Mechanics dedicated to a PARIS Cluster

Julien BETTANE **IPN Orsay**

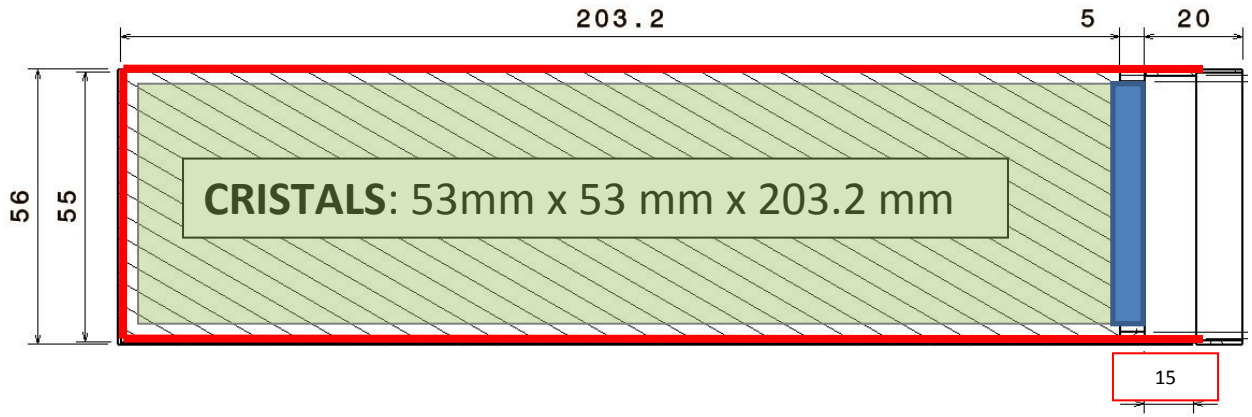
Single bloc mechanic

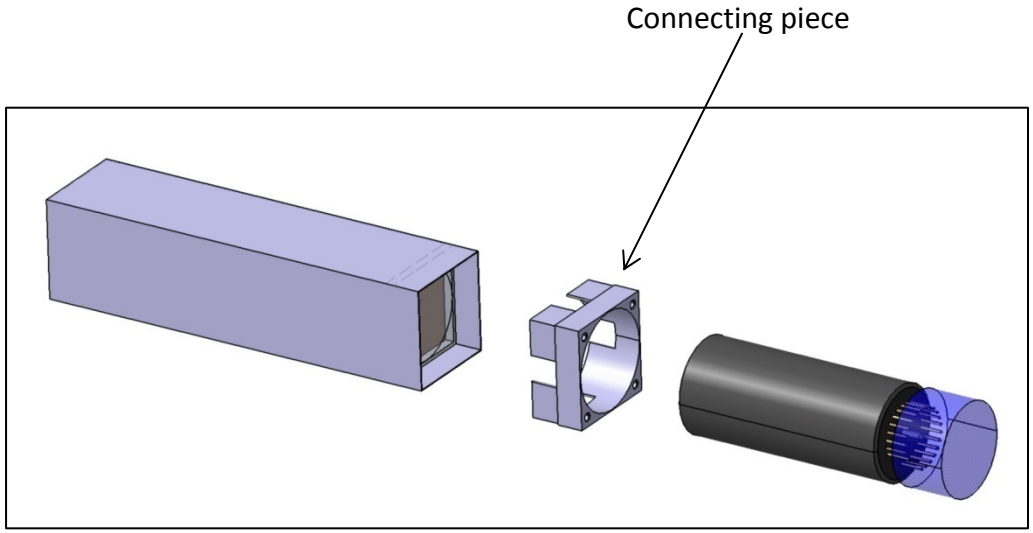
General design

