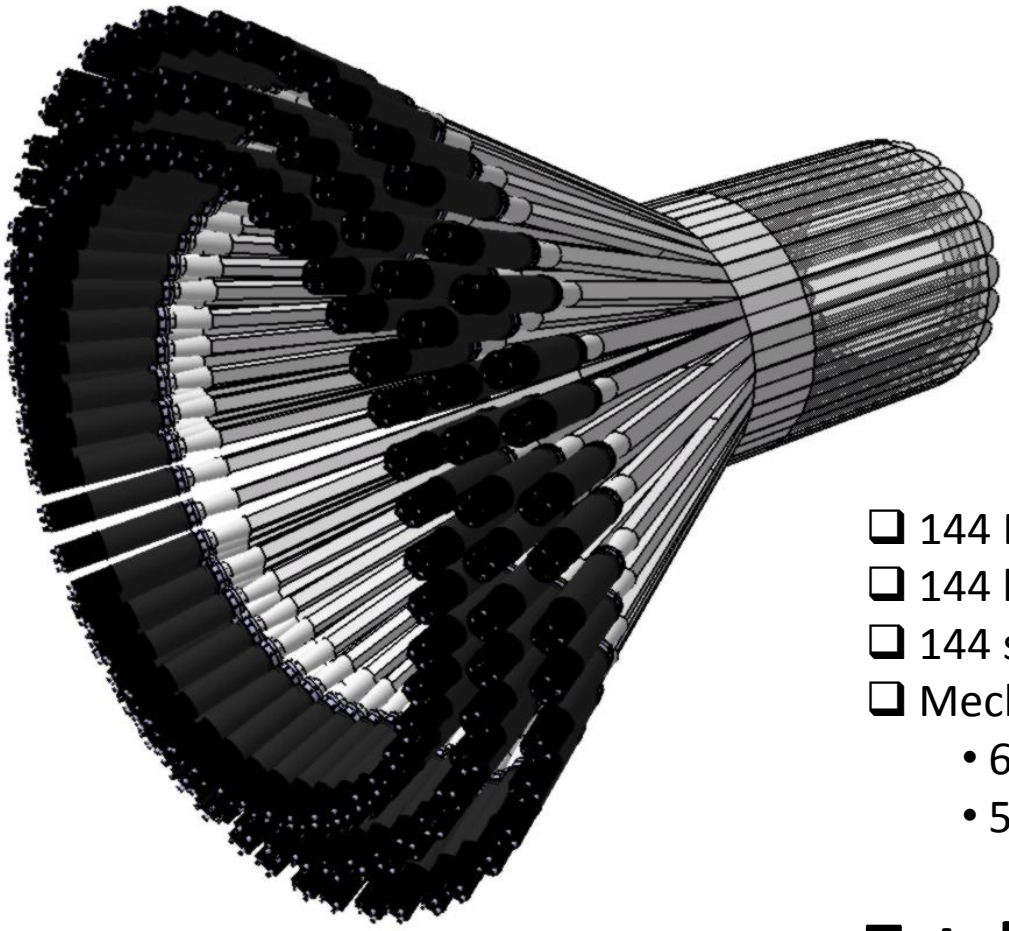
General Design

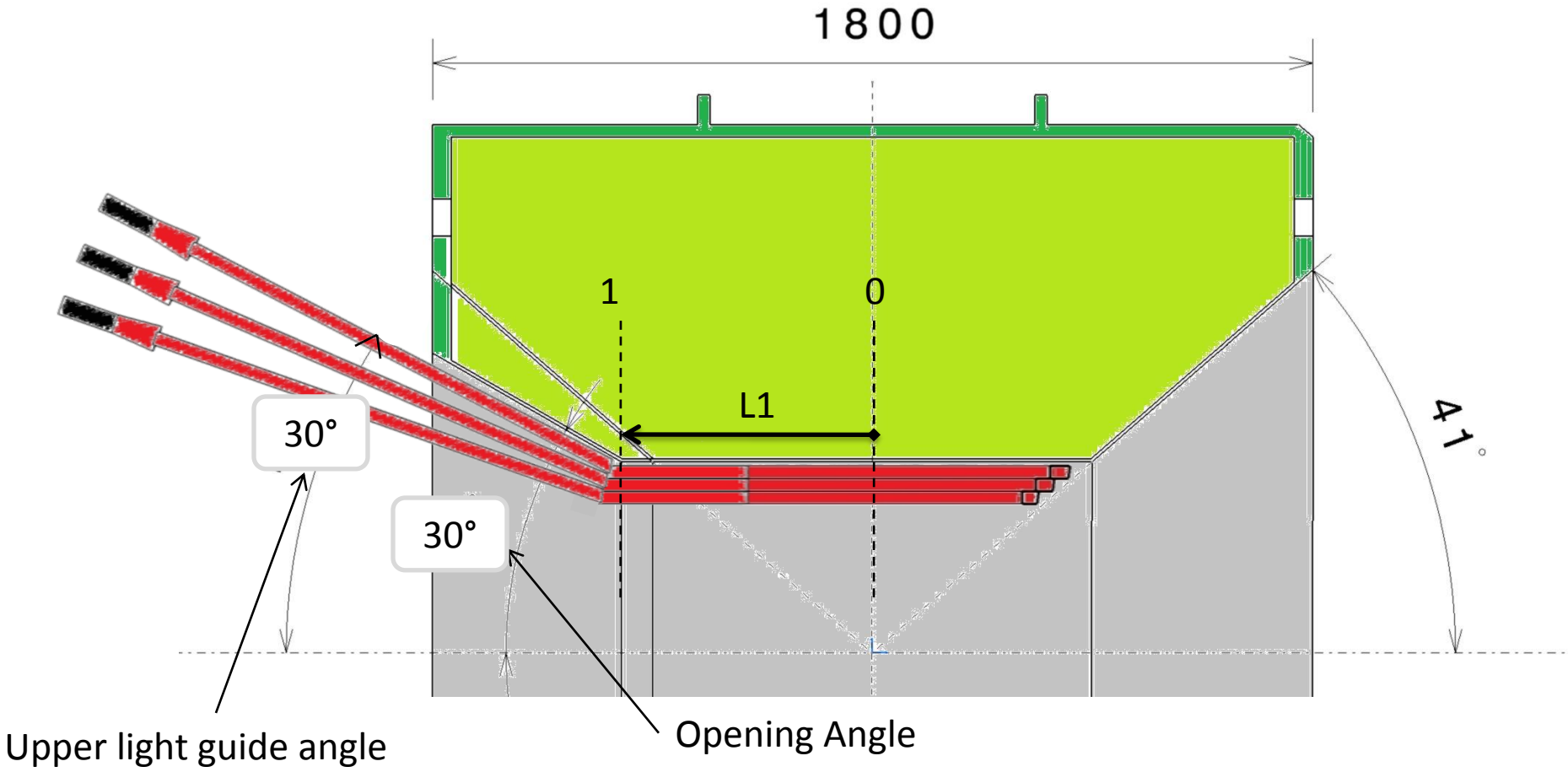


- 144 PM: 500 kg
- 144 light guides: 400 kg
- 144 scintillators: 160 kg
- Mechanics (*Not shown on the pic*):
  - 60 kg (scintillators barrel)
  - 50 kg (PMT's mounting)

