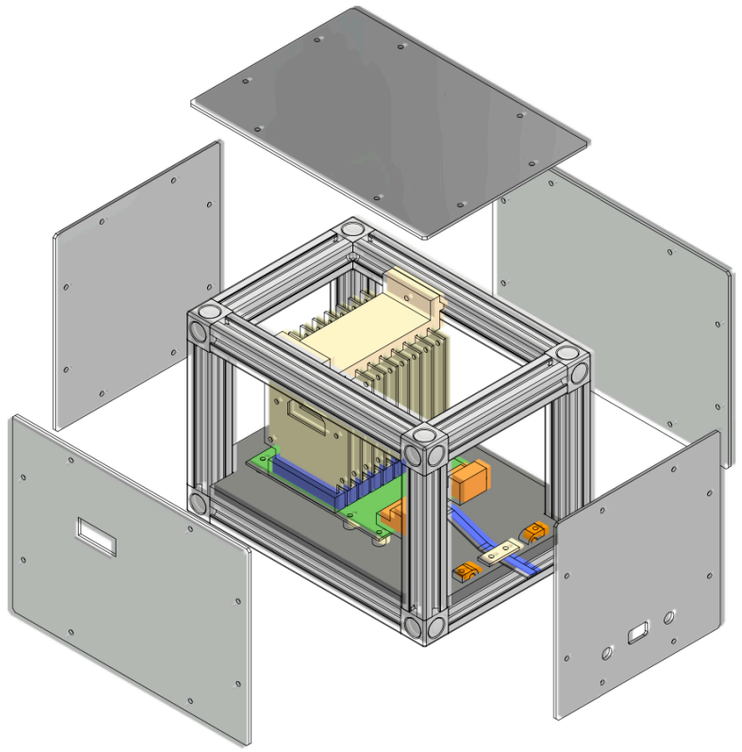
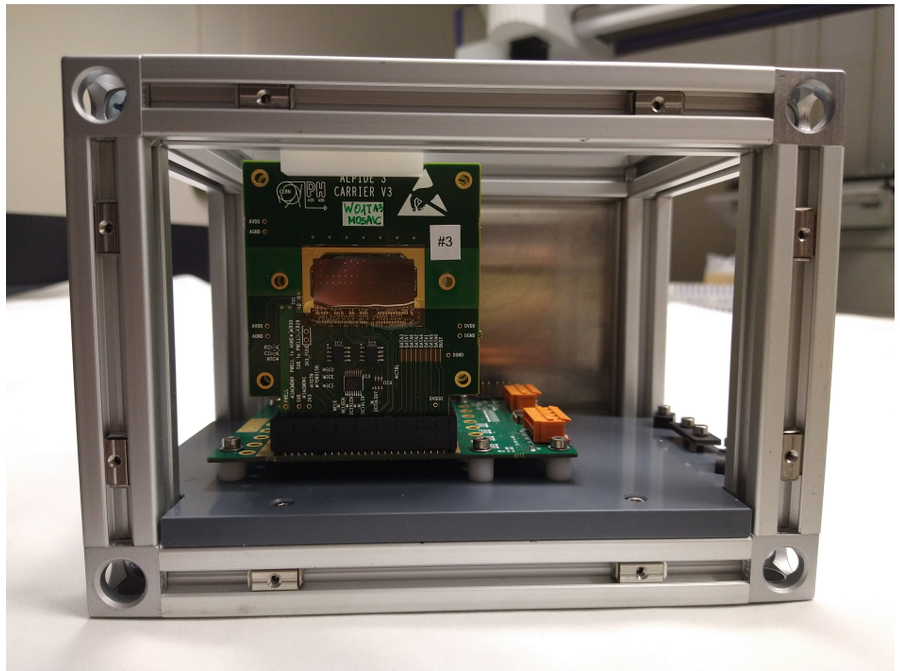
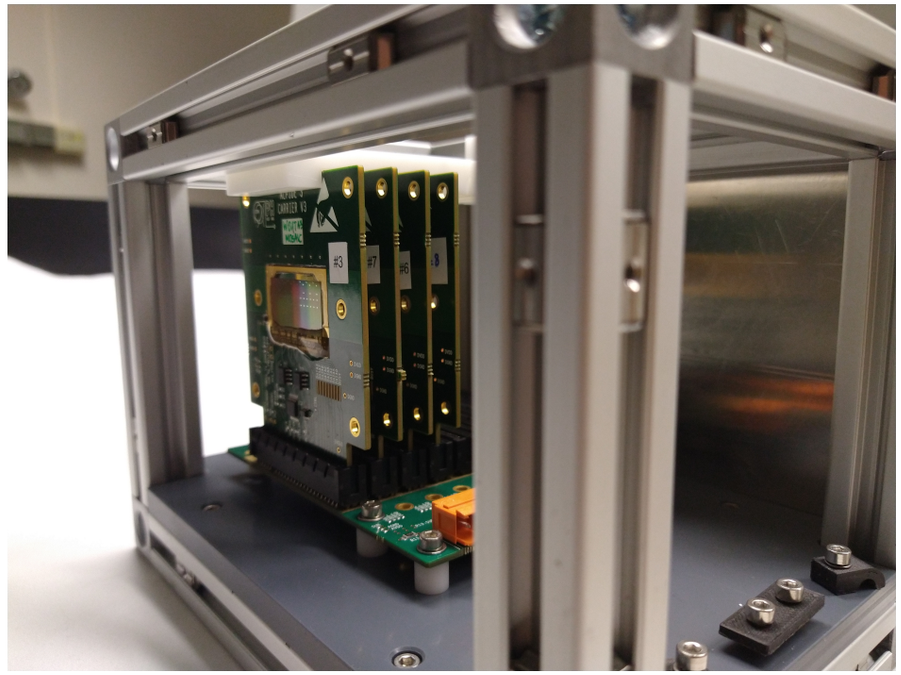
ALPIDE telescope Bari

