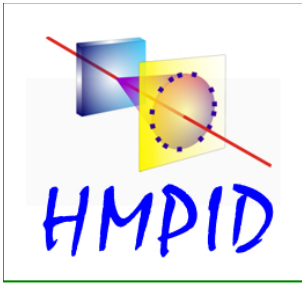
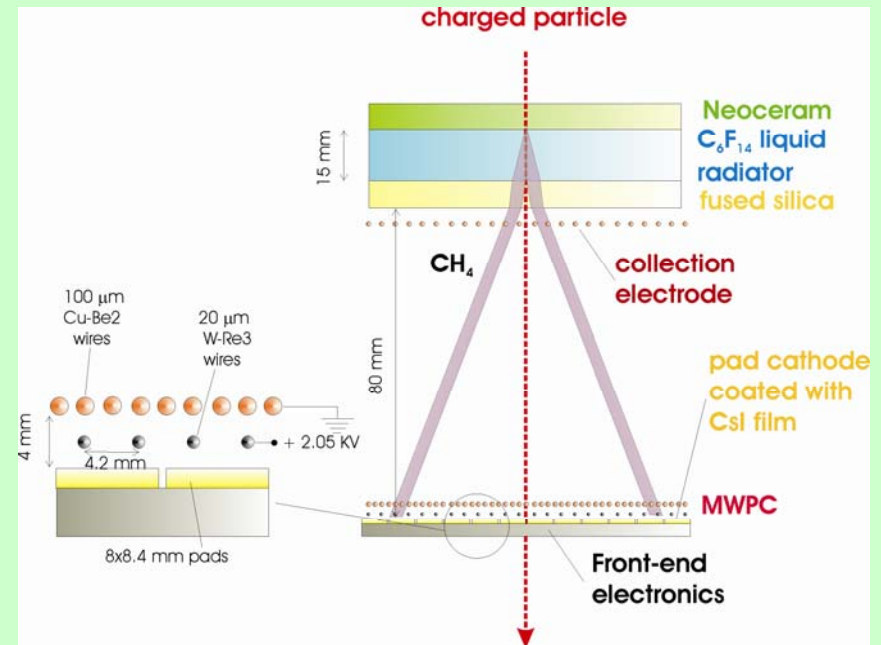
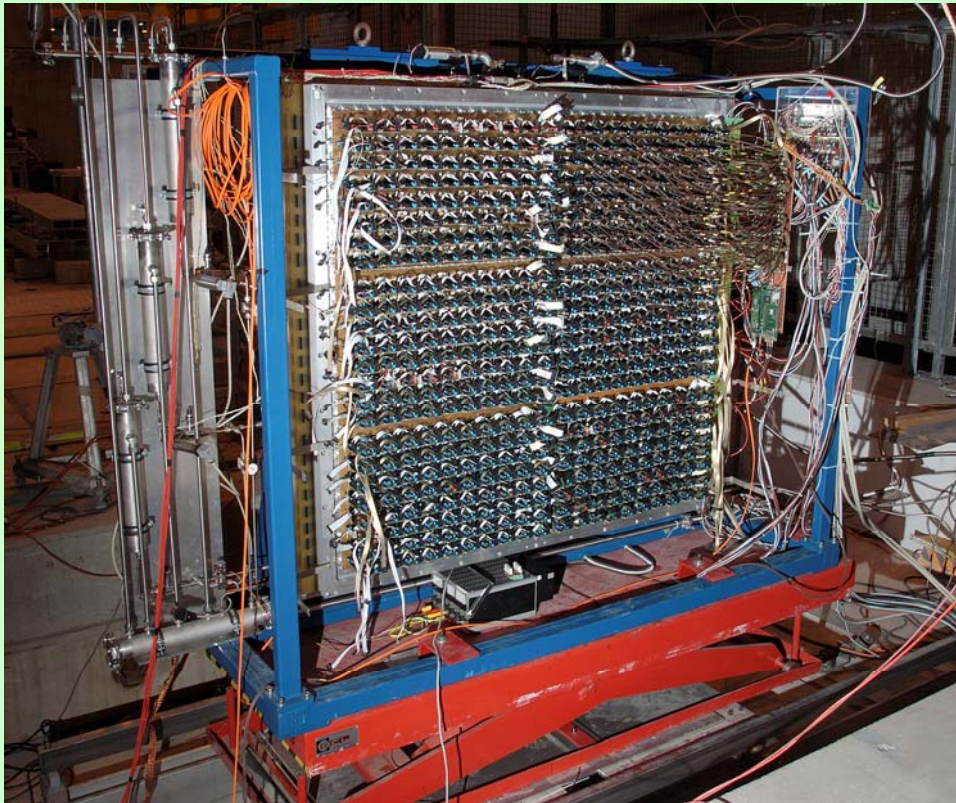