Total mass~ 1200 kg

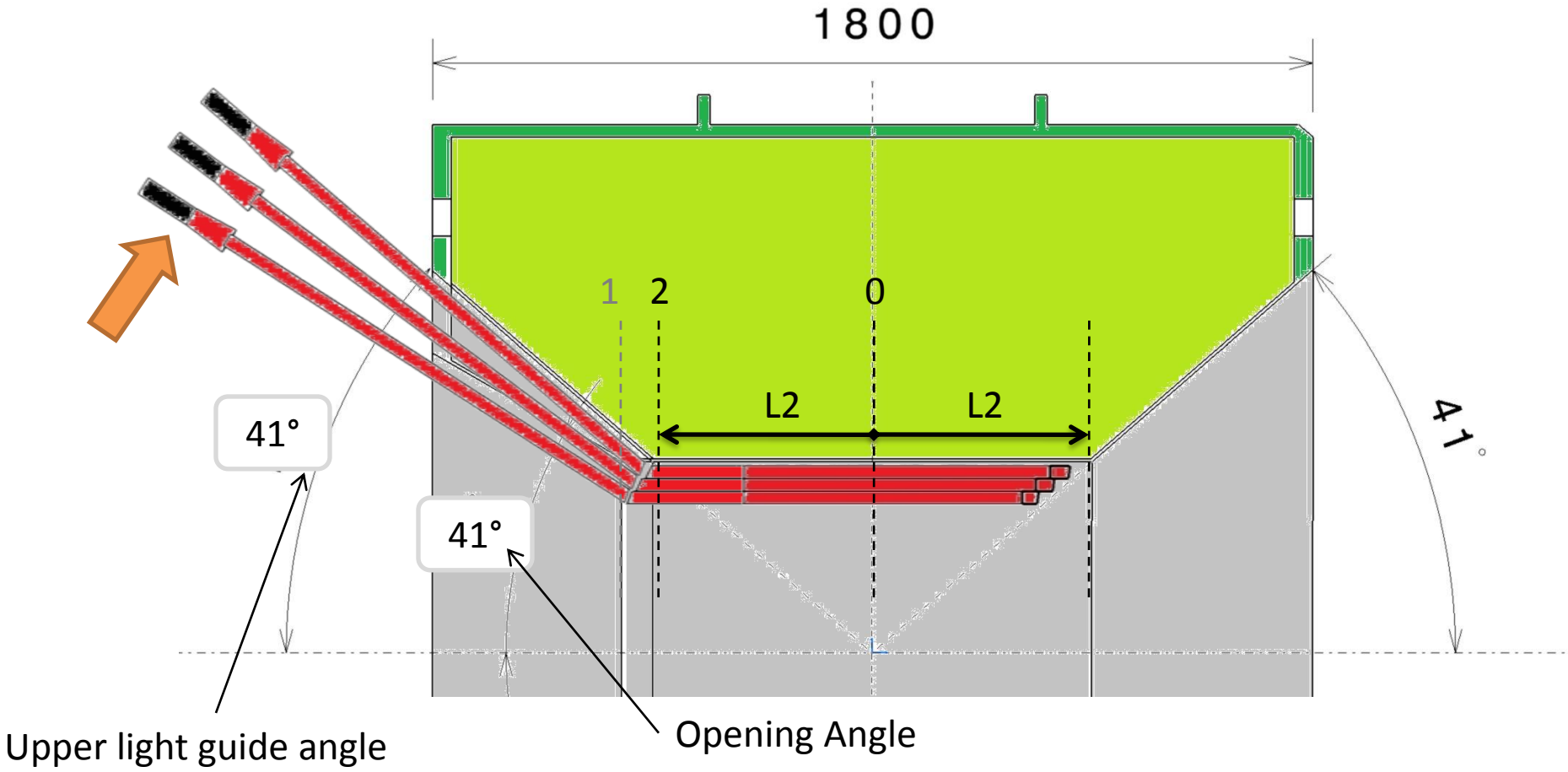
dépasser les frontières

Current Issue



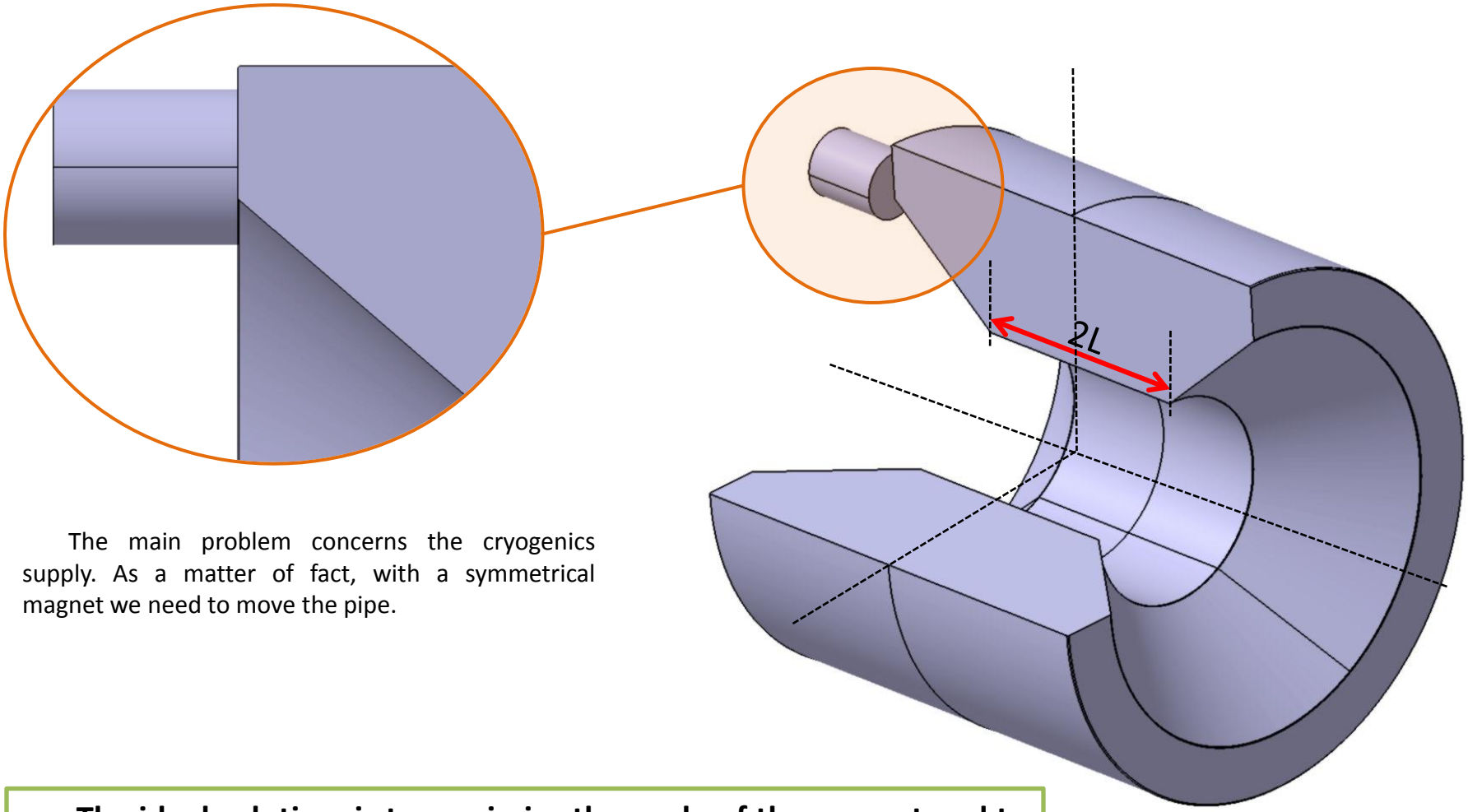
The angle of the light guides is too small and does not allow (or make it very difficult) the integration of other detectors.

