Micromegas tests

– Test beam 2010 plans –

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irfu

cea

saclay

RD51 Mini Week - CERN

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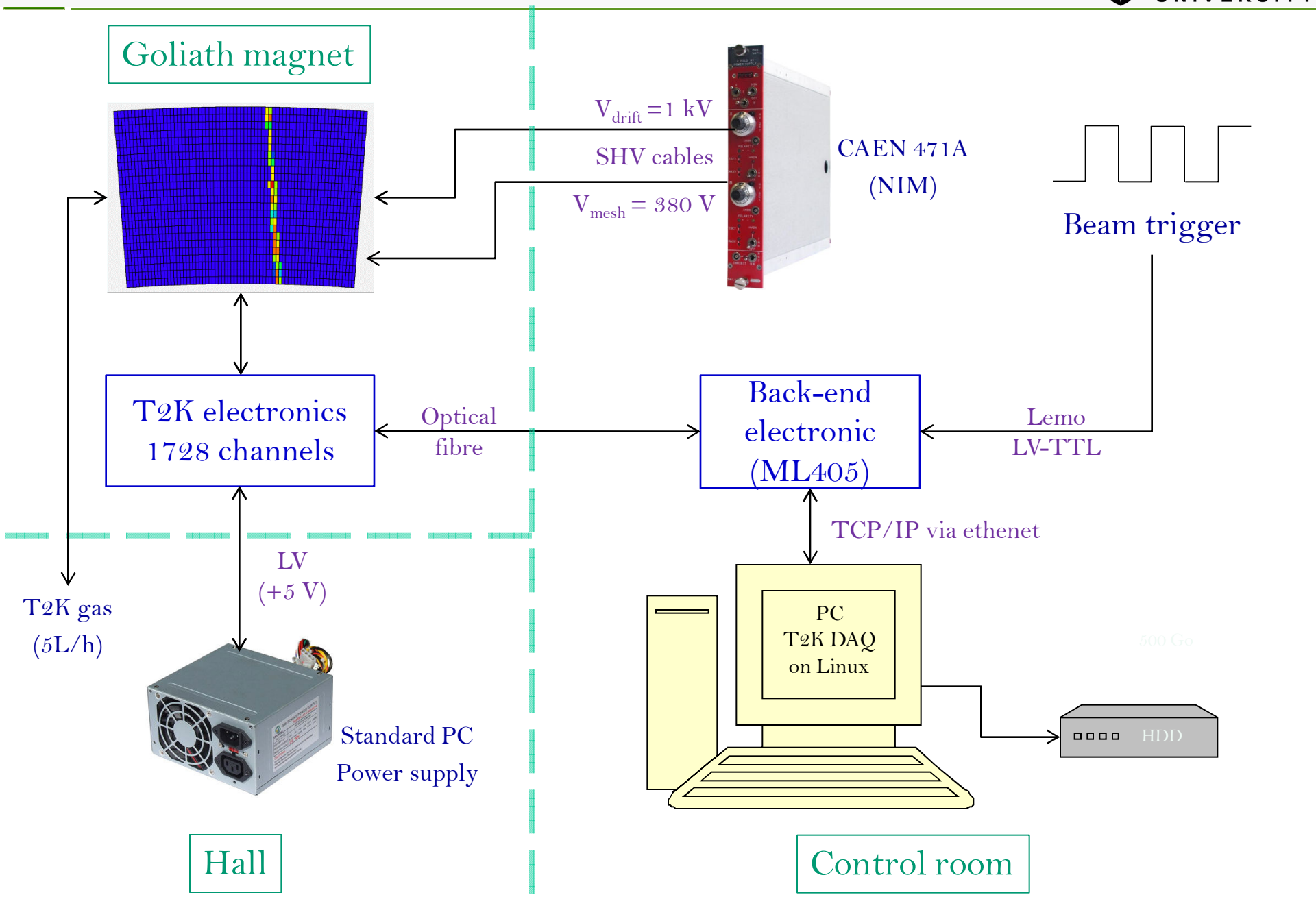
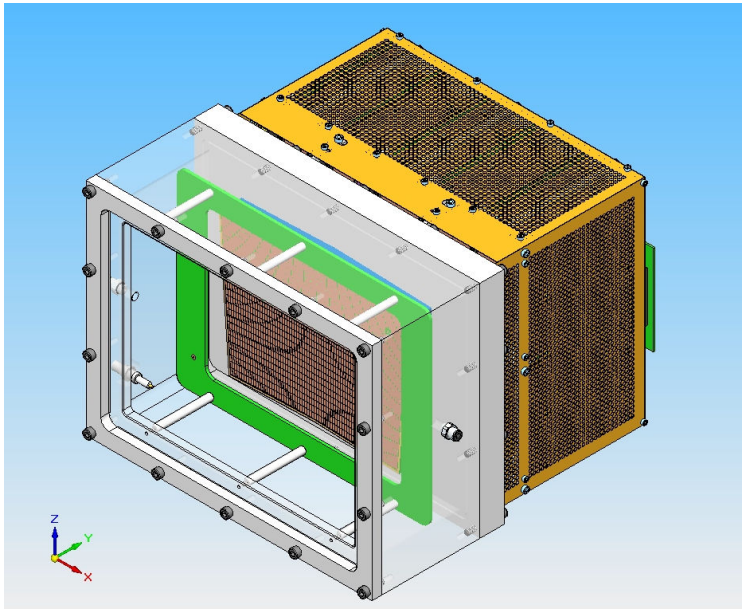
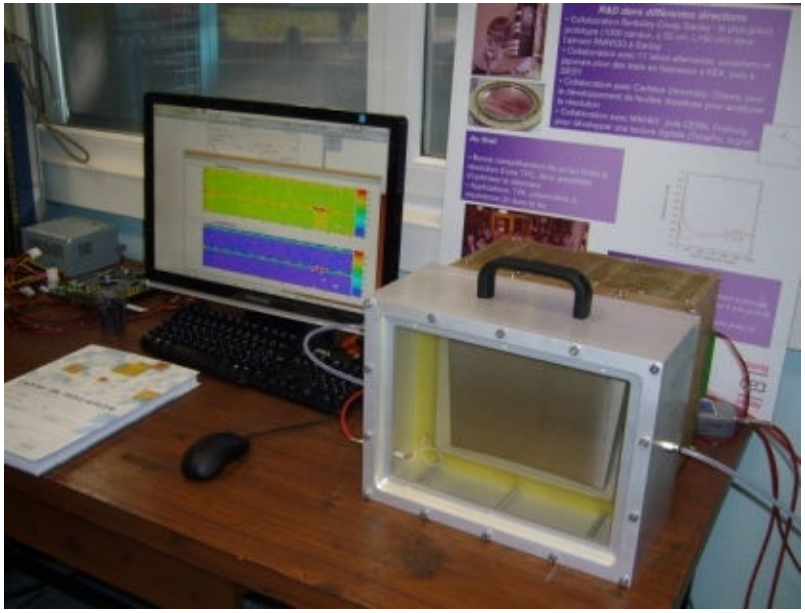
Data taking diagram