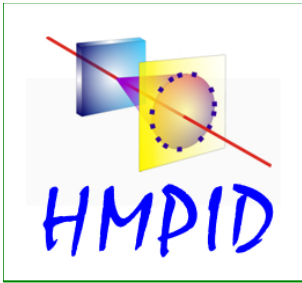
HMPID detector alignment procedure

Antonello Di Mauro
ALICE OFFLINE WEEK, 5/10/2005



Detector layout



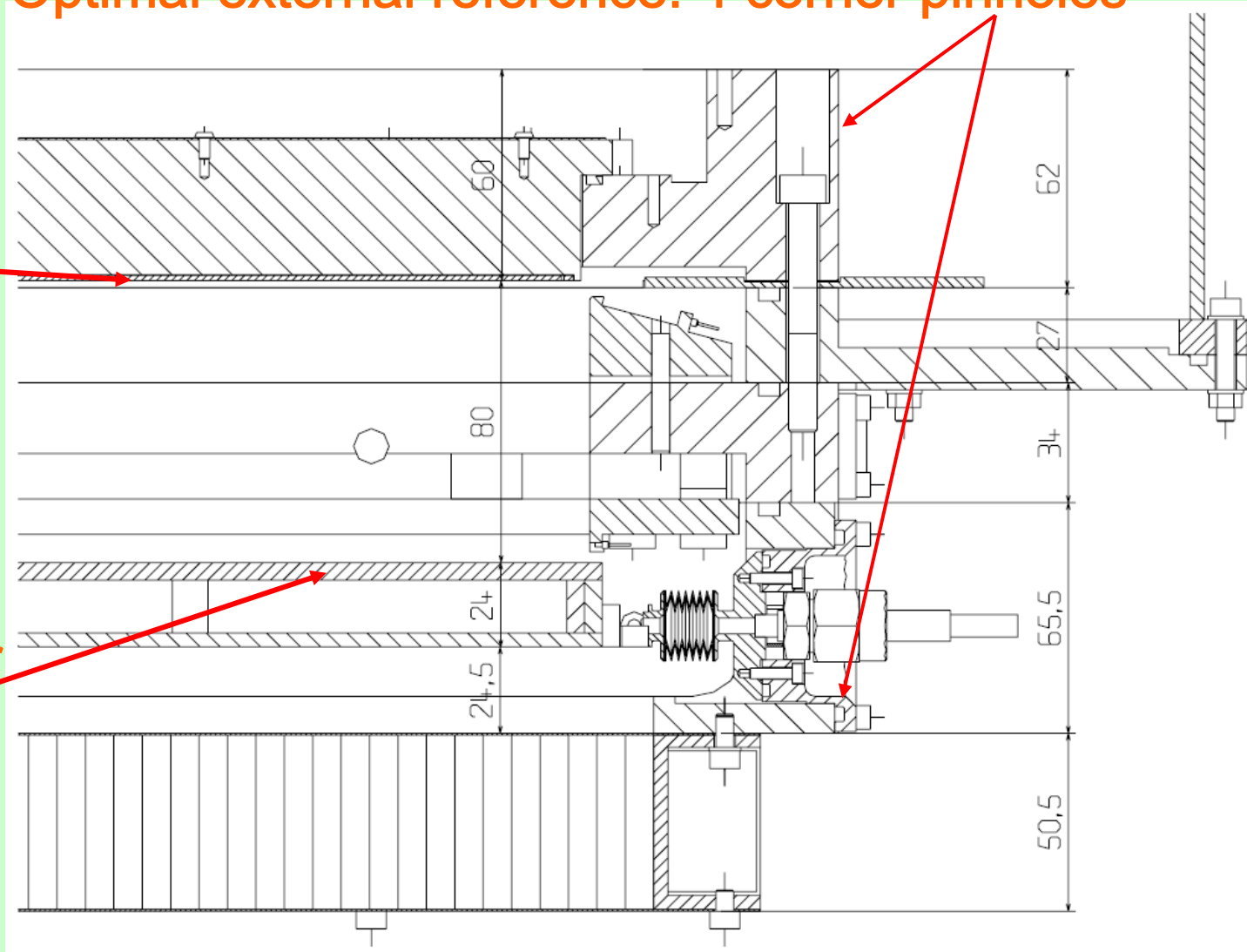