Ideal Solution



Increase the magnet angle to tilt the light guides. Minimize the length L

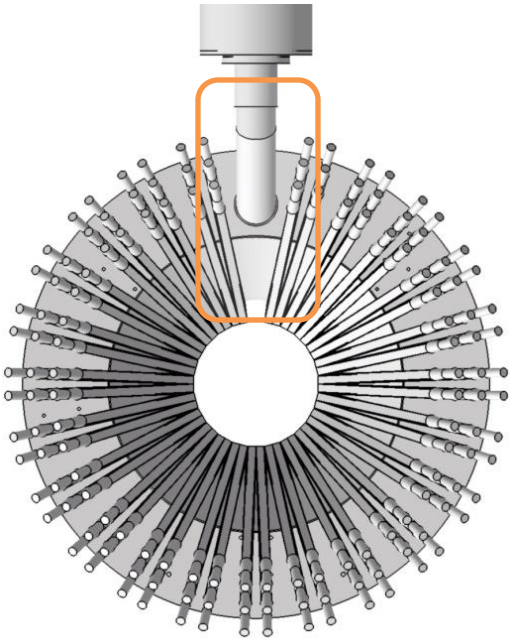
Consequences



The main problem concerns the cryogenics supply. As a matter of fact, with a symmetrical magnet we need to move the pipe.

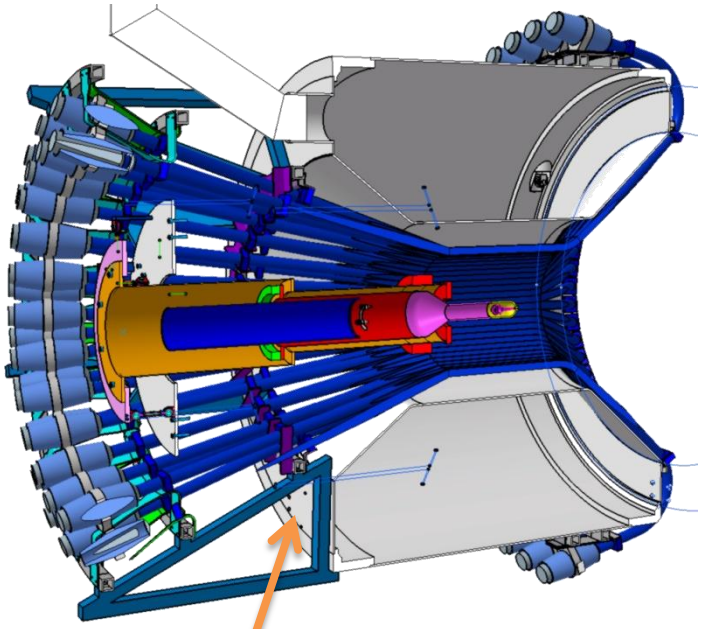
The ideal solution is to maximize the angle of the magnet and to minimize the length L, thus reducing the impact on the supply cryogenics pipe.

Mechanical Solutions 1/2



If for technical reasons we can not move the cryogenic system, it will be possible to remove one part of the detector (1:24).

The total mass of other detectors is about one ton, and this will be probably held by the magnet supports. (Initially: only a face). We can imagine, for example, to extend the horizontal supports of the magnet or to fix the supports on the cylinder. This will depend on the maximal weight acceptable by the magnet.



Mechanical Solutions 2/2