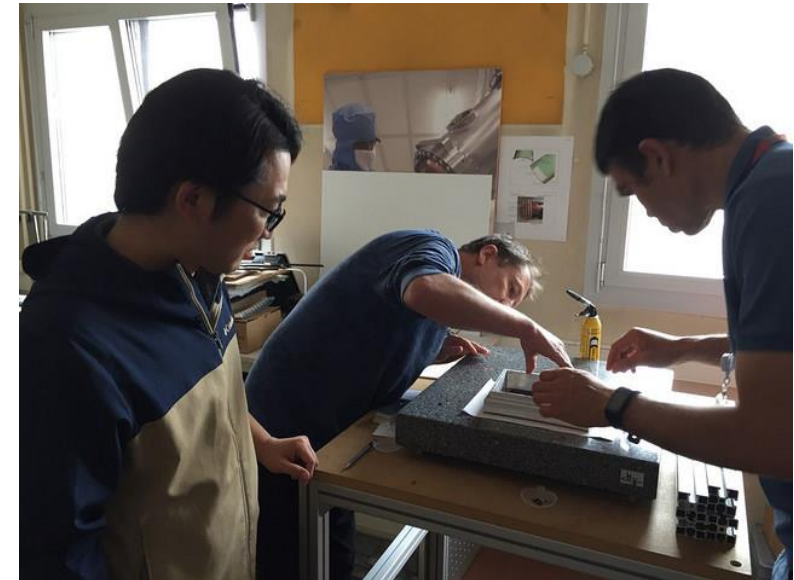


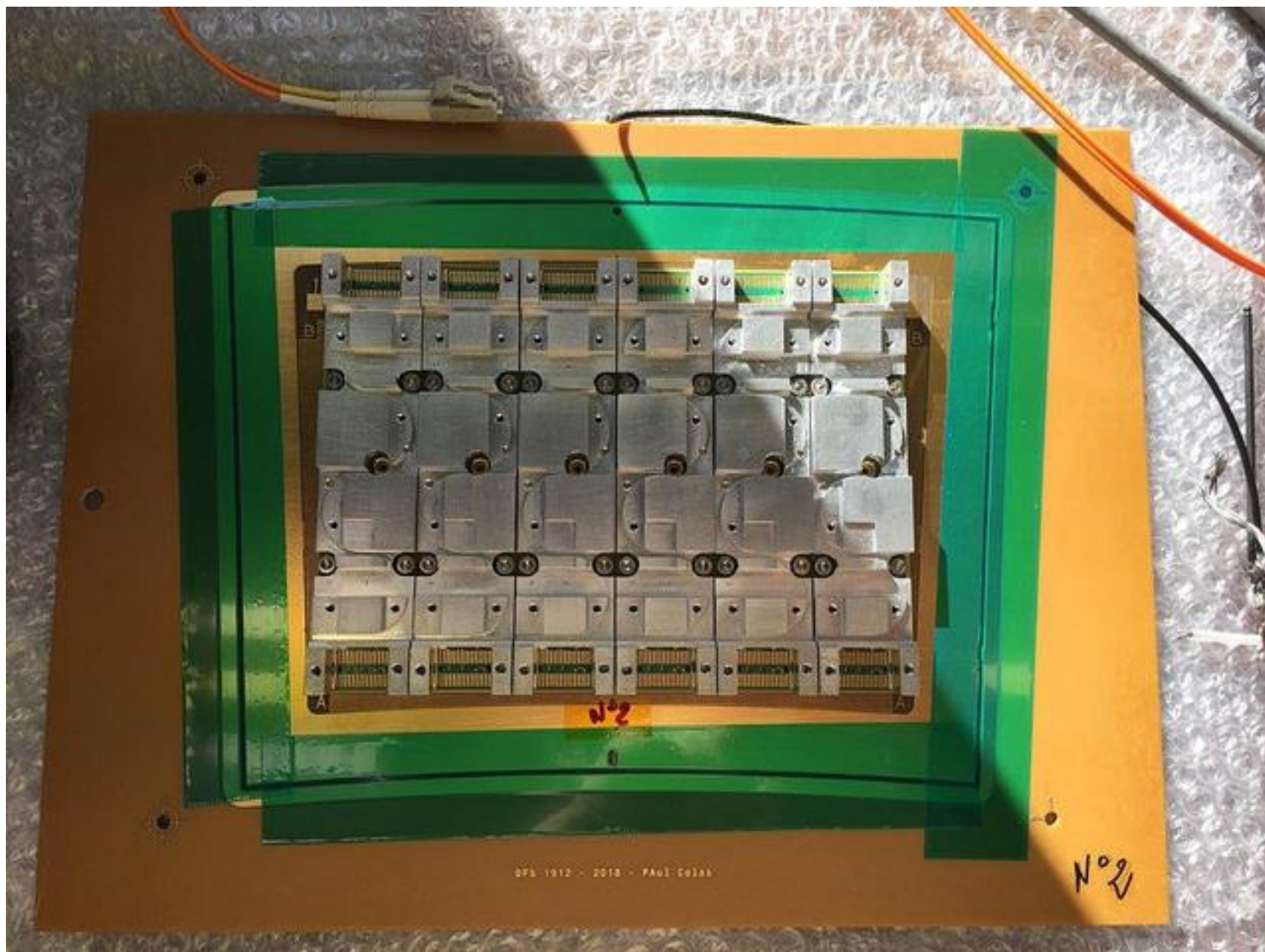
News from Saclay

P.Colas

- Tomohisa Ogawa arrived on October 2 and stays 2-2½ months
- Preparation of the Micromegas test at DESY (November 13 to November 29)
 - Will use LP2 endplate and 2PCO2 cooling (one loop)
 - 4 detector modules manufactured at CERN (encapsulated res. anode)
 - 3 arrived at Saclay, all working well (see presentation by Tomohisa) 1 glued on frame.
 - electronics and DAQ working (installed on the new computer)
 - preparation well advanced, radioprotection paperwork, travel, etc... in progress. (David Attié, Xavier Coppolani, PC, Sandrine Emery, Serguei Ganjour, T. Ogawa, Marc Riallot, Maxim Titov, Huirong Qi, Jan Timmermans). Important contribution from Ralf Diener and Oliver Schäfer at DESY (endplate, moving table, gas, CO2 compressor, trigger, supplies...)