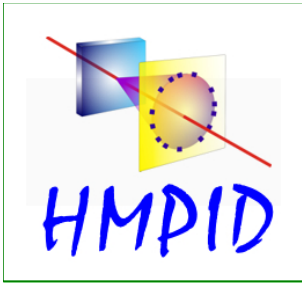
Detector elements to be aligned

Optimal external reference: 4 corner pinholes

Pad cathode

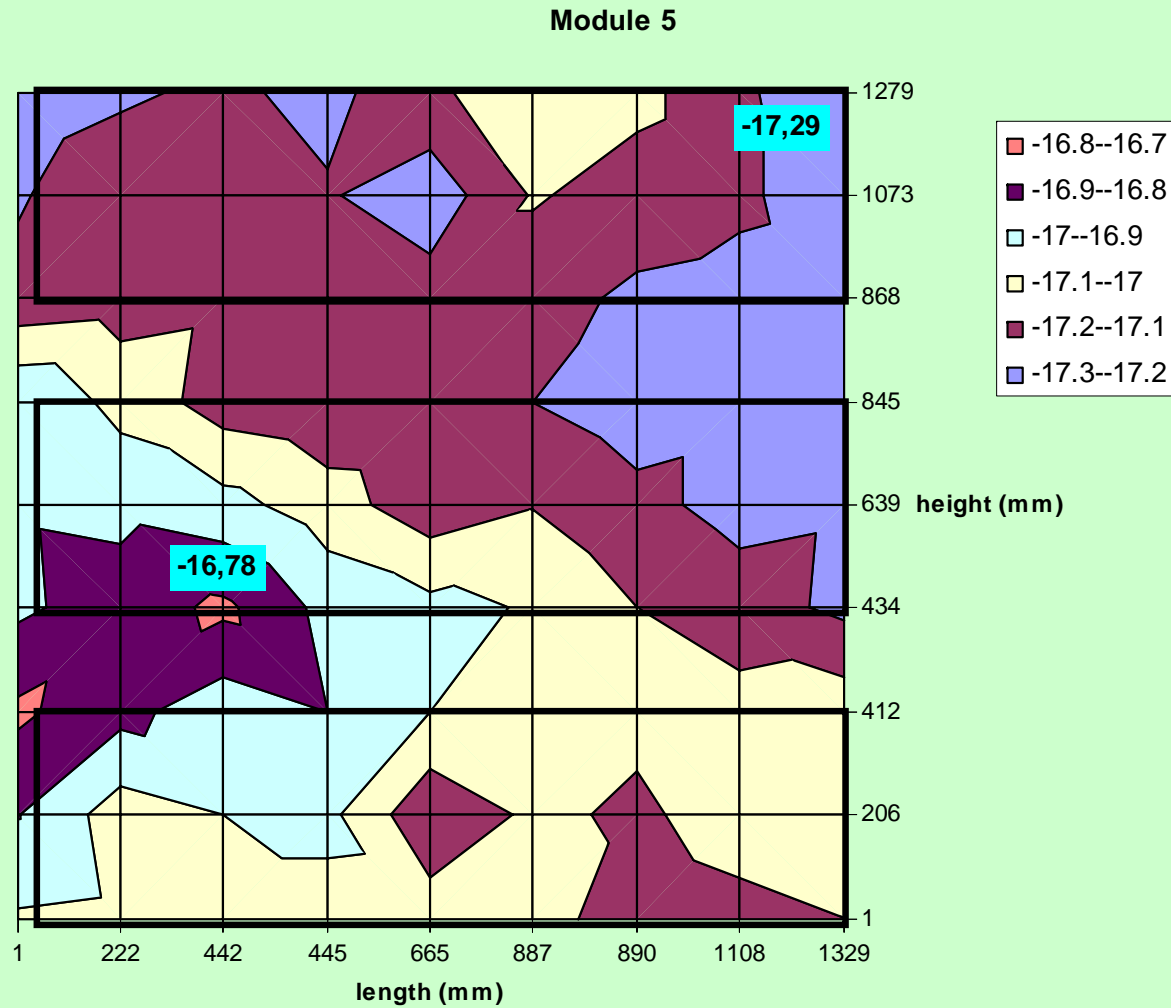
C_6F_{14} radiator vessel

