



AGATA

OPTIONS FOR DOUBLE ASSYMETRIC
CRYOSTAT

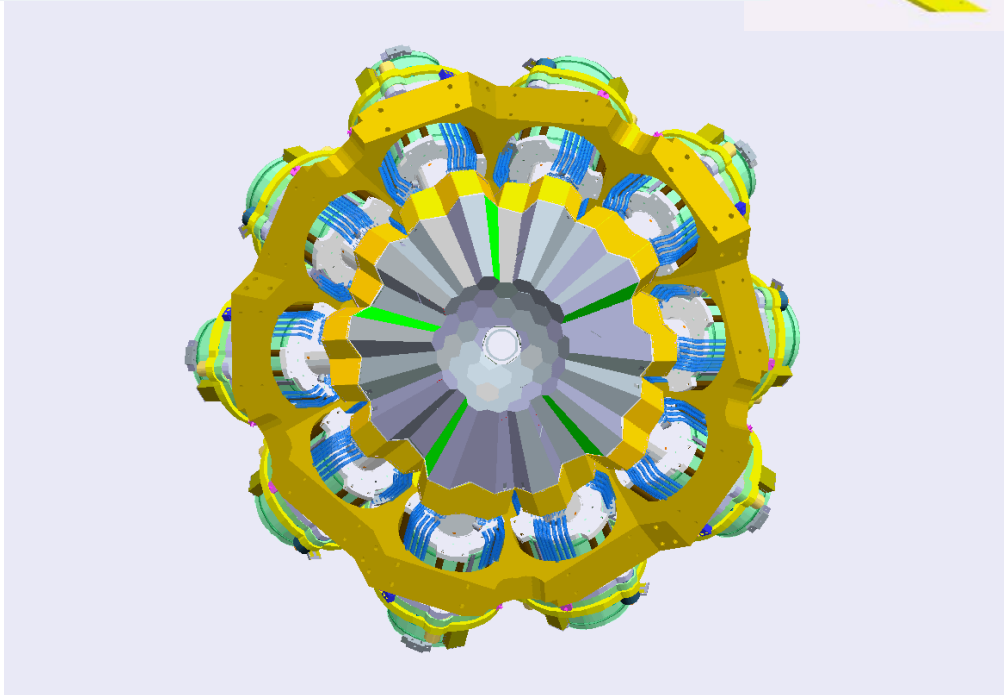
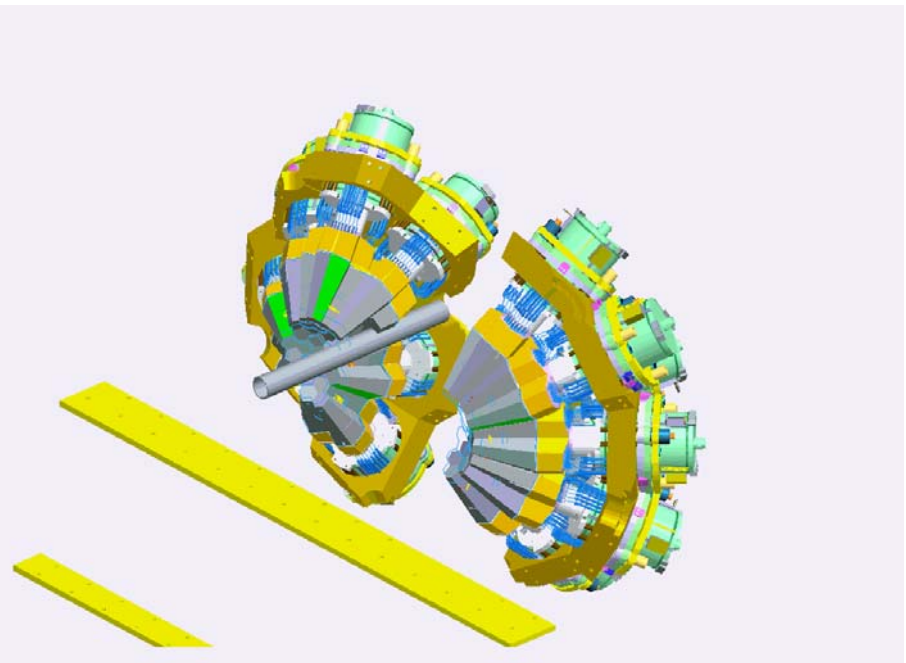
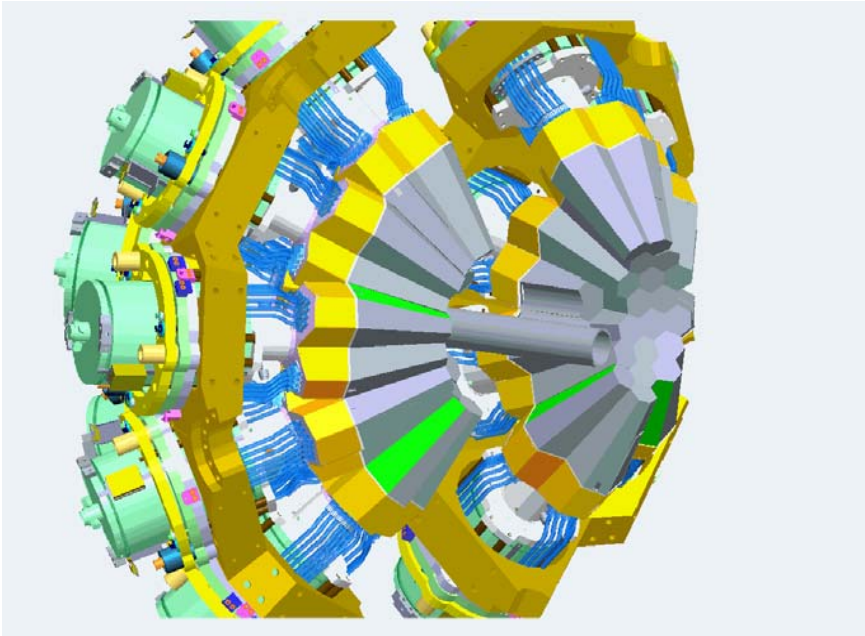
AGATA array at GSI