 - Mounting and commissioning on Nov. 14-17, beam might start on Nov. 18, dismantling November 28
- ILD TPC Mechanical studies
- ILD news

Gluing the E1 detector on frame on October 17

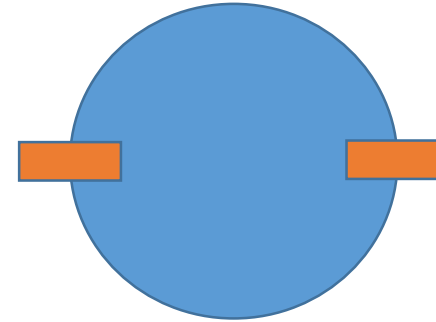




TPC mechanics

P.C., Julie Elman, Zhihong Sun

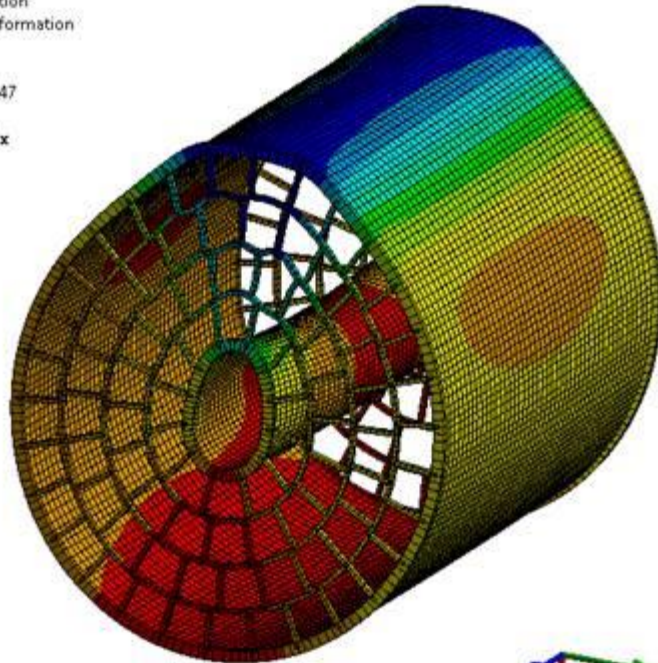
Proposal : support laterally



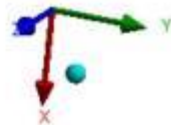
Gain a factor of 2.5 on the maximal scalar deformation

B: Base
Total Deformation
Type: Total Deformation
Unit: mm
Time: 1
09/10/2018 15:47

0.331 Max
0.294
0.257
0.22
0.184
0.147
0.11
0.0735
0.0367
0 Min

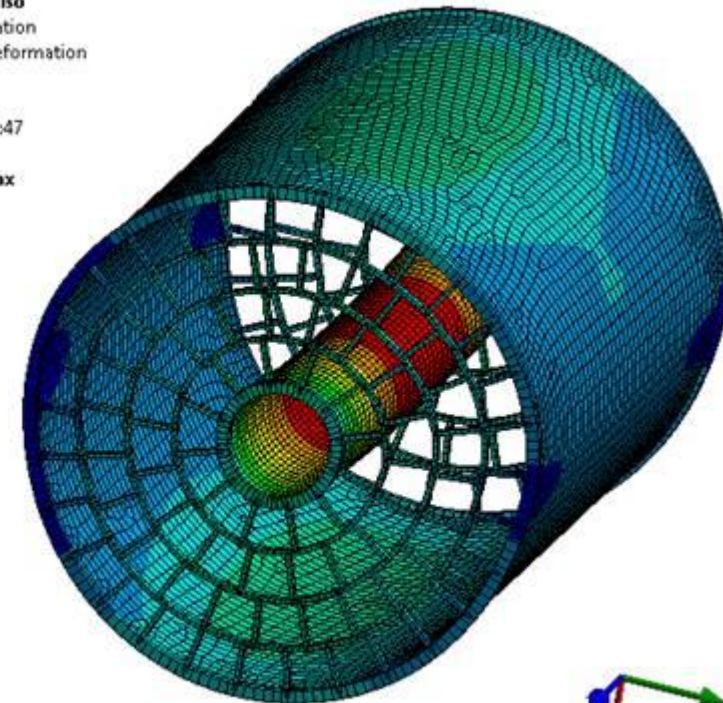


4e+03 (mm)
3e+03

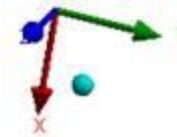


B: CL Median Iso
Total Deformation
Type: Total Deformation
Unit: mm
Time: 1
09/10/2018 15:47