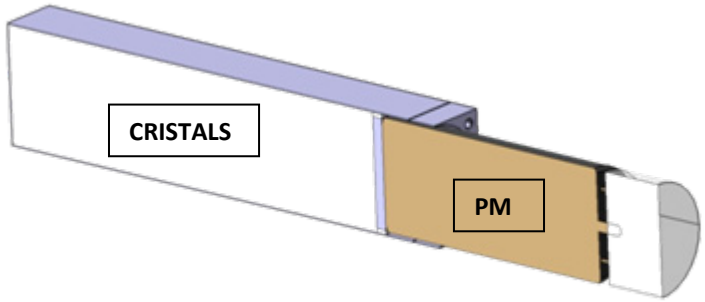
Assembly

Prototype

Single bloc mechanic

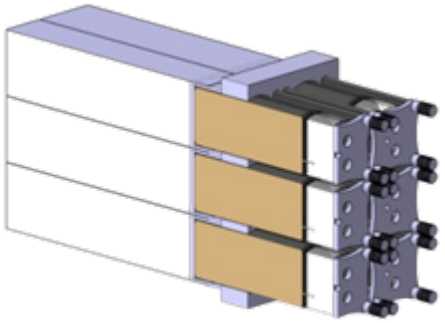


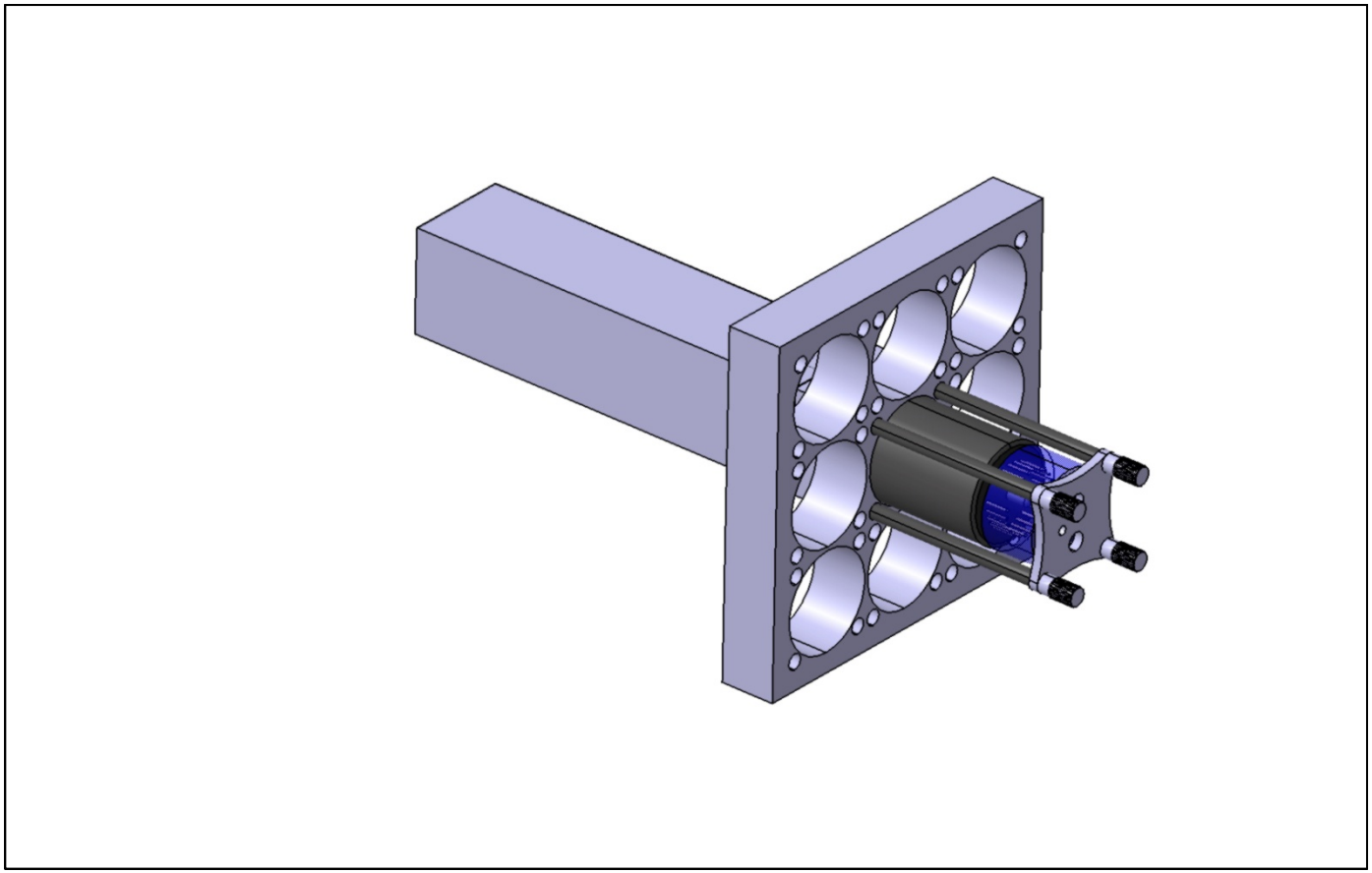




General design