The following slides show how 5 double crystal asymmetric detectors can be installed in the AGATA array at GSI as proposed in option S2 of the HISPEC/DESPEC workshop.

There are 2 options

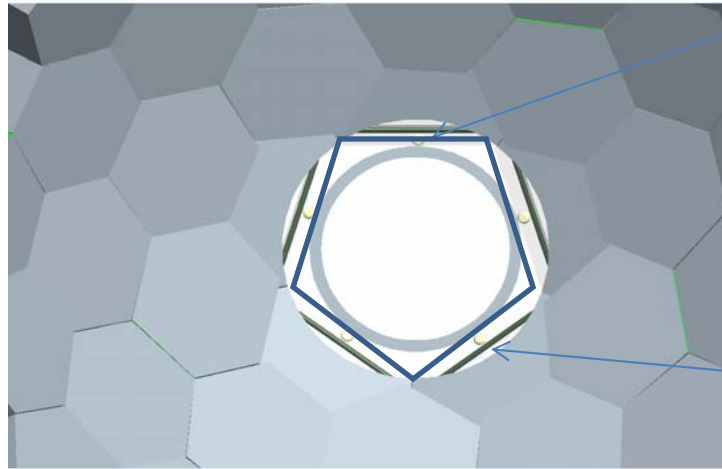
Option 1 Using a beam tube of 95mm OD

Option 2 Using a beam tube of 120mm OD