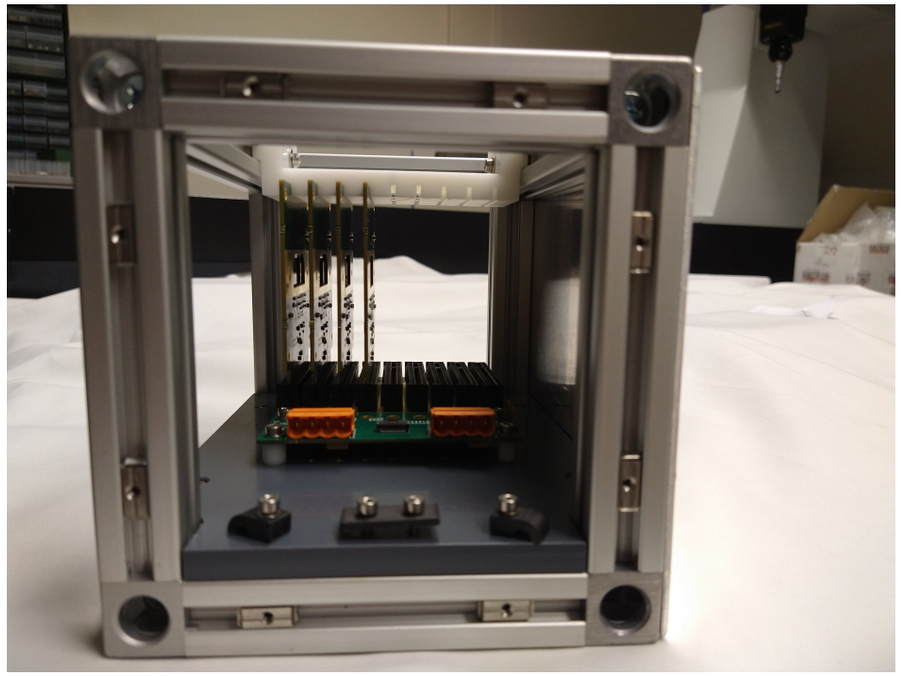
F. Barile, D. Colella, F. Colamaria,
S. Kumar, A. Mastroserio