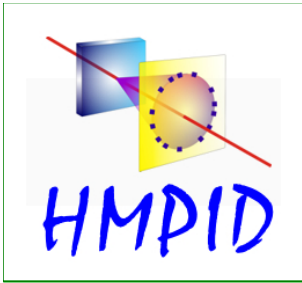




Radiator vessels

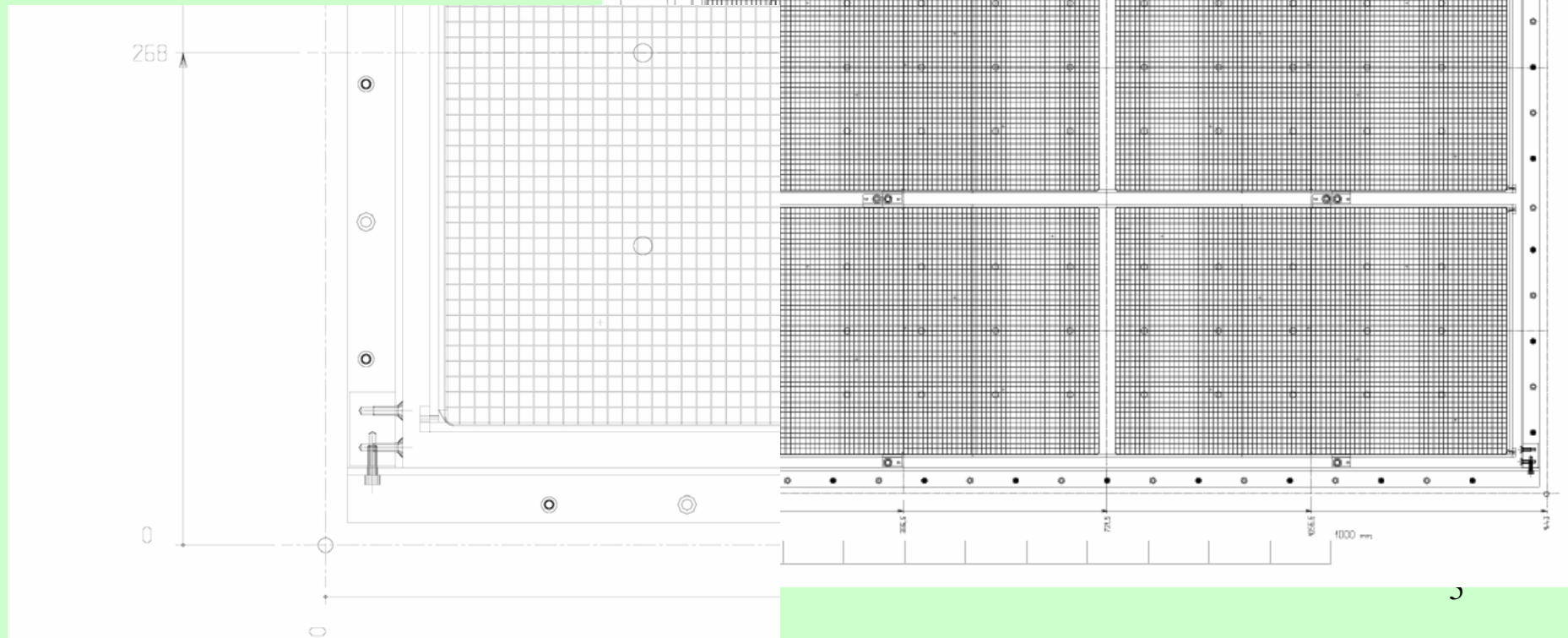
- Position of all radiator vessels wrt supporting frame measured with comparators by CERN metrology lab

