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EUDET Module

Plans of integration and assembly

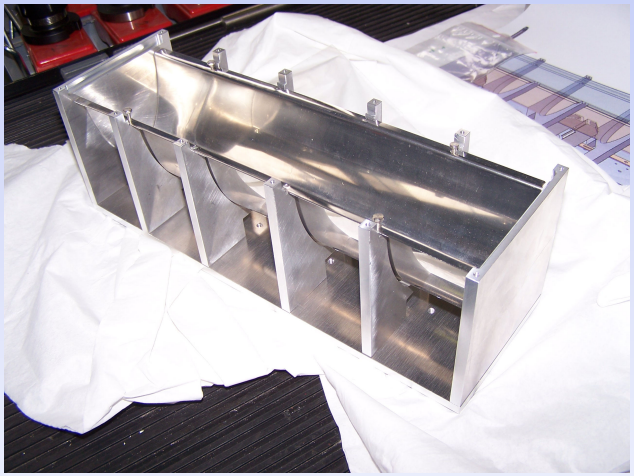
- SLAB assembly : Process phases
- Assembly and insertion equipments
- Facilities (hall)
- Conclusions

Process Phases for one slab

1. Brazing 2 ASUs line
2. gluing HT kapton on each ASUs line
3. Integrating first ASUs line with kapton in H structure
4. Integrating first copper drain in H structure
5. Turn over H structure
6. Integrating second ASUs line in H structure
7. Integrating second copper drain in H structure
8. Clamp and close the slab with copper tape

Assembly and insertion equipments

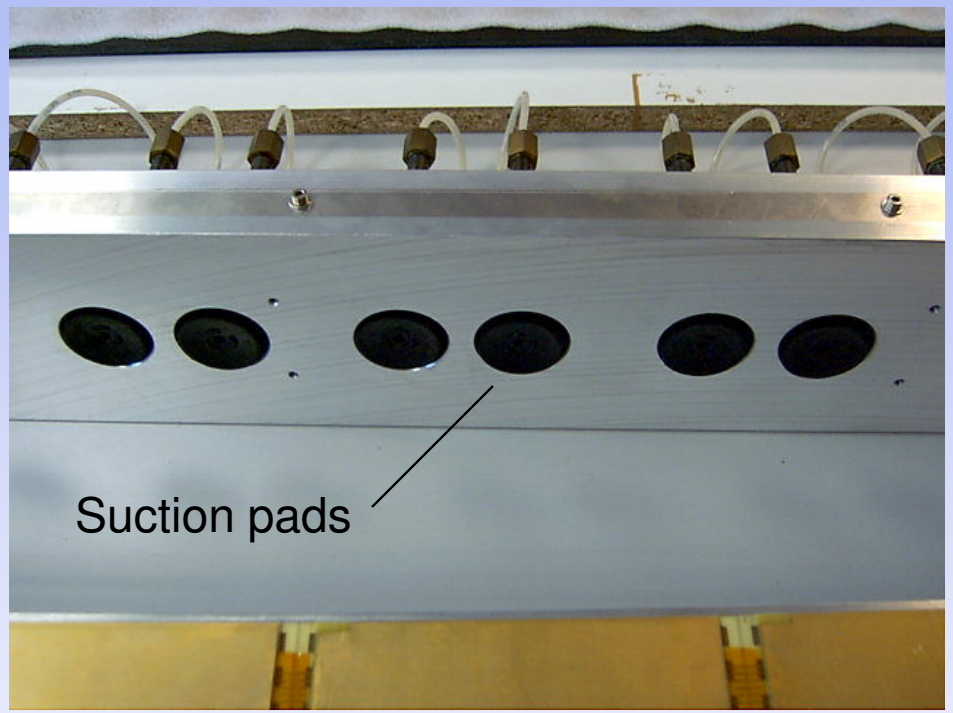
ASU assembly bench (brazing)
Patrick Cornebise