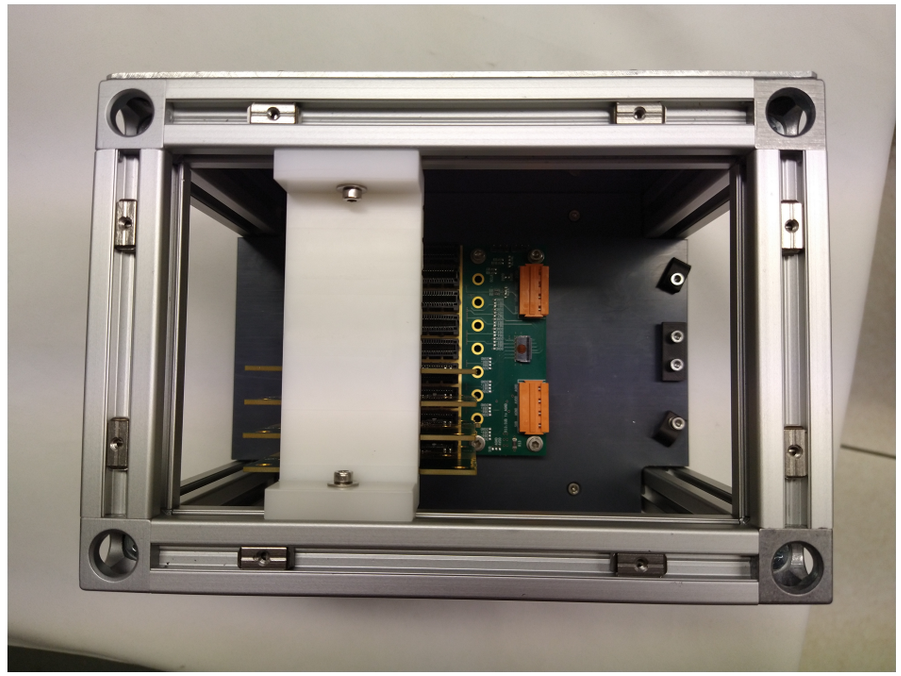
Supported by
Mechanical CAD (M. Mongelli)
Mechanical Workshop (C. Pastore)
Electronic Service (G. De Robertis)
High Technology Service (P. Cariola)