Option 1
95mm OD BEAM TUBE

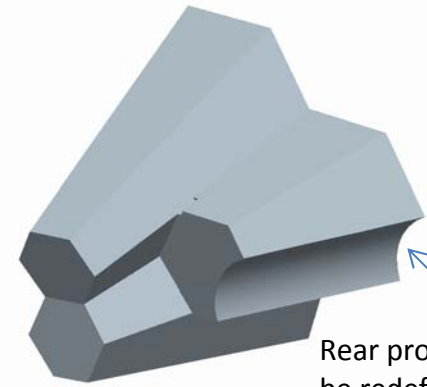
Option 1



Edge of end cap horizontal

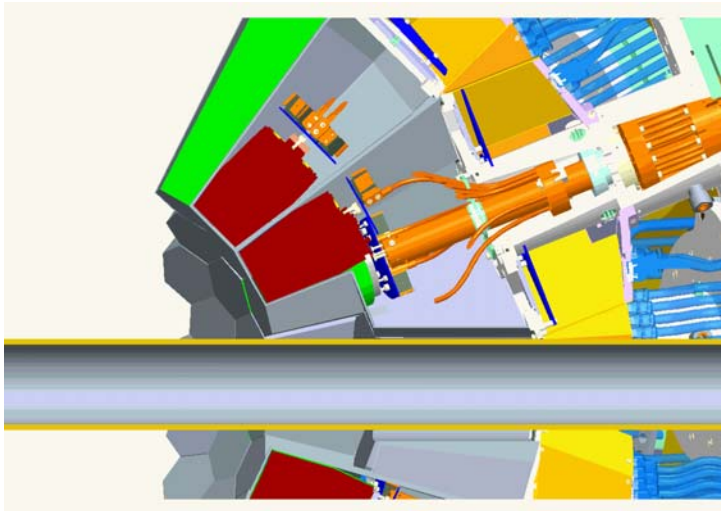
O Seal in cryostat cover

View along beam tube with 95OD beam tube



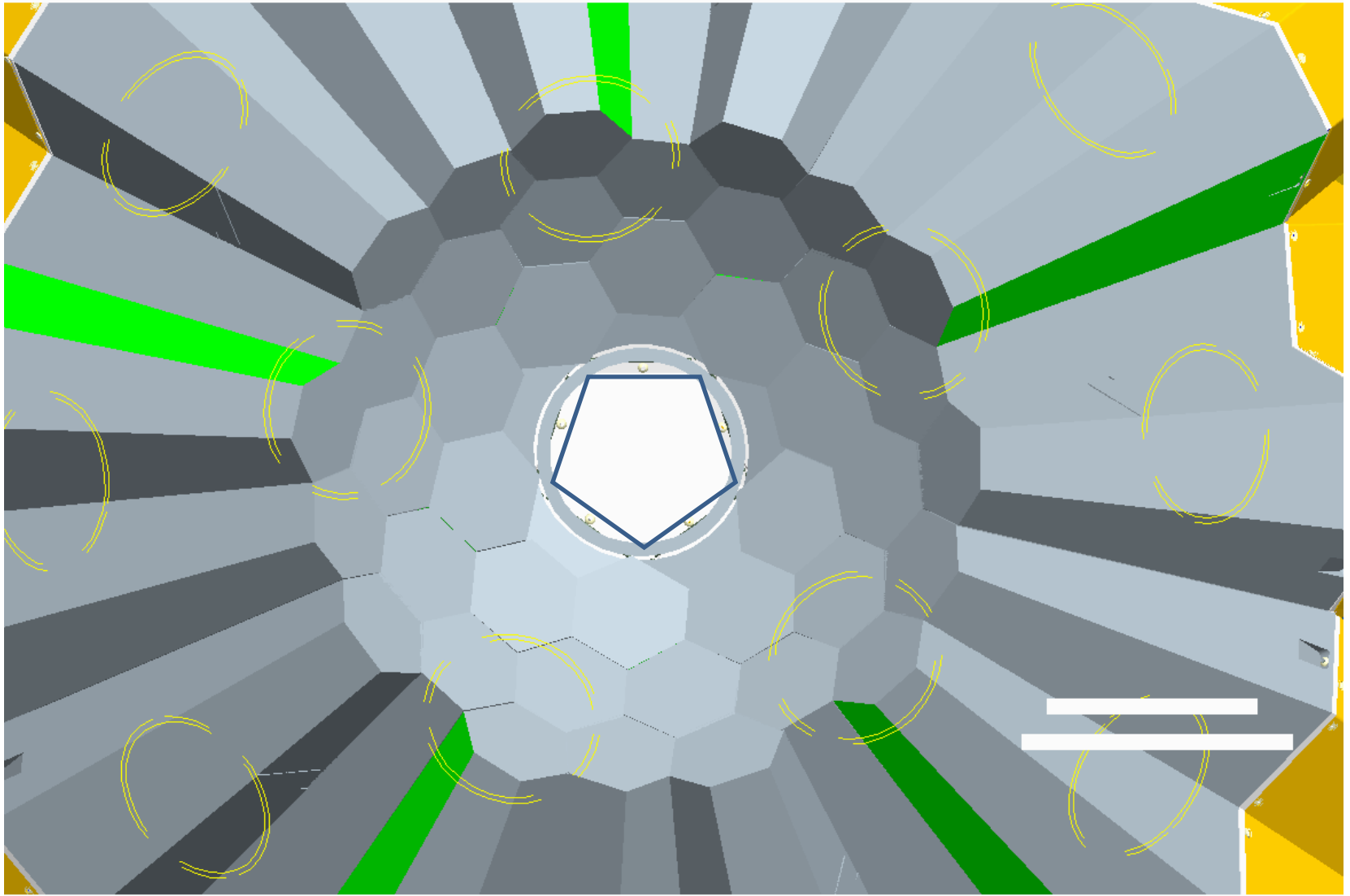
Rear profile to be redefined (may not require modifyng)

