FHIT

UCL Louvain (L. Bonnet, V. Lemaître, X. Rouby)

vincent.lemaitre@fynu.ucl.ac.be
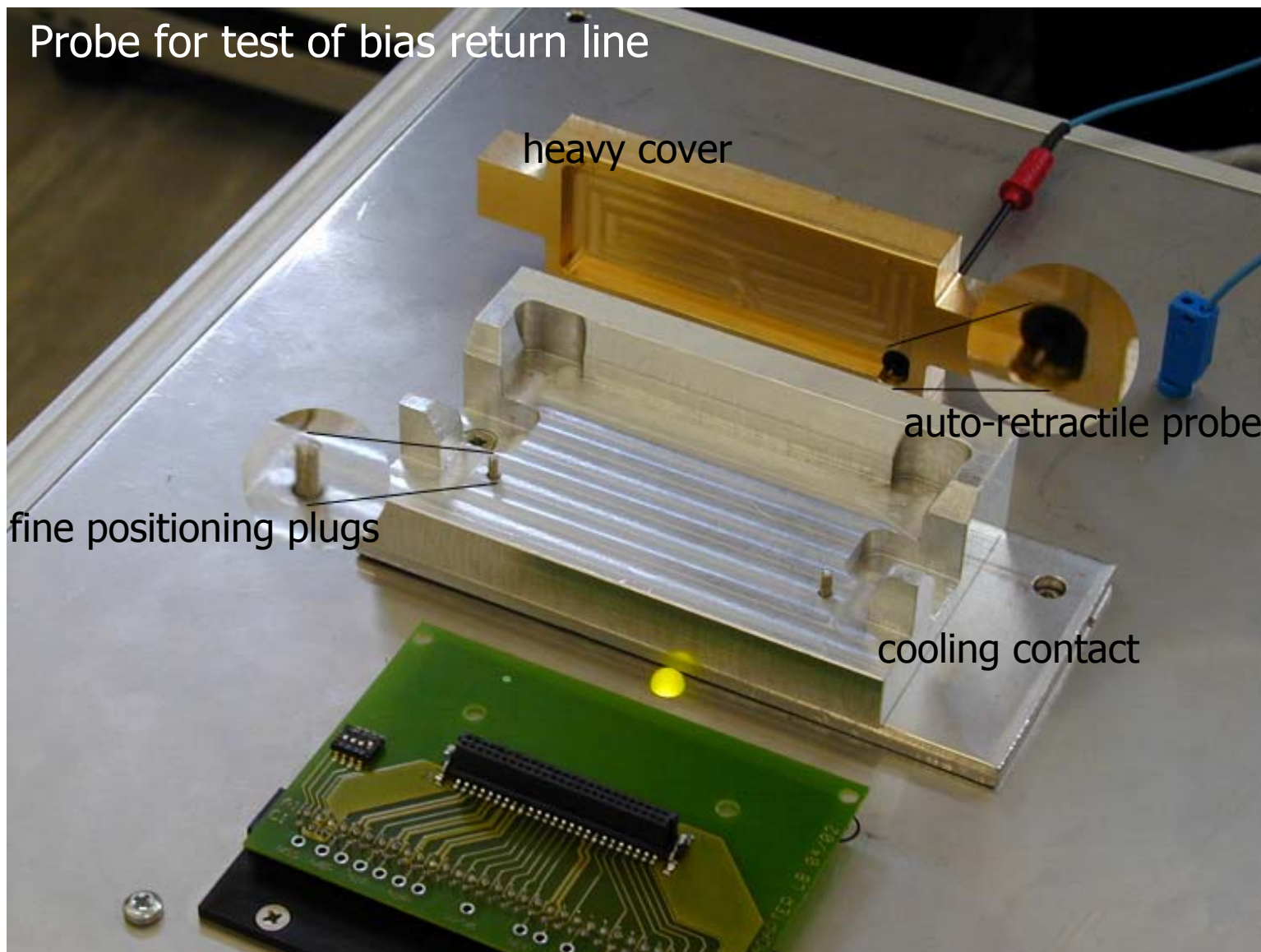

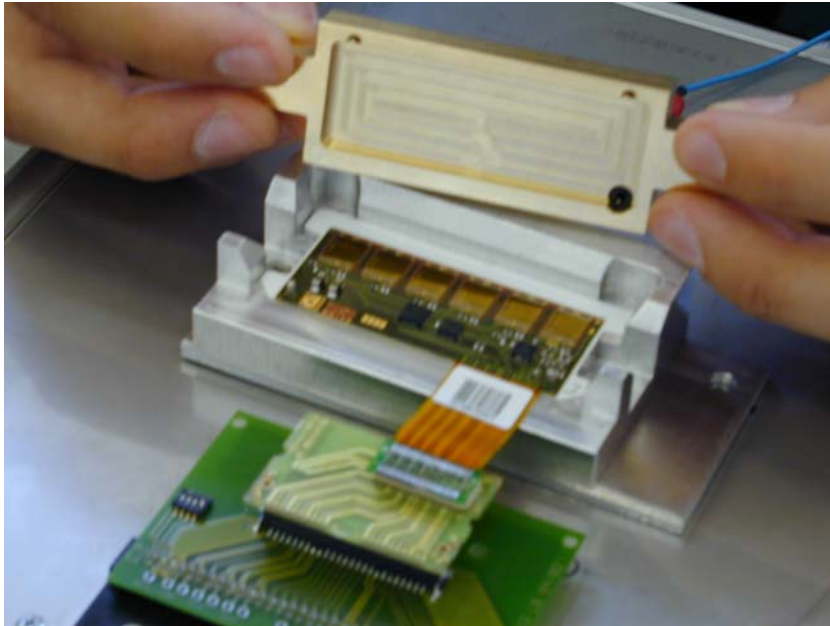*In collaboration with*