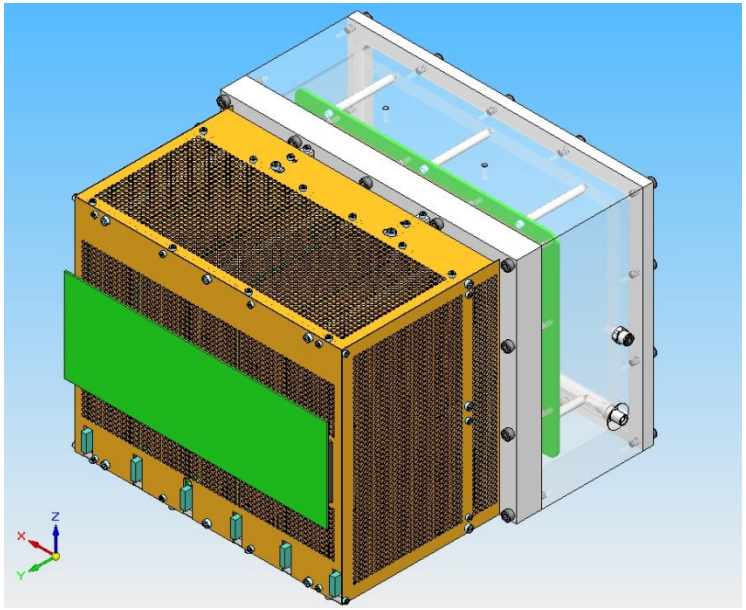


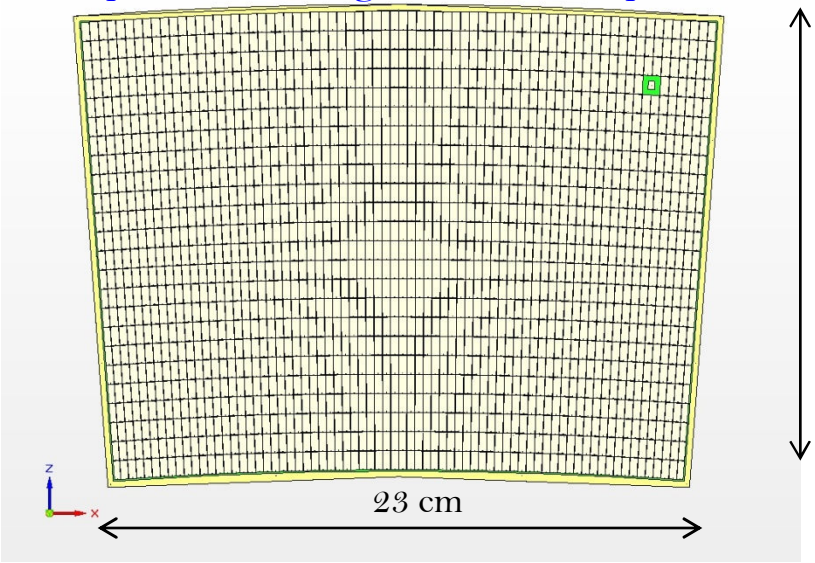
Detector description 1/2





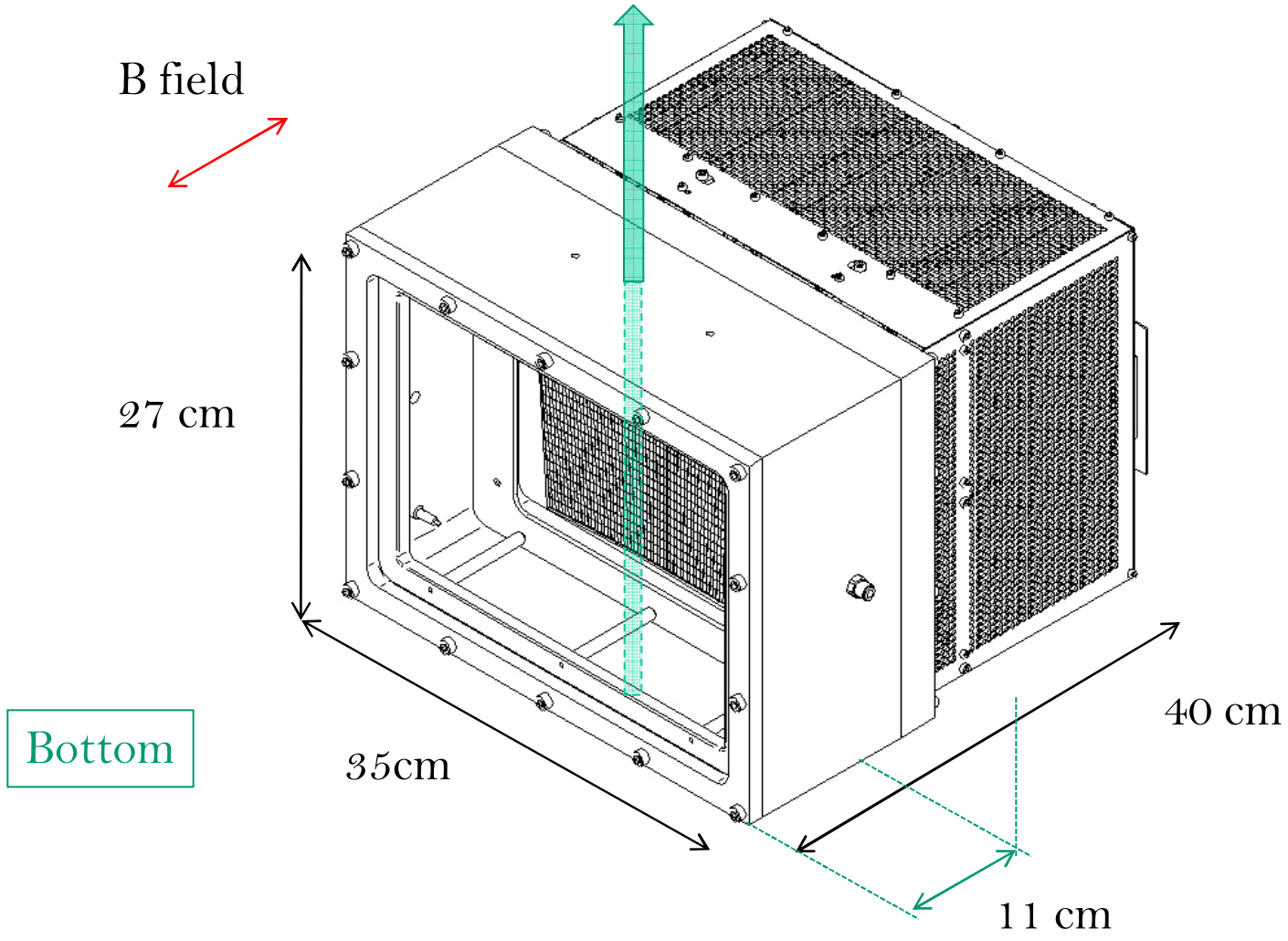
1726 pads Micromegas resistive Kapton bulk





24 rows x 72 columns; <pad size> ~ 3.2x7 mm^2

- Total weight: ~20 kg
- Radiation length: 40% (2×1.8 cm of aluminium)



Requests for the beam tests

- Detector placed in the centre of the magnet for homogeneous B field
- Goal: precision tracking and performance measurement of the resistive Kapton coverlay with hadrons at different beam intensities in TPC mode
- Duration: 3-4 days
- Particles: muons preferably, the rest can be hadrons, from low to very high rates
- Intensity: scan necessary.
- Gas: premix bottle of T2K gas ($ArCF_4Iso$) at 5 L/h
- Status:
  - optical fiber, SHV cables, gas tube already installed
  - improve the box installation: secured small lift table
  - own beam trigger as close as possible to the gas box but out of the B field