0.131 Max
0.116
0.102
0.0872
0.0727
0.0581
0.0436
0.0291
0.0145
0 Min

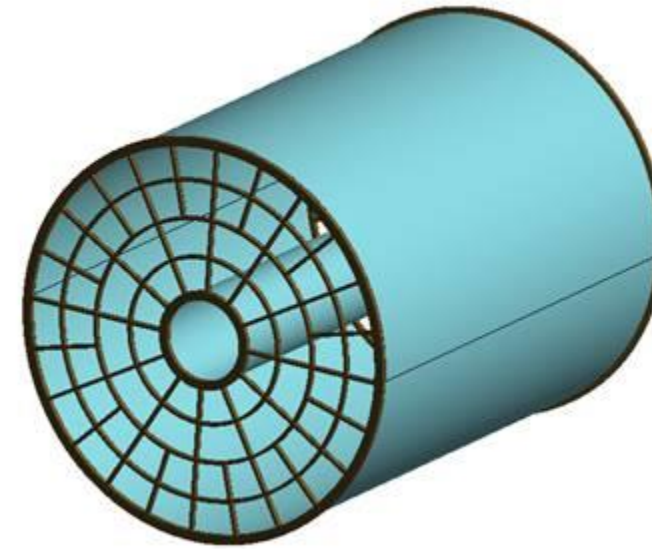
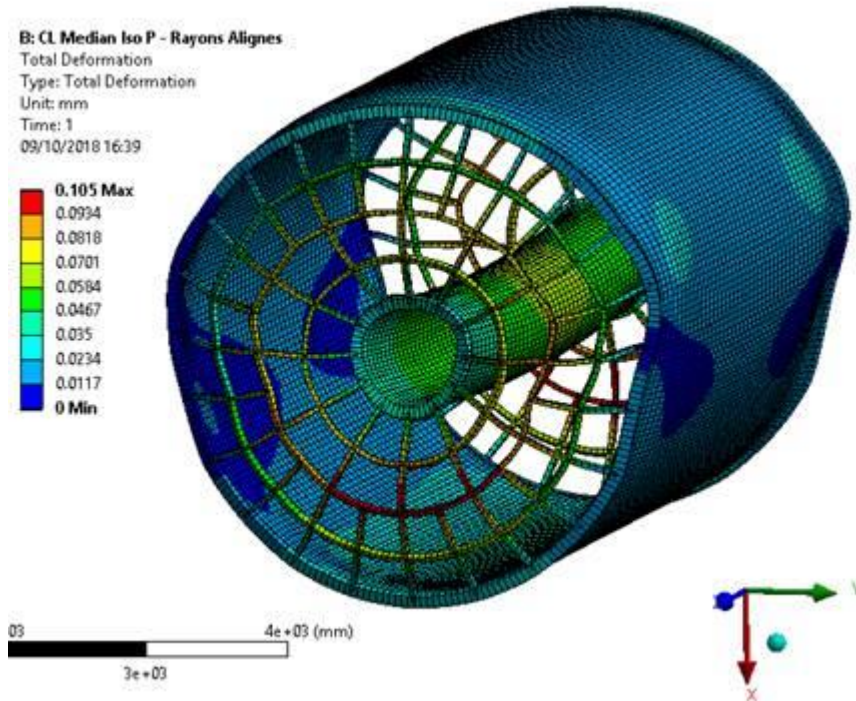


4e+03 (mm)
3e+03



New proposals and recent deformation calculations

Radial enplate support : was not considered so far, because of fear for projective cracks. But maybe cracks can be avoided by staggering at the PCB level.



Gain another 30% on the maximal deformation : 105 μm

Progress on the WBS

- Also preparing a mounting scheme. Will require a support tool (stiffeners) to hold the shape of the field cage to include the two endplates.
- The modules cannot be mounted horizontally. So jigs have to be placed in place of the modules to stiffen the structure during the endplate mounting, and exchanged one by one with real modules (or supermodules) once the endplates are integrated with the cage.

LC-TPC beam test preparation

Nov. 2018

Paul Colas

New Micromegas modules (4 in preparation)

- Inverted grounding : mesh at ground and encapsulated resistive anode. Advantages (better shielding, less distortions, better voltage flexibility)
- New modules status : 4 manufactured, 3 delivered and tested for connections and HV.
- HV stability: one excellent, one medium (250 nA) current, one problematic, to be cleaned up.