Double Crystal Cryostat

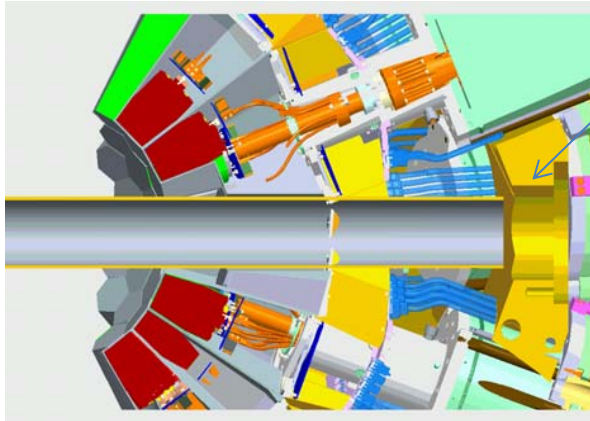


Section view shows that only crystal endcap needs to be modified.

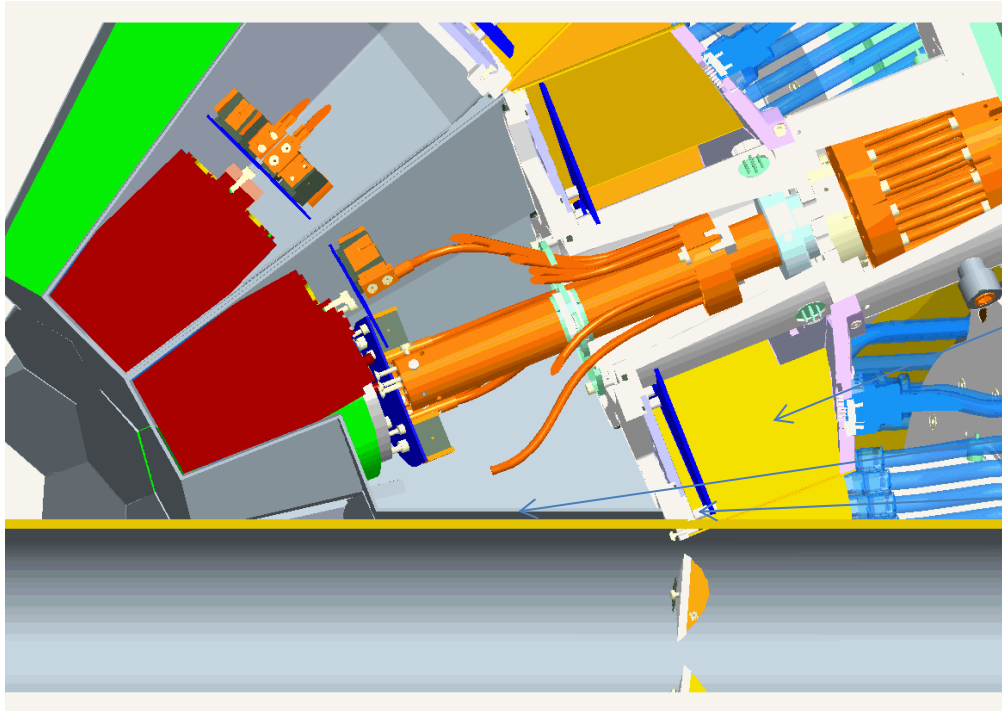
Option 2



Beamline view showing 125mm OD beamtube



160mm dia hole in existing support flanges



Sectional side view shows 120mm OD Beam tube cutting through cryostat cover

Circuit boards need to be removed

Parts to be modified.

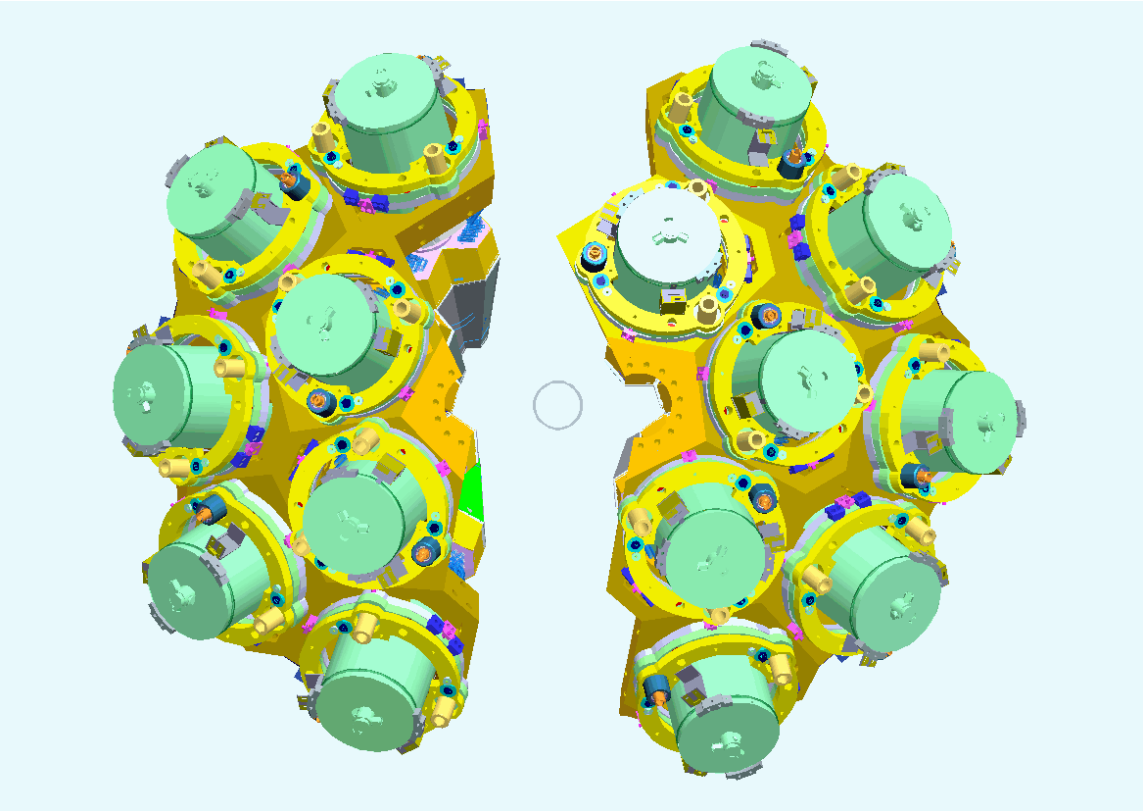
End caps

End flanges

Outer cover

Option 2

Option 1 & 2



Rear view showing split line between 2 halves and existing support flanges

Summary

1. The mechanical support and splitting there of is relatively straight forward for the S2' layout.
2. If a 95mm dia beam pipe is acceptable only modification of the detector end cap is required.
3. If a 120mm dia beam pipe is required modification to the end cap and end cap cover flange is required