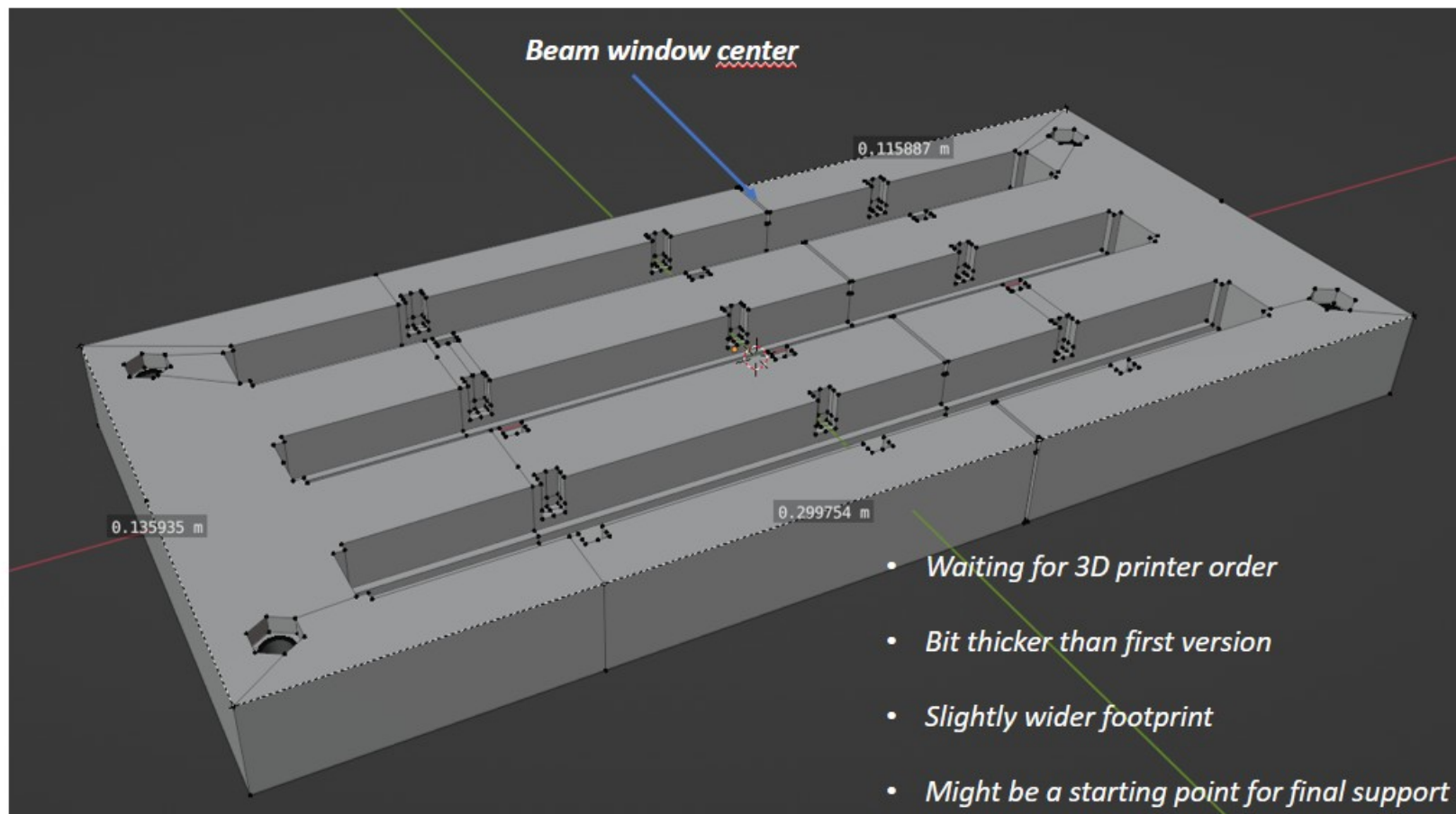
→ *December: G. Silvestre, F. Peverini*

→ *MSD configuration: STANDARD: 3 x-y planes*