Heating lamp under fabrication

P. Cornebise, Y. Peinaud
M. Lacroix et J. Dubois

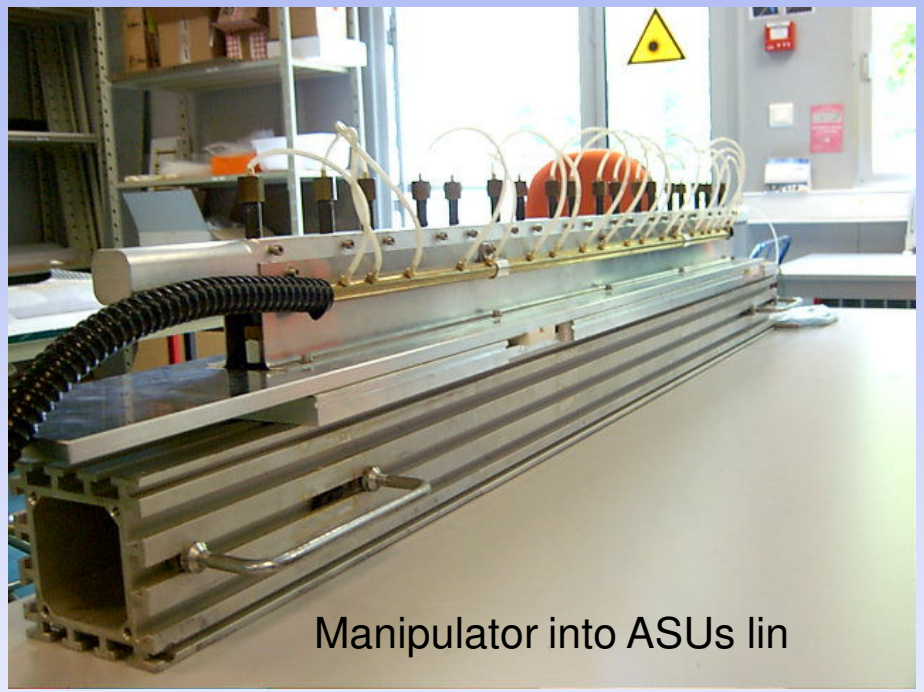
Assembly and insertion equipments



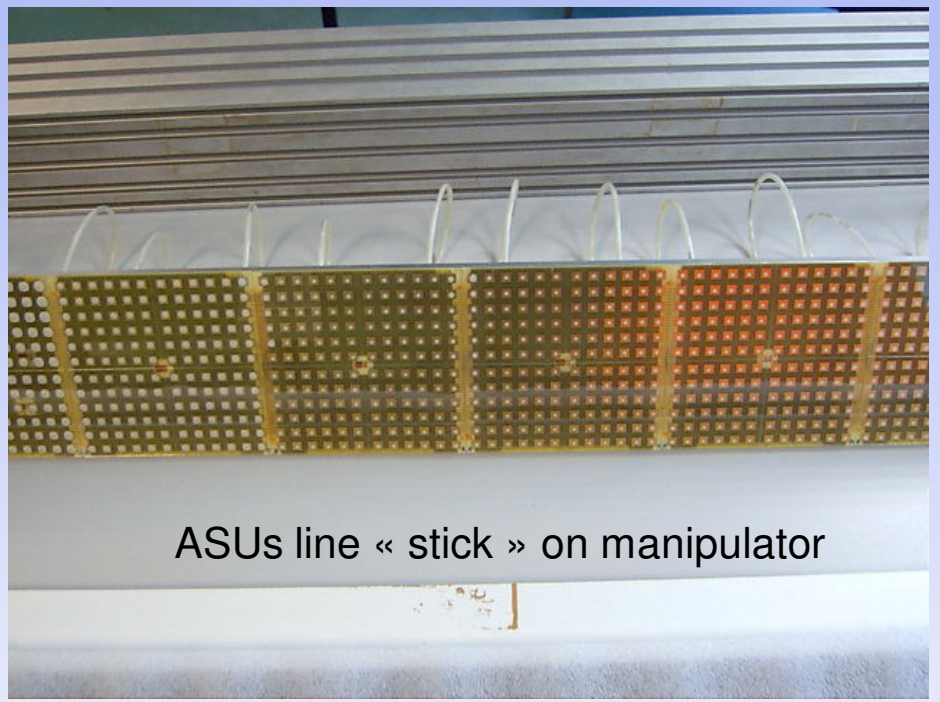
G. Guilhem

Manipulation equipment for ASUs line (suction pads)