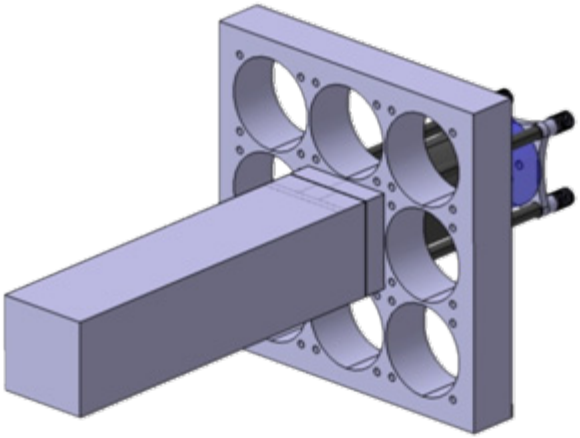
Cluster 3x3: Total mass= 30 kg



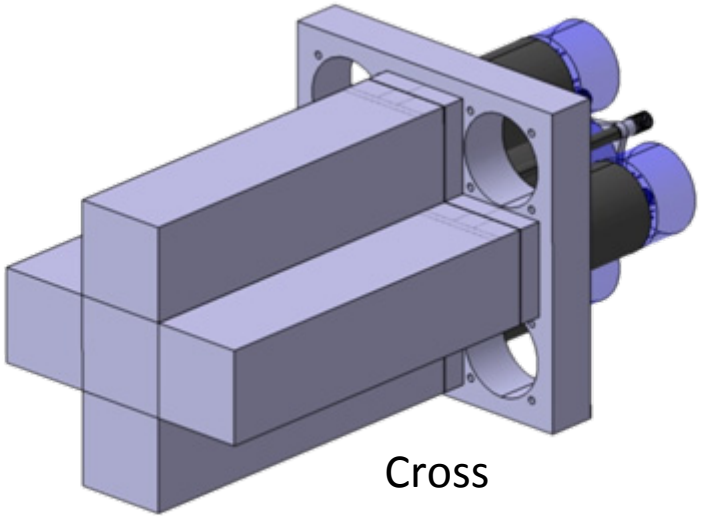


1. **Insertion bloc**
2. **Fixation by screw**
3. **Plate to press on PM**
4. **Nuts to fix plate**