RWTH Aachen (M. Axer, F. Beissel, T. Franke, J. Mnich)

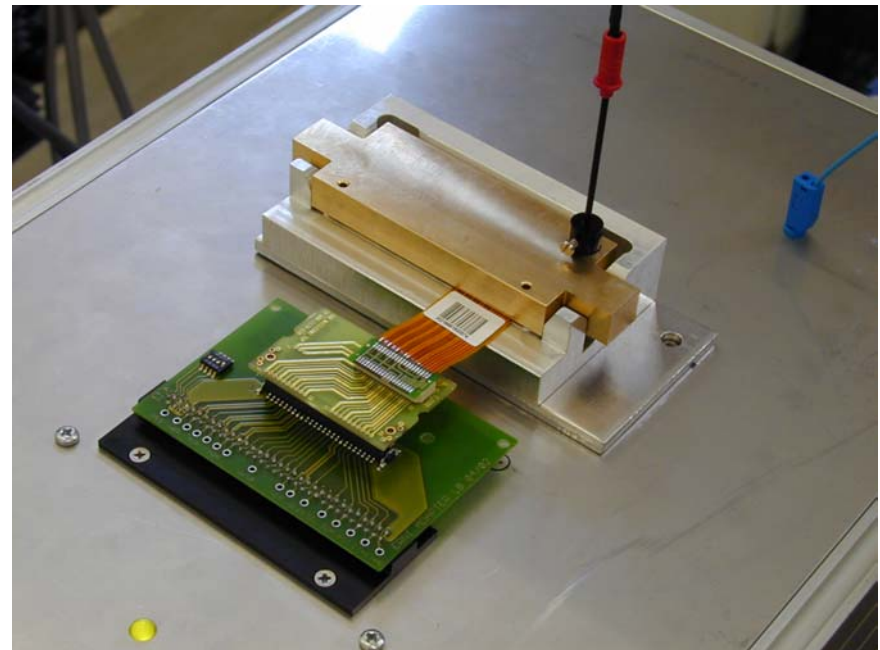**IRES Strasbourg** (JD. Berst, P. Graehling, P.Juillot, C. Maazouzi)