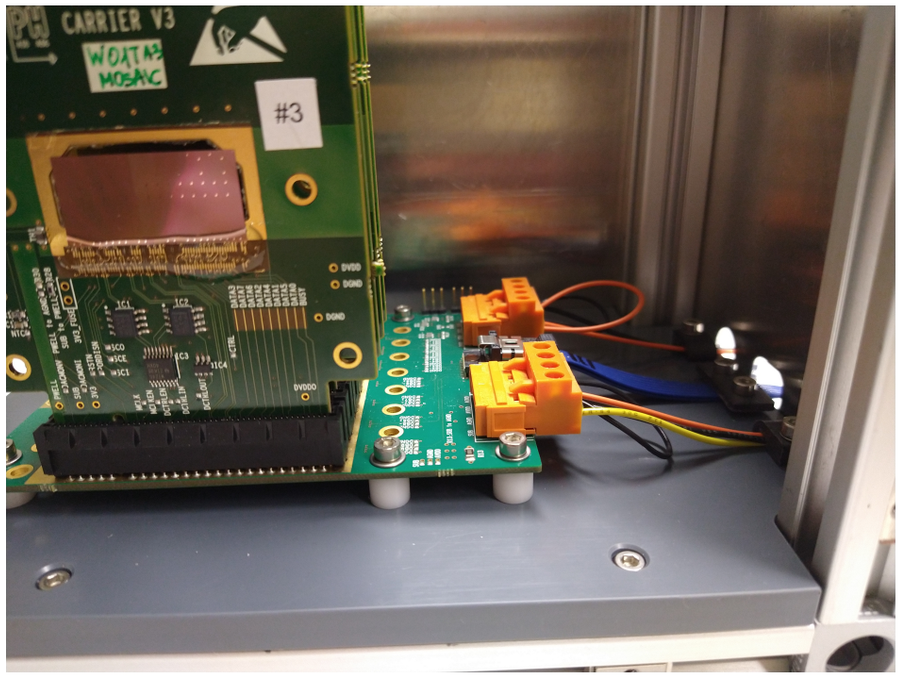


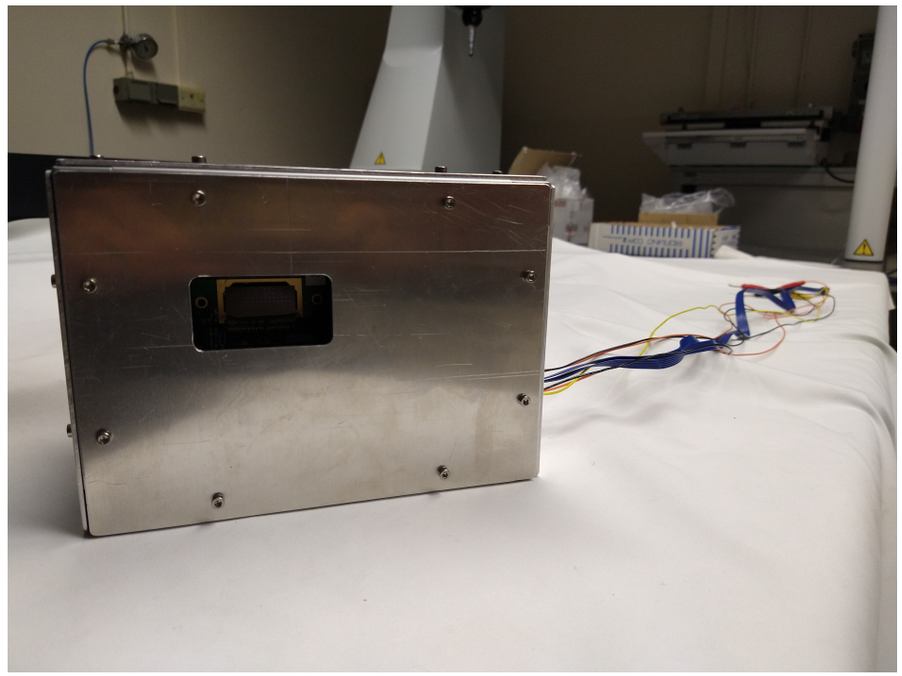

ALPIDE 3
CARRIER V3
#3

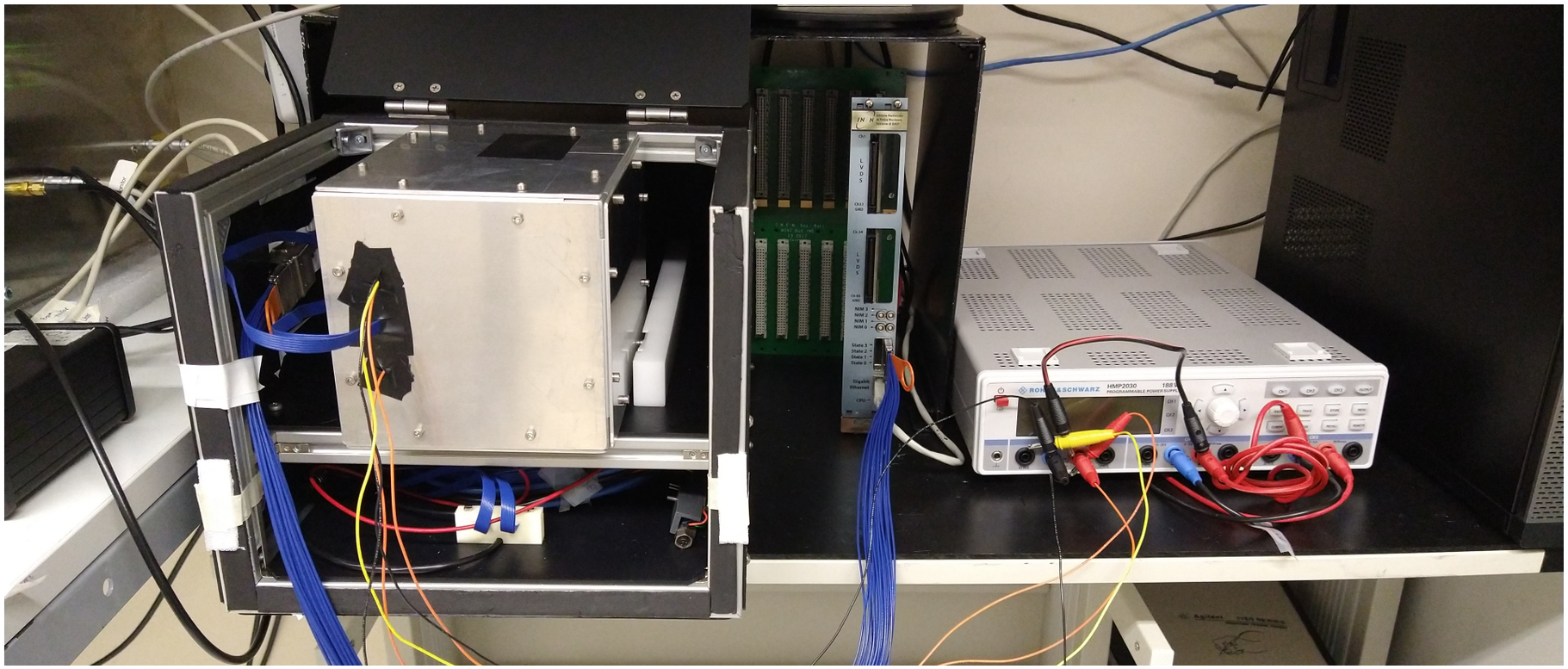




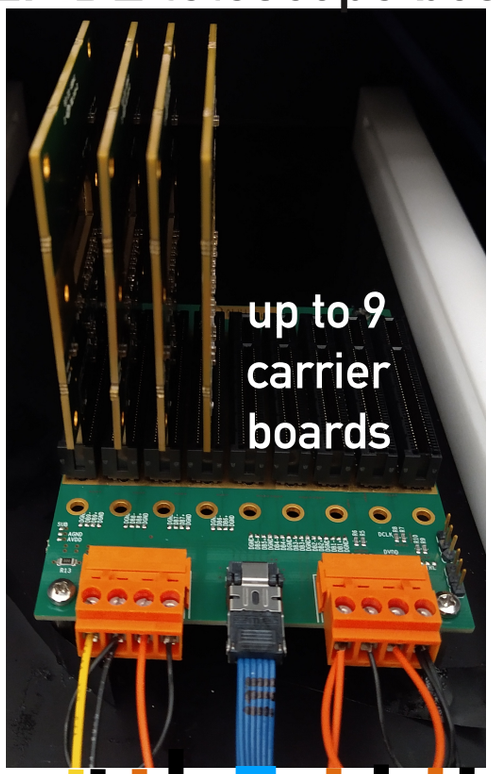



CARRIER V3
#3

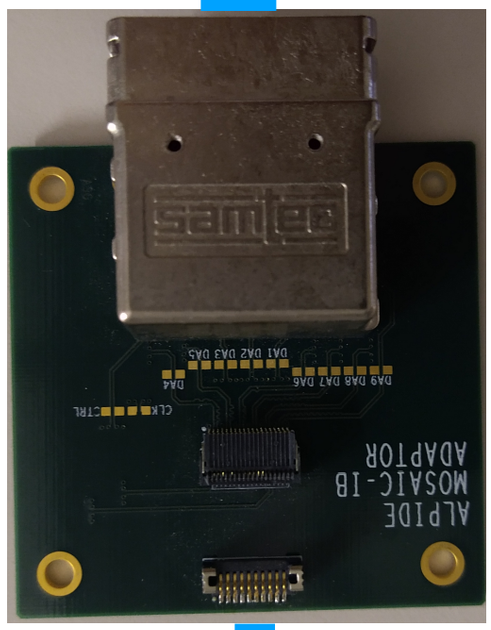


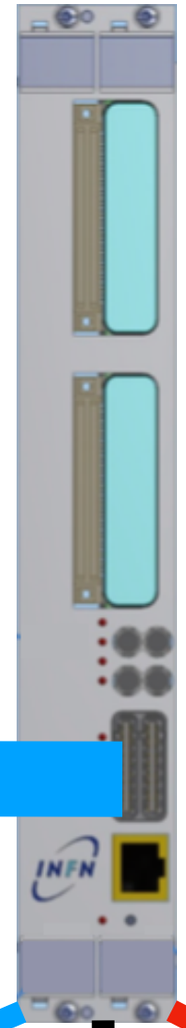

ROHDE&SCHWARZ
HMP2030

ALPIDE telescope board



ALPIDE MOSAIC-IB ADAPTOR



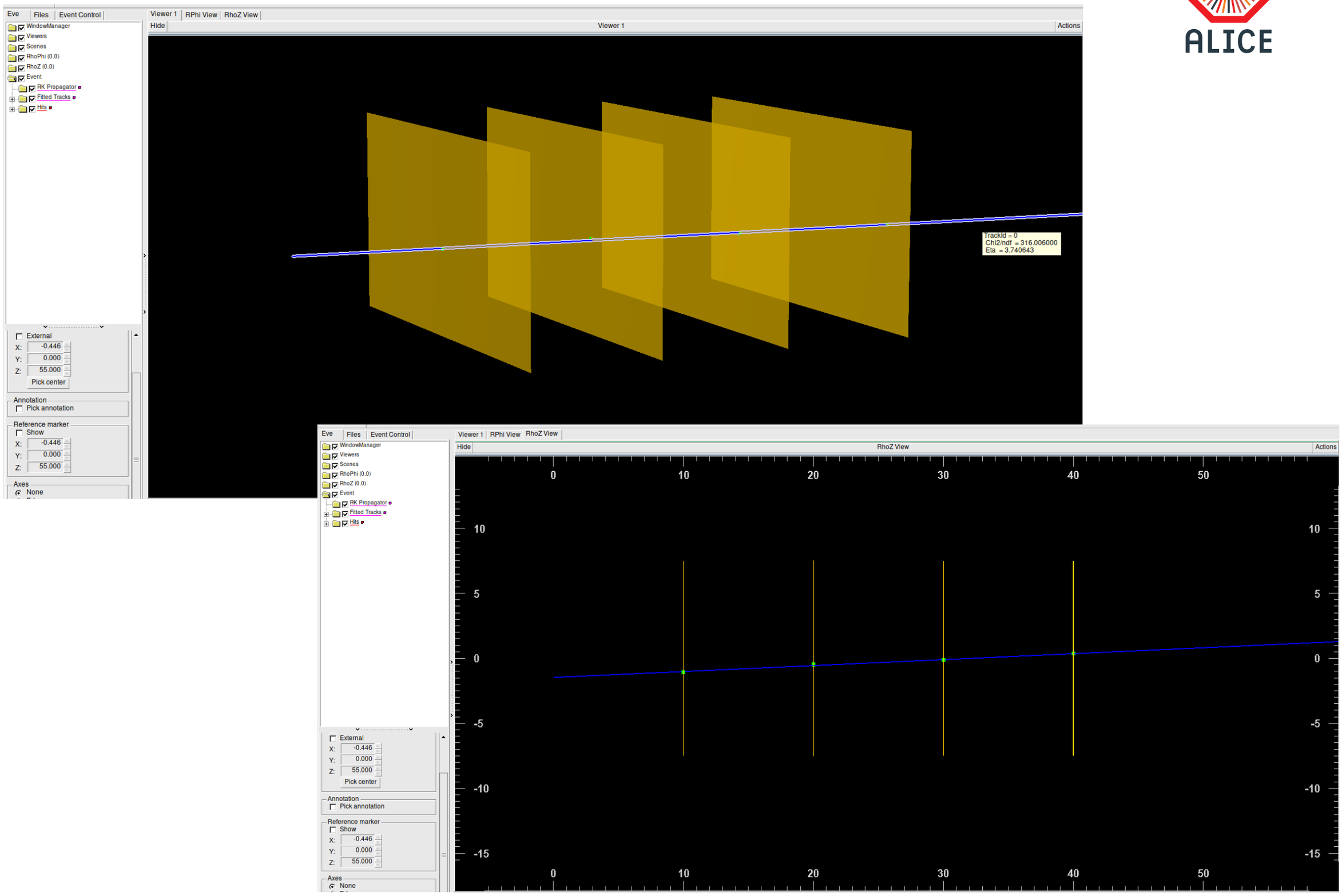


Multiple usages

- Research
  - Useful exercise to develop the readout of ALPIDE stack
  - Can be used as alignment tool for test beam sensor characterisation
