

Micromegas for SLHC

A project to investigate the use and determine the working parameters of Micromegas for SLHC tracking – in conjunction with the ATLAS SLHC Micromegas chambers effort

Participating Institutions

Saclay

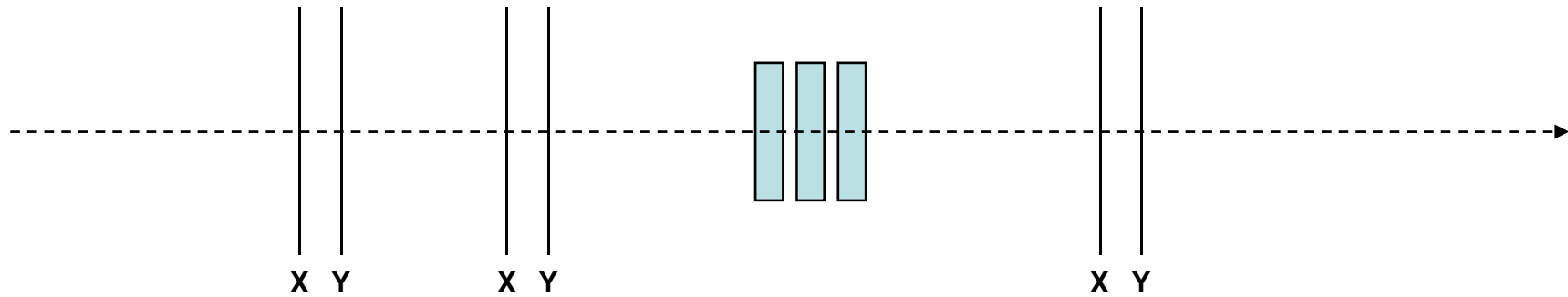
NSRC “Demokritos”

Univ. of Athens

Univ. of Thessaloniki

National Technical Univ. of Athens

Telescope



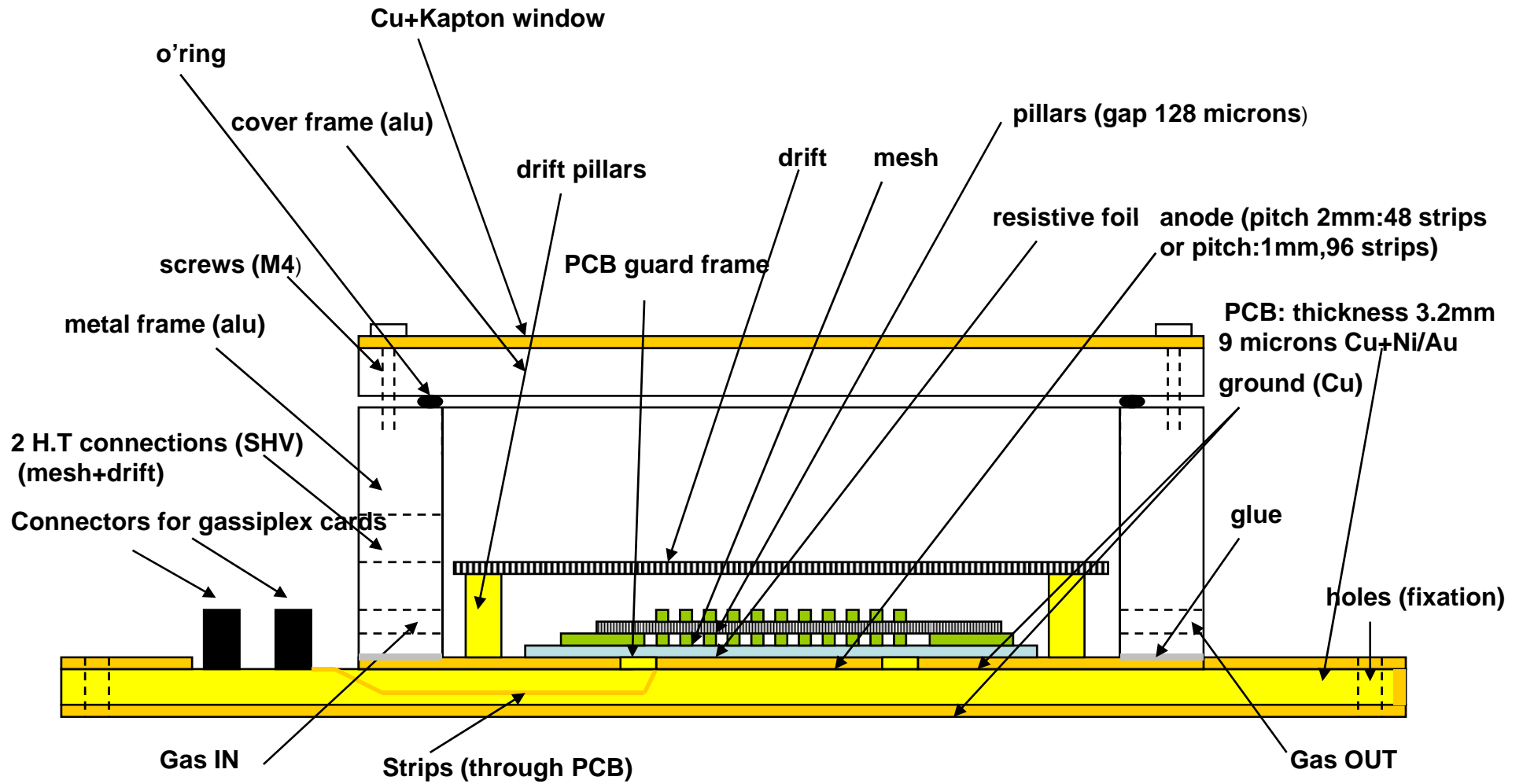
Detector parameters

- Design and construct 6 (X,Y) detectors to form a beam telescope
- Design and construct several test detectors with different pitches (0.5, 1 and 2 mm) some with resistive layers
- Use GASSIPLEX electronics and later a faster front-end system
- Design Labview DAQ and later a faster system

Measurements

- assessment of protection against sparks
- improvement of spatial resolution
- Gas mixture studies

Test beam prototype



Status

- X and Y Micromegas chamber design finished
- 2 prototypes constructed
- The mechanical frames of 8 more chambers have been constructed at Demokritos → under integration process at Saclay
- Labview DAQ and Monitoring under development
- Planning for initial tests in October 08 cancelled due to CERN recent decision. Next chance in Spring...

