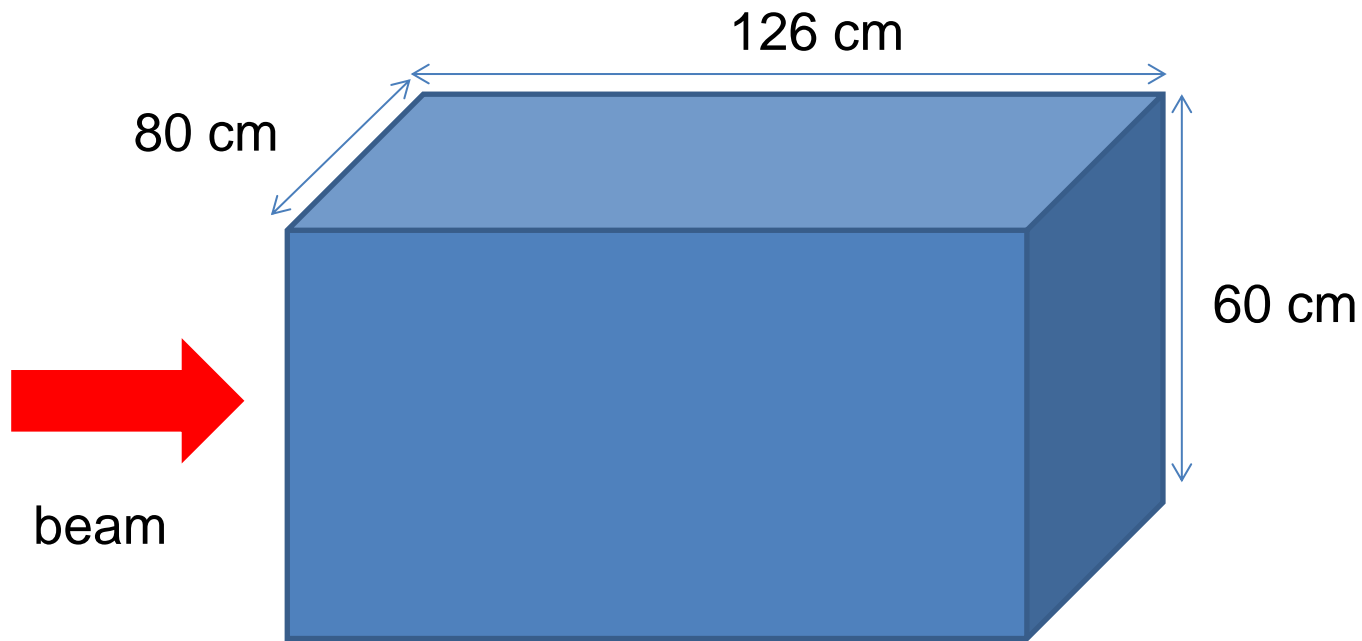


# NA61 SciFi tests

Alessandro Bravar





All detectors are in the AI box (i.e. scintillators and SciFi ribbons).

Box located just downstream of the NA61 large TPC hut,  
**requires infrastructure (platform, if possible movable table)**

Box must be centered to the beamline

Additional beamline detectors, incl. existing NA61 counters,  
will be used to center to the beam.

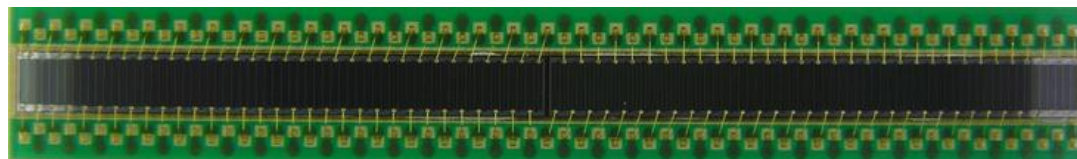
Electronics and cabling: use NA61 installations

frame  
(plastics)

32 mm

32 mm

SciFi ribbon – 32 mm wide  
250  $\mu$  fibers / 2 layers



Si-PM array  
coupled directly to SciFi  
(can be attached to the frame)  
128 readout channels / 250  $\mu$  pitch

hybrid electronics

readout

- 2 Si-PM channels can be connected to reduce the # of readout channels to 64 for a 500  $\mu$  pitch
- use “hybrid” circuits to amplify signal (with HI expect very large signals)
- signals look like those from PMTs

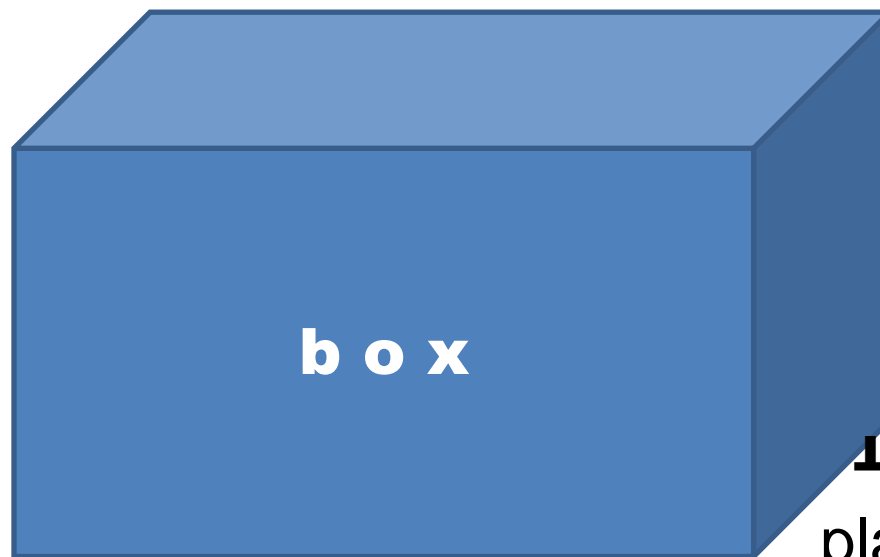


NA61 T P C  
hut

H2 beam



32 cm



platform

movable table:  
it would be great if we could have  
a movable table,  
say 5 cm in horizontal and 5 cm in vertical

???



floor

# Beam request

positive, above 100 GeV

beam spot size  $< 1 \text{ cm}^2$

intensity :            most of the test period  $10^5 - 10^6 / \text{spill}$   
                              for short periods as high as possible (???)