- Didactics
  - Good proposal for a Master thesis
  - A. Mastroserio and D.C. proposing a course for Master on Tracking
- Outreach
  - Can be easily moved and installed during whatever happenings (ERN, PCTO, etc.)

Status and open points

- Hardware
  - 6 carriers with ALPIDE sensor (having different IDs) available
  - More carriers to be purchased, if needed
  - 3 ALPIDE telescope boards available
- Software
  - new-alpide-software for single ALPIDE calibration → COMPLETE
  - GdR and Fabio's code for data taking → ALMOST COMPLETE
    - up to clustering
  - Shyam's code for tracking → PARTIALLY UNDER DEVELOPMENT
    - track finding → COMPLETE
    - track fitting → UNDER REVISION
    - alignment → TO BE DEVELOPED
    - online → TO BE DEVELOPED


Eve
Files
Event Control
WindowManager
Viewers
Scenes
RhoPhi (0.0)
RhoZ (0.0)
Event
RK Propagator
Fitted Tracks
Hits
Viewer 1
RPhi View
RhoZ View
Hide
Viewer 1
Actions
trackId = 0
Chi2/ndf = 316.006000
Eta = 3.740643
External
X: -0.446
Y: 0.000
Z: 55.000
Pick center
Annotation
Pick annotation
Reference marker
Show
X: -0.446
Y: 0.000
Z: 55.000
Axes
None
RhoZ View
0
10
20
30
40
50
10
5
0
-5
-10
-15

BACKUP