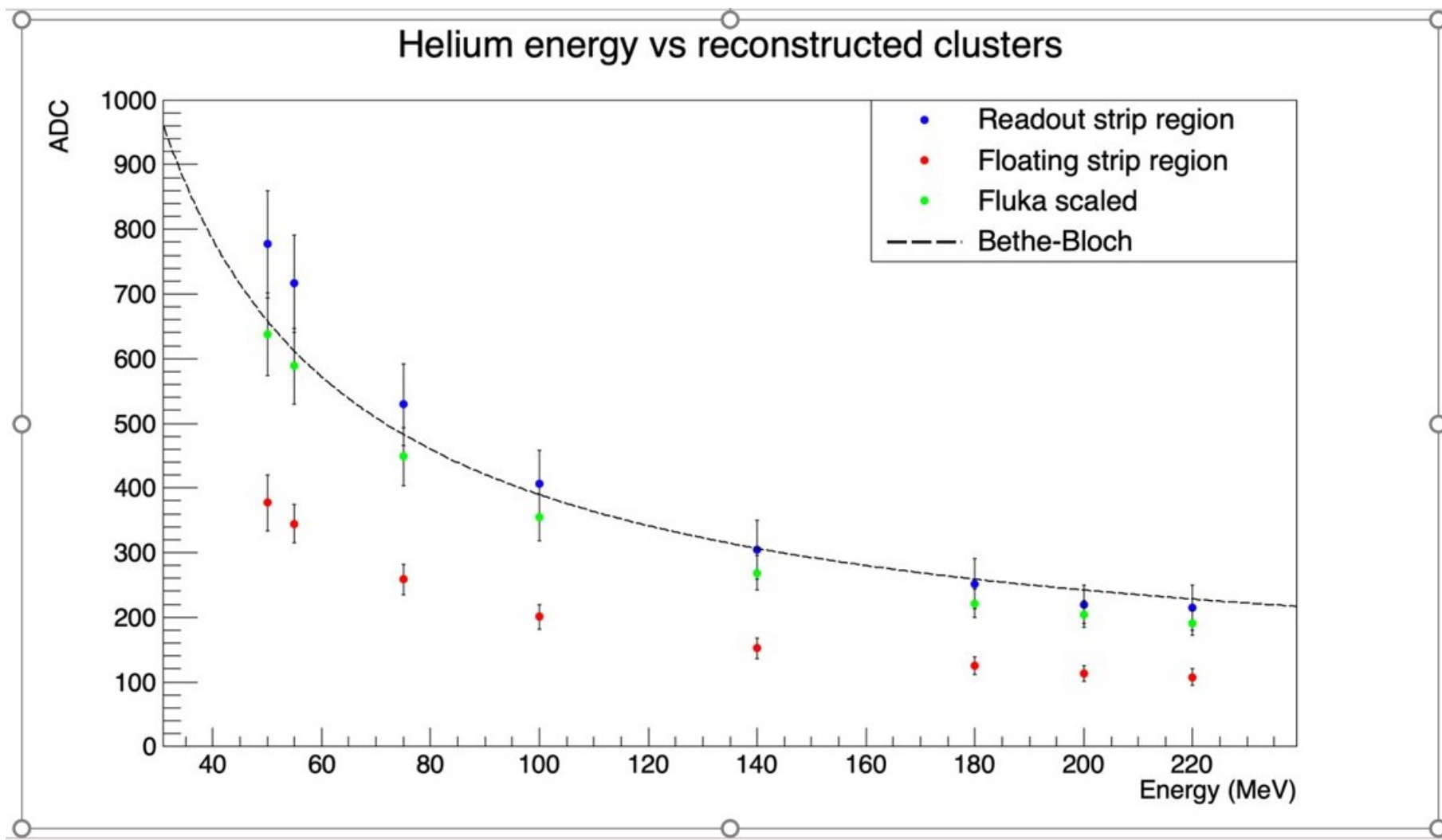
→ *MSD running smoothly (~ 100% efficiency)*

3) *New mechanical setup at CNAO:*

New 3D printed support (W.I.P.)