http://www.fynu.ucl.ac.be/themes/he/cms/activities/tracker/hybrids.html

Mechanics

Probe for test of bias return line

heavy cover

auto-retractile probe

fine positioning plugs
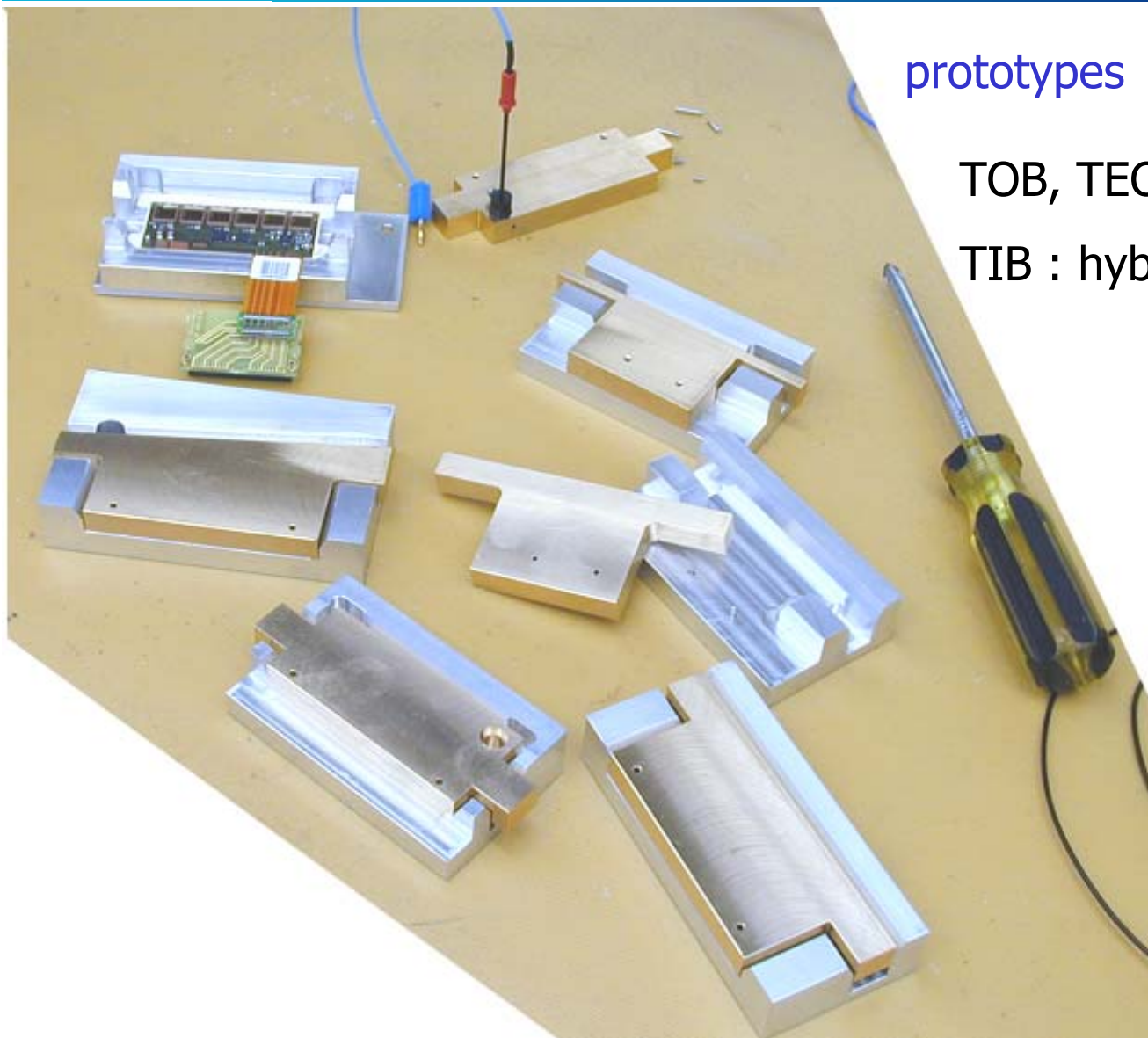
cooling contact

example : TEC_6_down (1666)

- the hybrid is put into the mechanics

- the cover pushes it down

- the positioning plugs insure correct

  hybrid positioning

- hybrid is ready for the test

prototypes

TOB, TEC : ok

TIB : hybrid holes too small ?

... being improved

And in addition:
some need to be
compatible for
up and down types!

firmware is ok

General:Large number of jigs… this will make the handling in the industry
more complicated! (… will cost more)
→ that's life…

For TIB:

The oblong hole should be on the left hand side
to improve accuracy
→probably difficult to change the mechanical layout

The dimension of the oblong hole is not the one specified (1.5 mm)
smaller than 1.45 for the TIB R-phi hybrid we have in hand
(ceramic we received were ok though)
→should be 1.5 mm to be checked with next TIB hybrids…

The contact area for the continuity test of the det. return line is very small
possible alignment problem (related to the two above remarks)
→this cannot be changed

Urgent need of "dummy" or bad TIB hybrids

- was installed end of May
- is working
- same setup as Strasbourg & industry

XML translation routine available (V1.0) [ASCII -> XML]

- not (yet) integrated into the LabVIEW interface

- easy to use :
    - copy it into the interesting folder (< 40Kb)
    - just one double-click and that's it… : XML files are generated

- working only for fully tested hybrids
        (ie : hybrids that passed the electrical test with no fatal error)

- feedback from Strasbourg :
    slight improvements needed
        ~> XML code
        ~> CT/ET-bad hybrid compatibility

- Mechanics ready for TOB and TEC but not for TIB.
  (to be continued)

- XML creation routine available and working for fully tested hybrids
  (to be continued)

- First estimate of limits for ET and FT : no news
   (to be continued)

- Most recent release of software distributed
            - LabVIEW : minor changes (FHITS 1.42)
            - XML creator : available (1.0)
            - firmware : no change