Assembly and insertion equipments



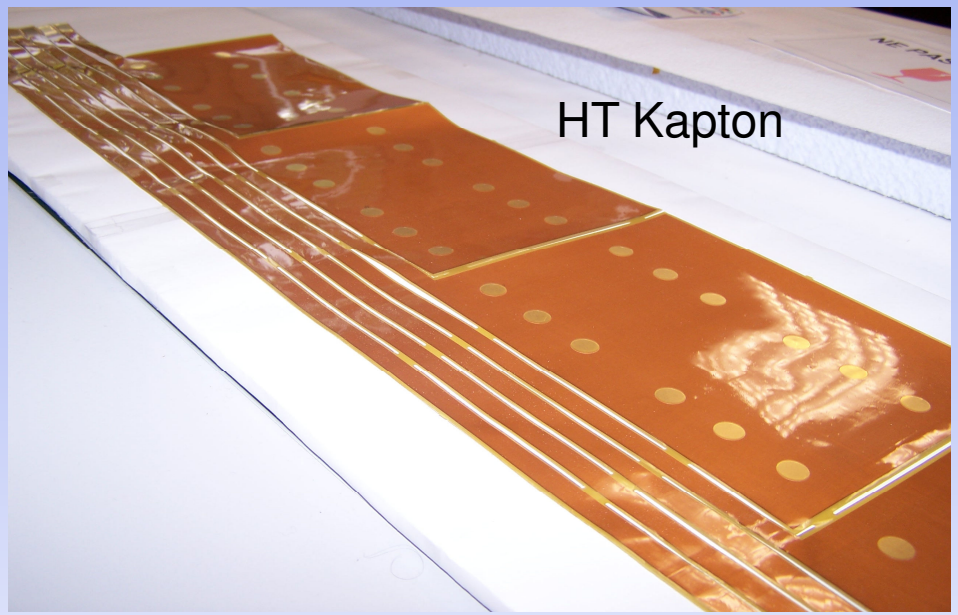
Manipulator into ASUs lin



ASUs line « stick » on manipulator

Manipulation equipment for ASUs line (suction pads)