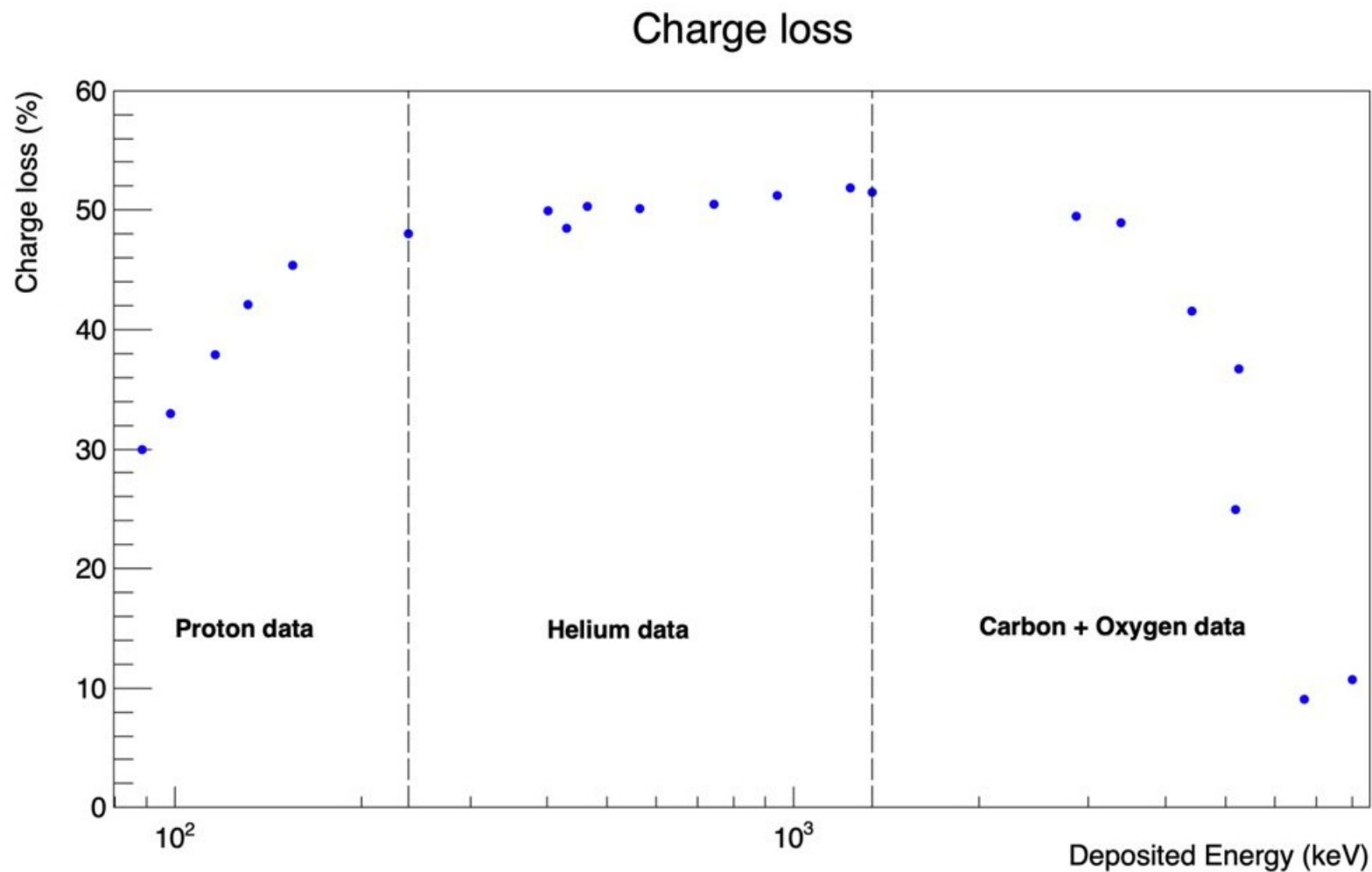


3) *First HIT results.* (Gianluigi)