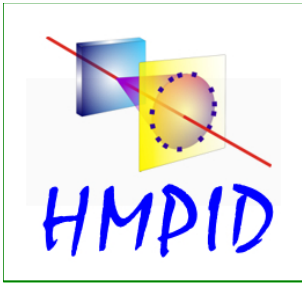




Pad cathodes

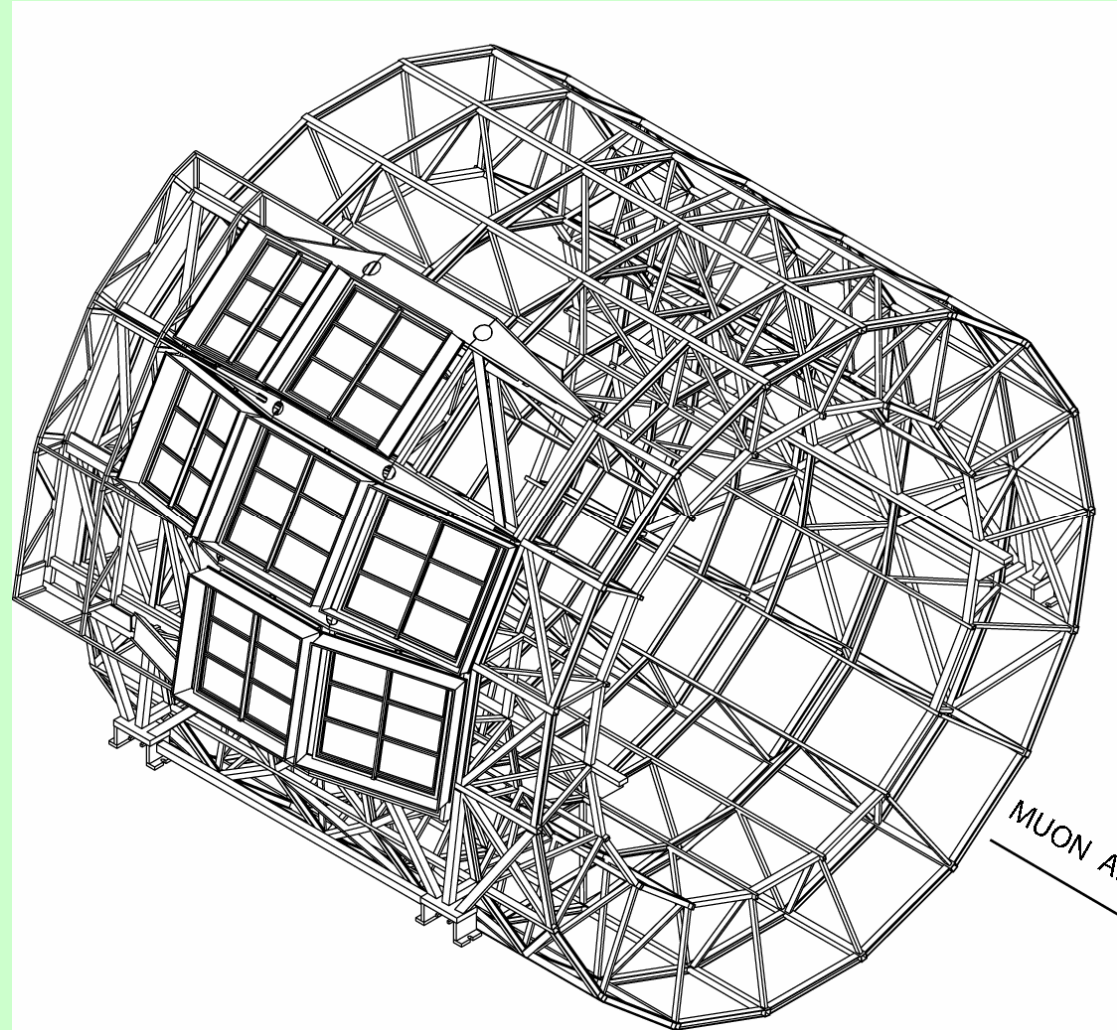
- Position of pad cathodes known by drawings (play for mounting $\sim 200 \mu\text{m}$)

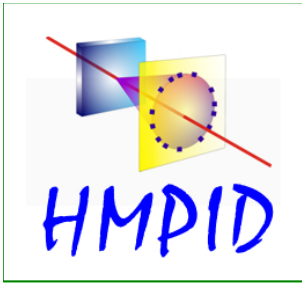




Pad cathodes

- However when mounted on the support cradle and then on the spce-frame the corner pinholes are not visible anymore....