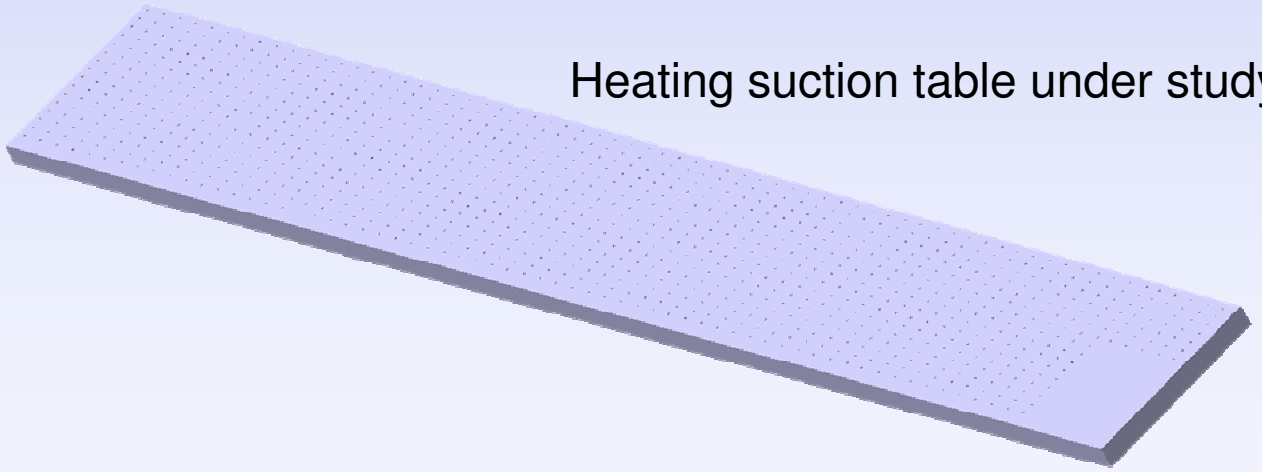
Assembly and insertion equipments



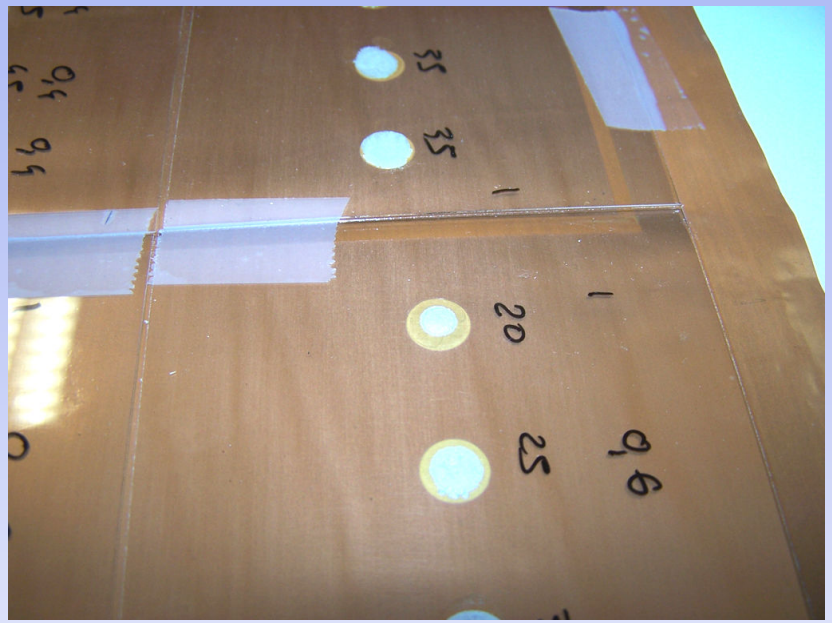
HT Kapton

We need equipment to fix and keep flat HT Kapton sheet during gluing on ASUs line

Heating suction table under study



Assembly and insertion equipments



HT kapton test gluing on glass

Lead by Patrick Cornebise (LAL)

and Remi Cornat (LLR)

- The mecanique resistance of conductive glue seem weak

  $\Rightarrow$ Epoxy glue points will be probably required.

- Final approach of ASUs line must be without cross mouvement

  $\Rightarrow$ Guidance équipement for ASUs manipulator

Facilities (Building)

Equipements liste

- ASUs line assembly bench *
- HT kapton gluing bench (suction table and guidance)
- Side table *
- Turn table *
- Module stand (module = 800kg)
- Cosmic bench
- ASUs line box beam storage *
- SLAB box beam storage
- Electronique test bench (ASUs line, HT…)
- Wardrobes for equipments, tools, spare parts…*
- Computeur office

*Quite clean environment required

Facilities

Patrick Cornebise office :