3) *First HIT results. (Gianluigi)*

Charge loss in floating strip region for all different ion data



4) *Laboratory test for eta-function*

→ *laser test to study the eta-function problem.*

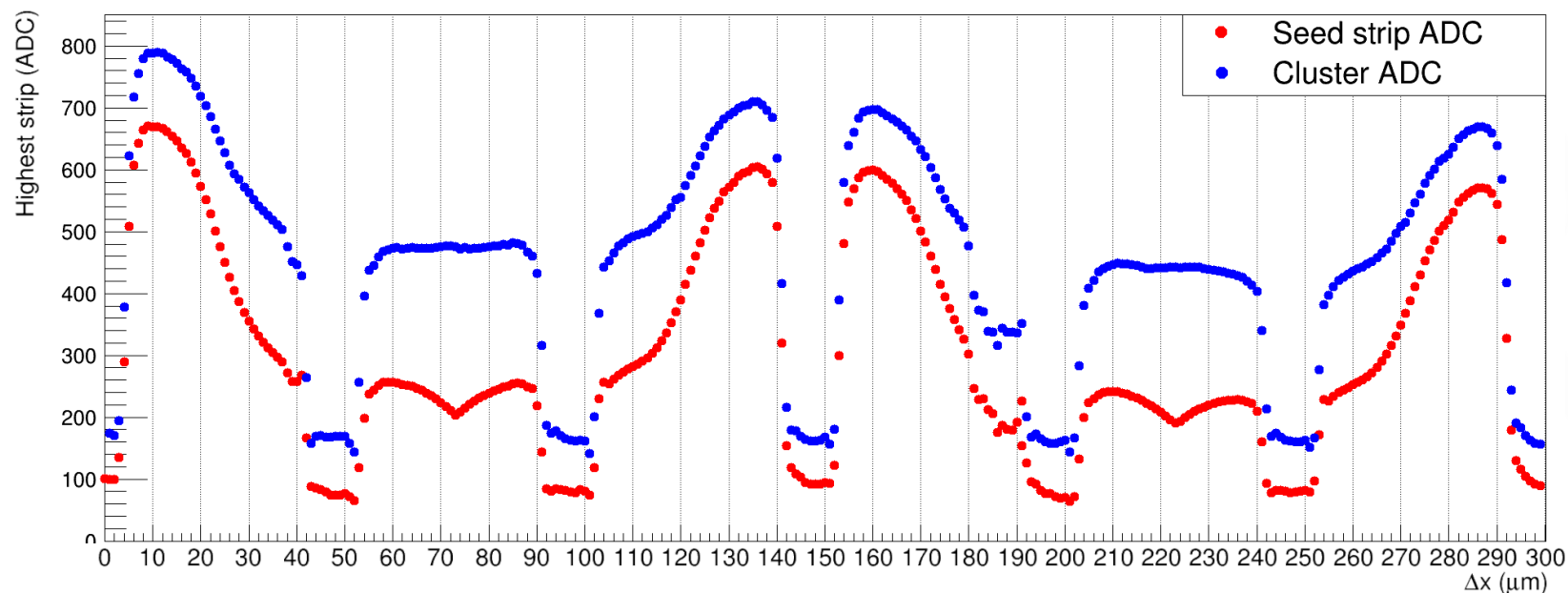
Some problem with defining the mechanical and optical setup.

Preliminary test already done before HIT test, some preliminary results presented by Gianluigi:

Scan of focused laser (6-10 μm) between 2 strips: 1 μm steps for a total of 300 μm

Strip implantation appears as a reduction of the collected signal (reflection on metalization)

Charge loss in the floating strip region appears as expected.



3) First attempt to eta-function definition.

- **Mechanical setup for the test;**
[within next two weeks] done
- **Data taking campaign;**
Started but problems with laser driver.
- **Data Analysis;**
[Leonello, first results @ FOOT general meeting];
Started but no real new results to be shown up to now.
- **Calibration of laser beam with calibrated photodiode.**
On hold due to laser driver problems.