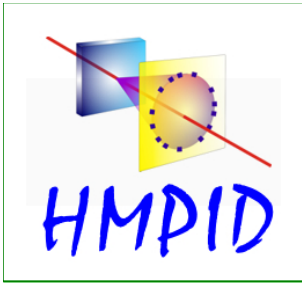


Pad cathodes

We agreed the following procedure with C. Lasseur/ A. Bahrens:

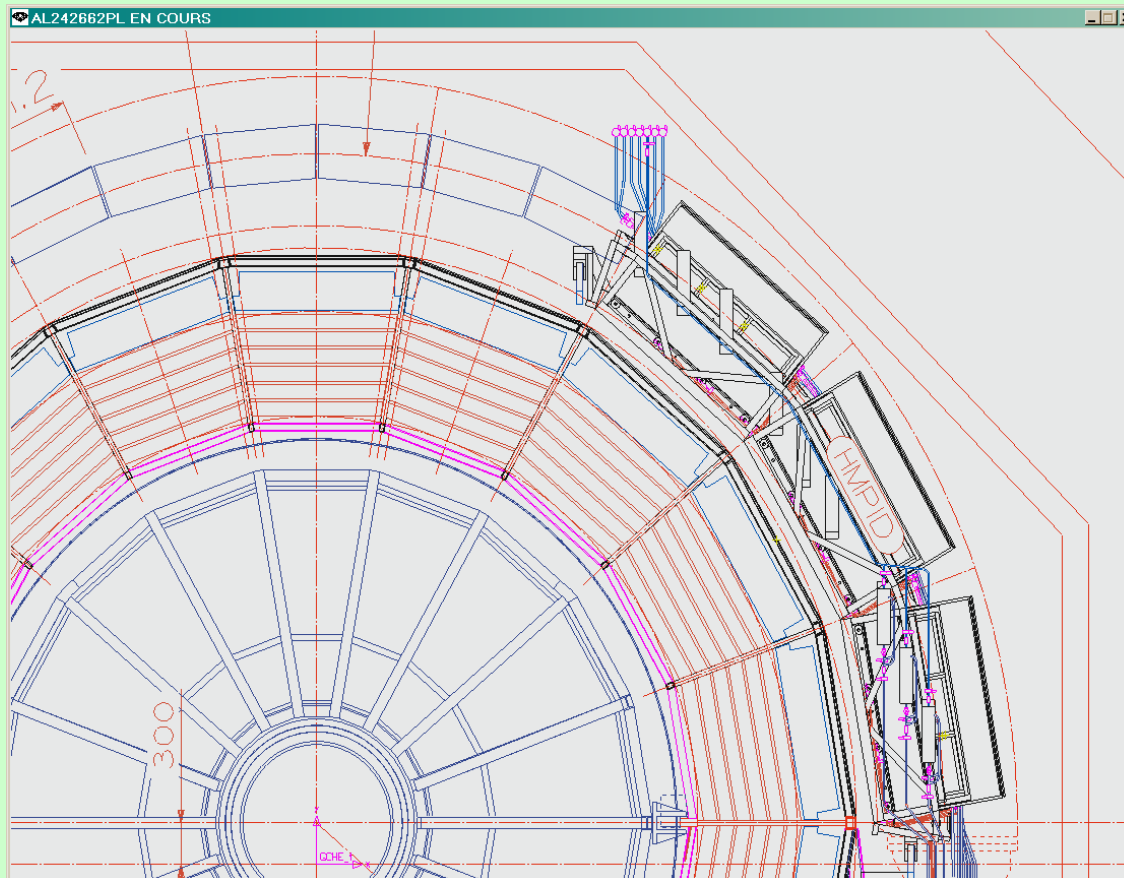
- 1) Translate corner pinholes coordinates using targets visible after mounting on cradle, survey of 7 modules

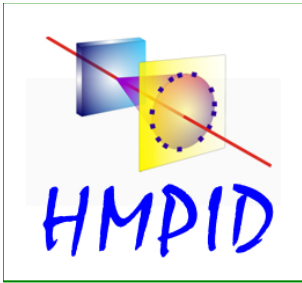




Pad cathodes

- 2) Add on cradle new targets visible from outside the L3 Magnet
- 3) Survey cradle with all modules before insertion and after insertion





Pad cathodes

- All 7 modules have been measured
- Fixed targets to be put on cradle are under study