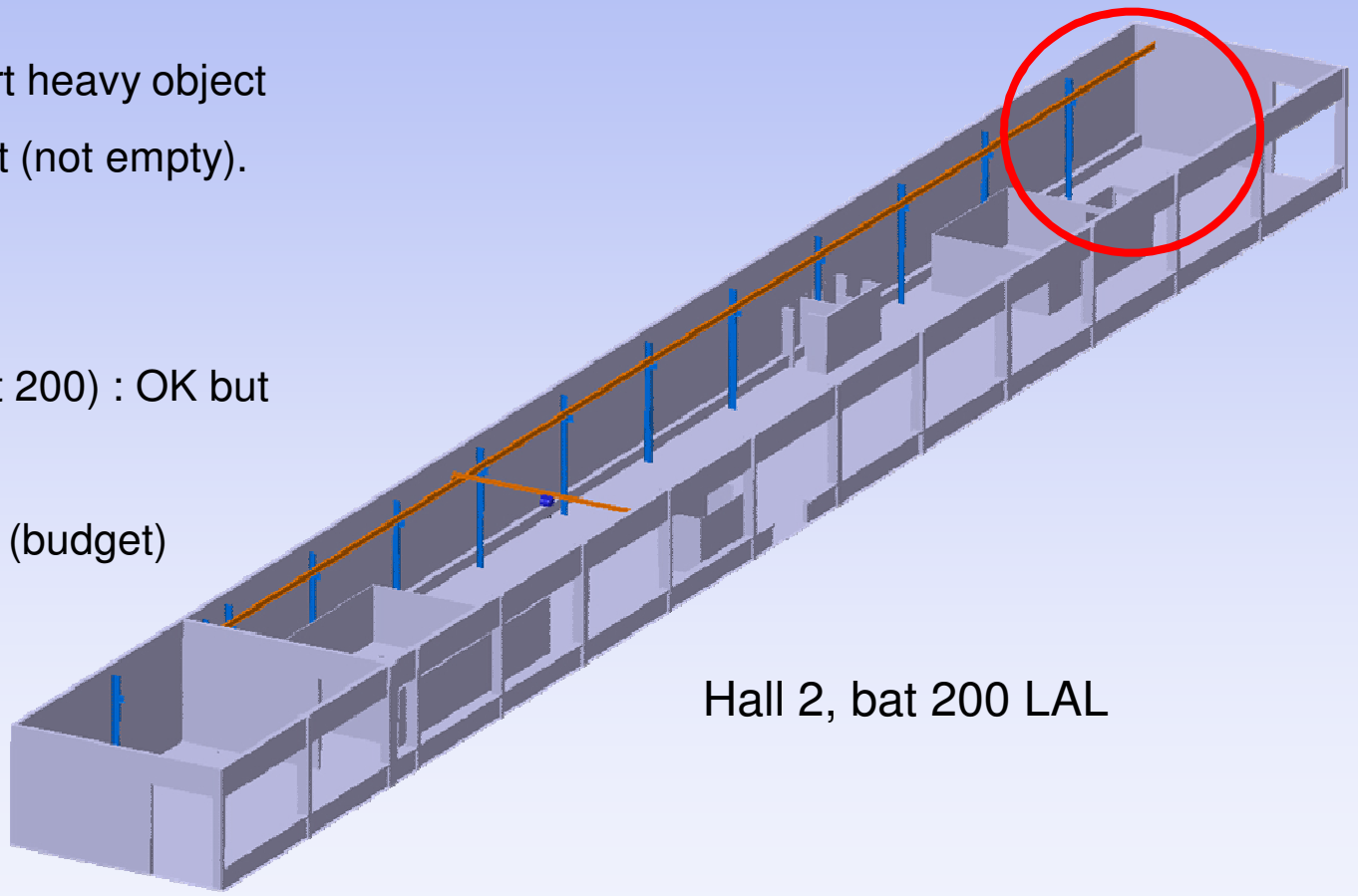
- Too small
- The floor not support heavy object
- Use for other project (not empty).
- Inadequate access

Location in hall 2 (LAL, bat 200) : OK but

- Unclean, dusty.