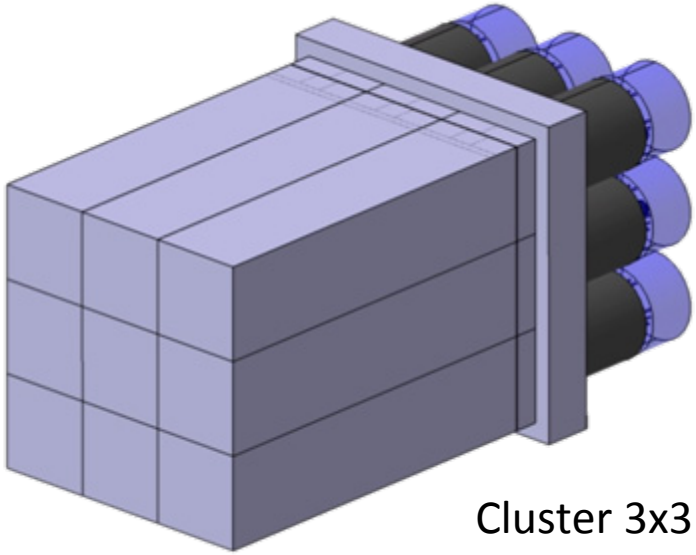
Assembly



One Cristal

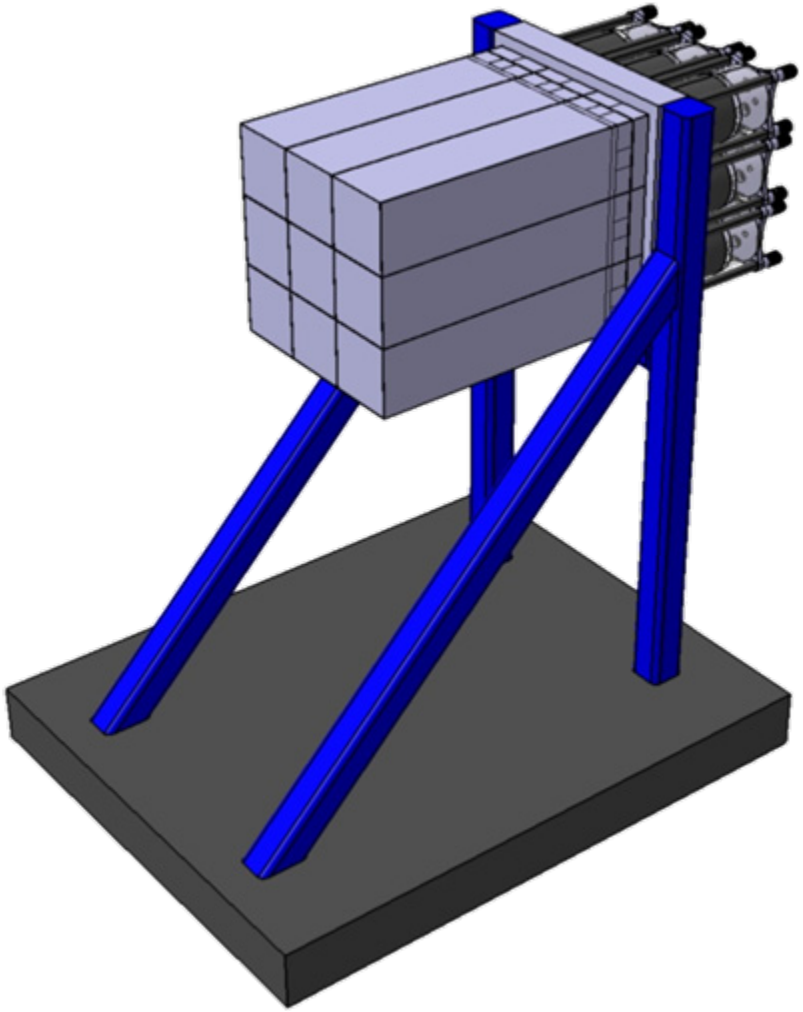


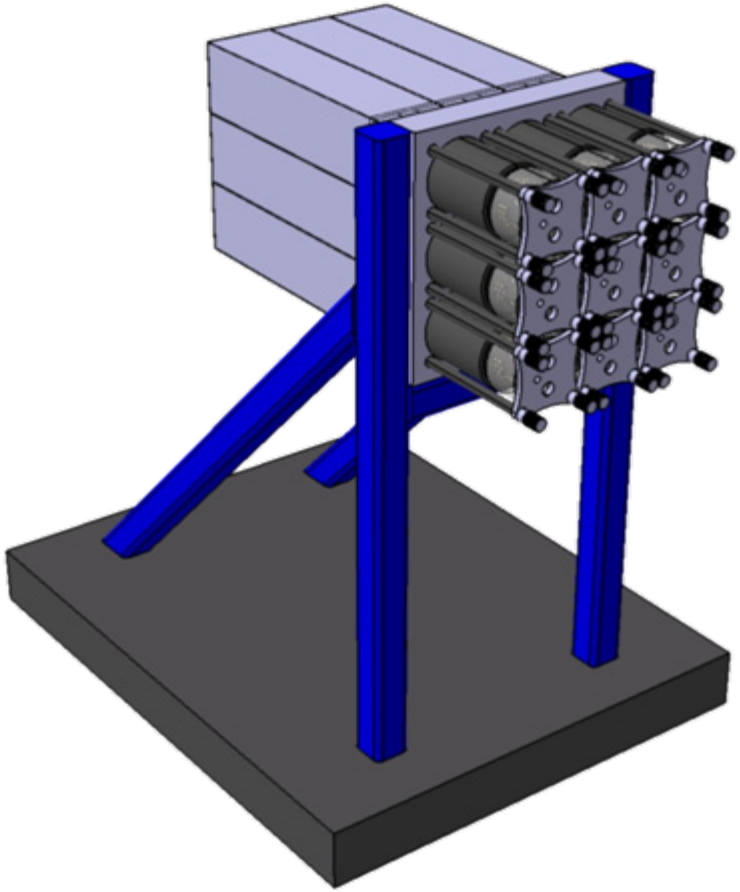
Cross



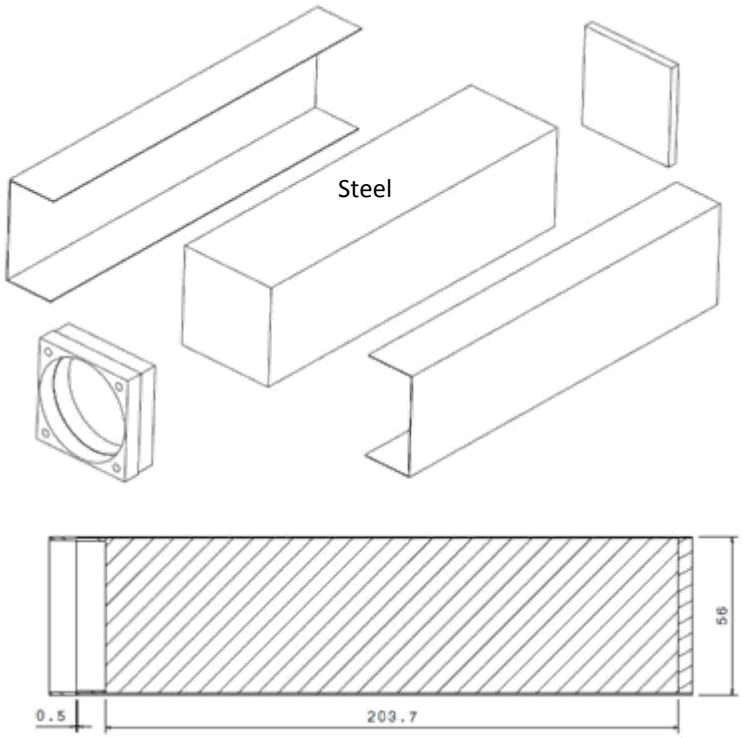
Cluster 3x3

Assembly

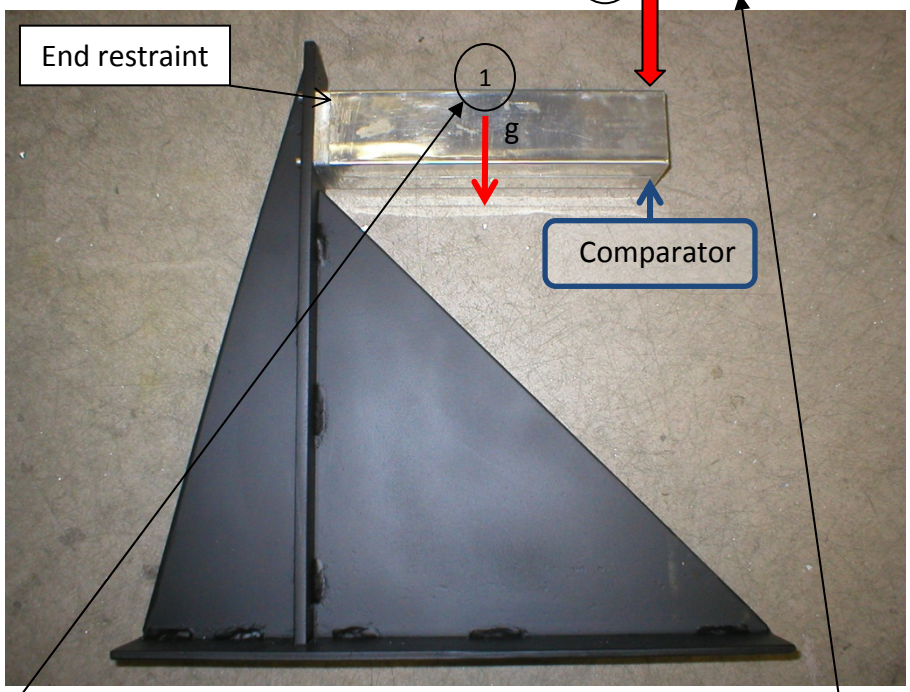




Prototype



Thickness Al= 0.5 mm
Material: Steel (ρ= 7800 km/m³)



1- First test: Envelop with Steel bloc
Deformation: 0.05 mm

2- Second test: Envelop empty (force concentrated from the top)
Deformation: 0.1 mm

RIGIDITY IS GIVEN BY ALUMINIUM ENVELOP NOT BY THE CRISTAL