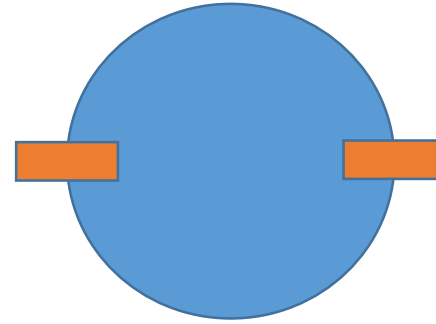


# TPC mechanics

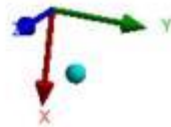
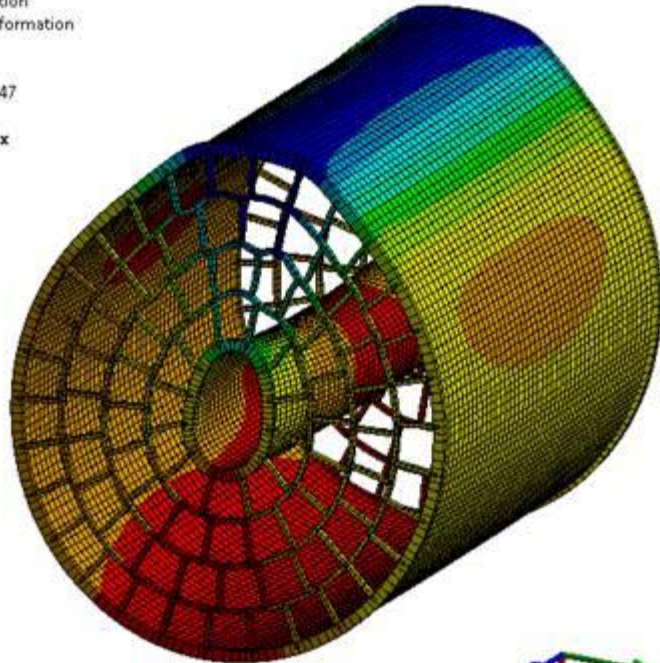
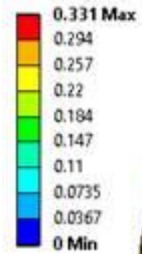
P.C., Julie Elman, Zhihong Sun

# Proposal : support laterally

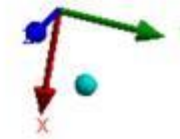
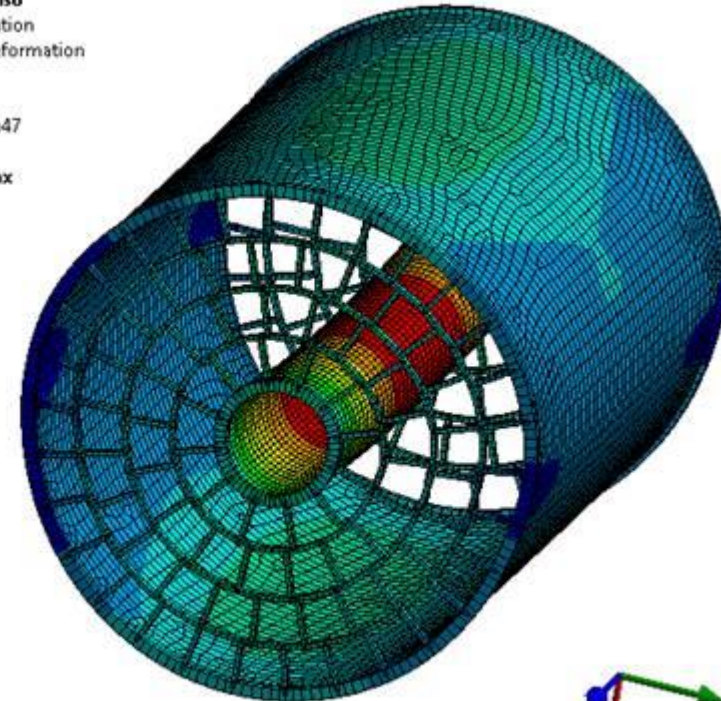
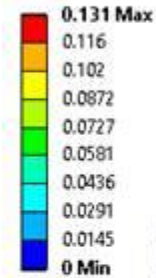


Gain a factor of 2.5 on the maximal scalar deformation

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

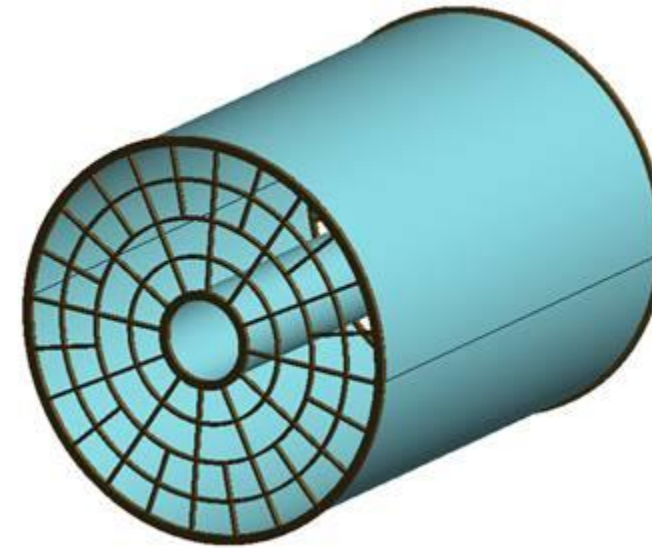


**B: CL Median Iso**  
Total Deformation  
Type: Total Deformation  
Unit: mm  
Time: 1  
09/10/2018 15:47

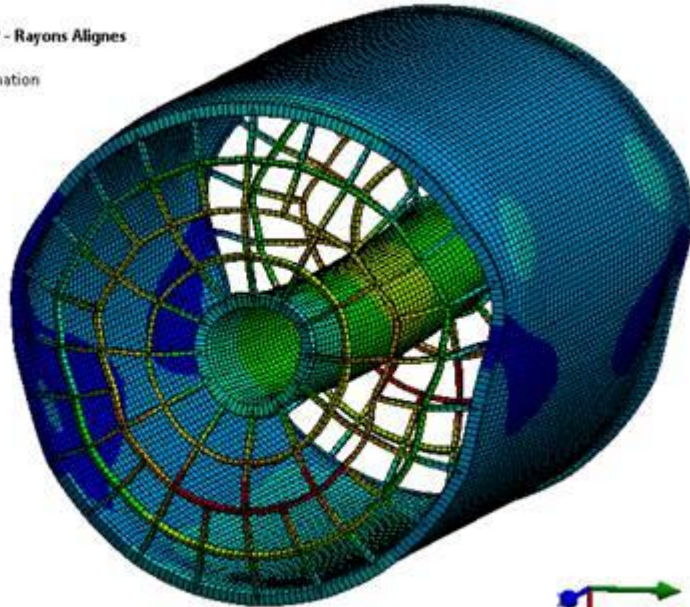


# New proposals and recent deformation calculations

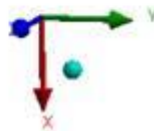
Radial enplate support : was not considered so far, because of fear for projective cracks. But maybe cracks can be avoided by staggering at the PCB level.



B: CL Median Iso P - Rayons Alignes  
Total Deformation  
Type: Total Deformation  
Unit: mm  
Time: 1  
09/10/2018 16:39



03 4e+03 (mm)  
3e+03



Gain another 30% on the maximal deformation : 105  $\mu\text{m}$

# 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.