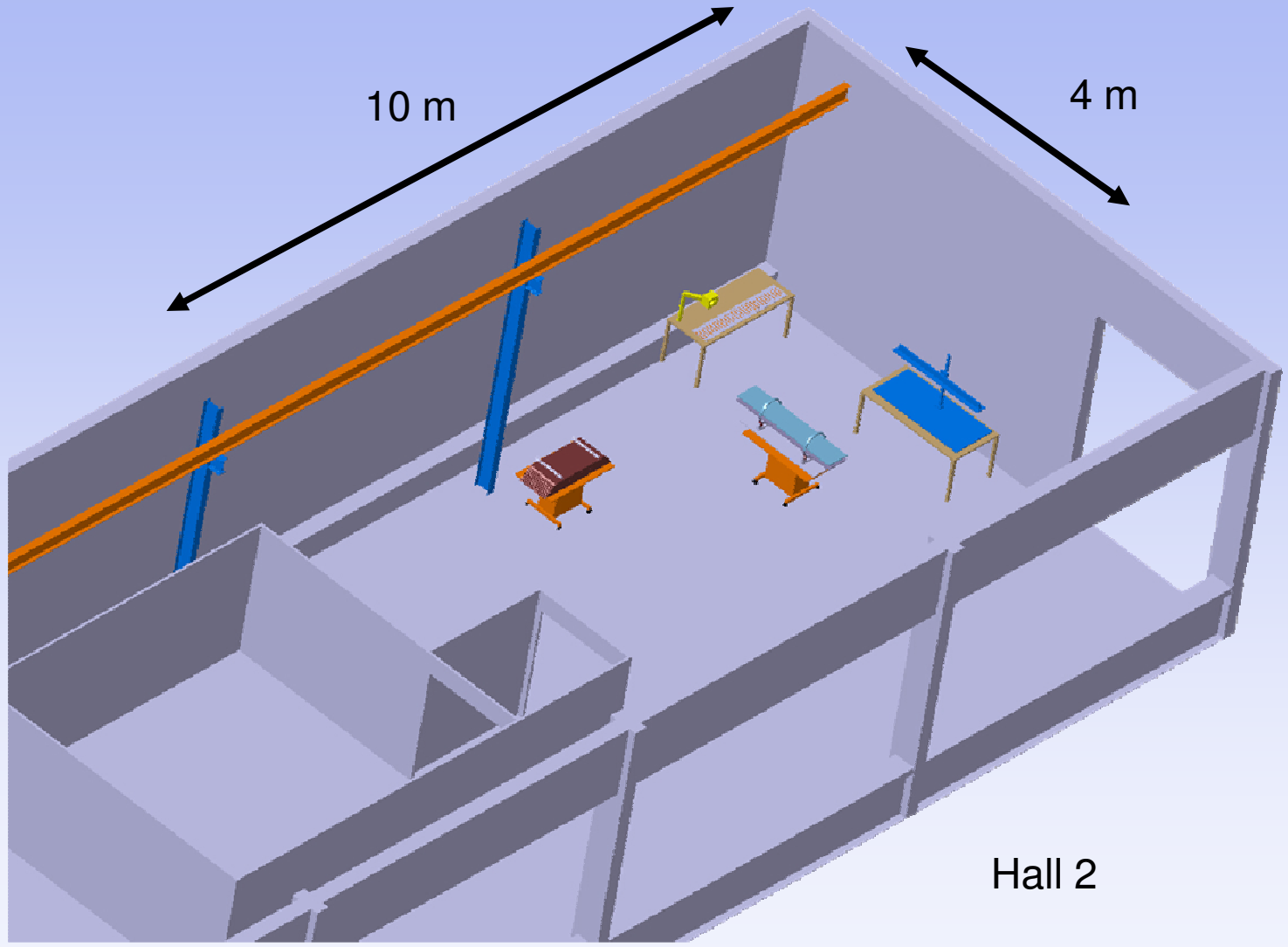
⇒ Build a clean zone (budget)

⇒ Mind to delay



Hall 2, bat 200 LAL

Facilities



Conclusions

- The team have make good progress on equipments.
- Assembly and integration zone still abeyance
- Next steps are :
  - Thermal test in module with several « slab »
  - See real PCB/ASU to finalise SLAB in mecanical point of view
  - Start facilites devolpment