

Cryomodule Shielding Update

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08/02/16

Cold Magnetic Shields

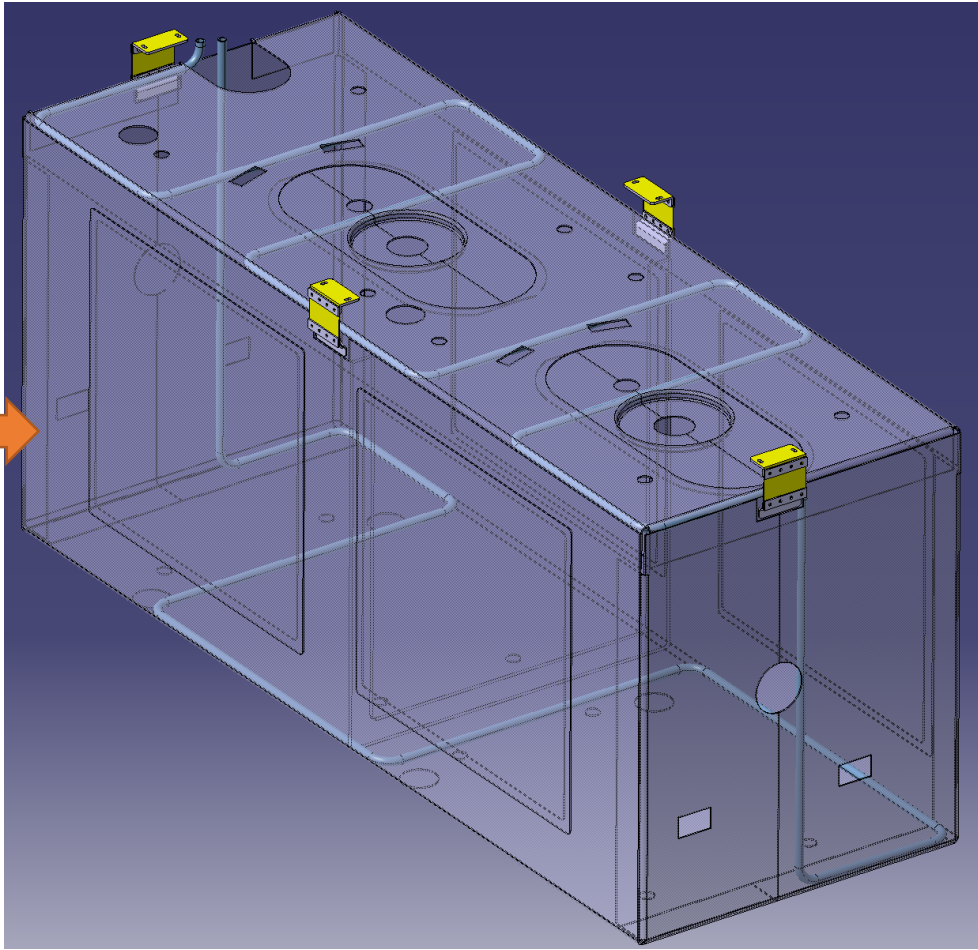
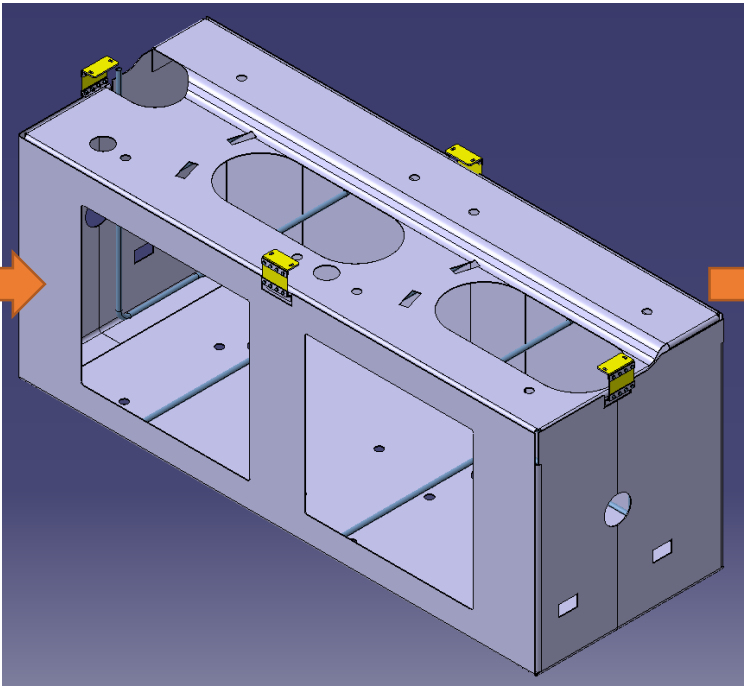
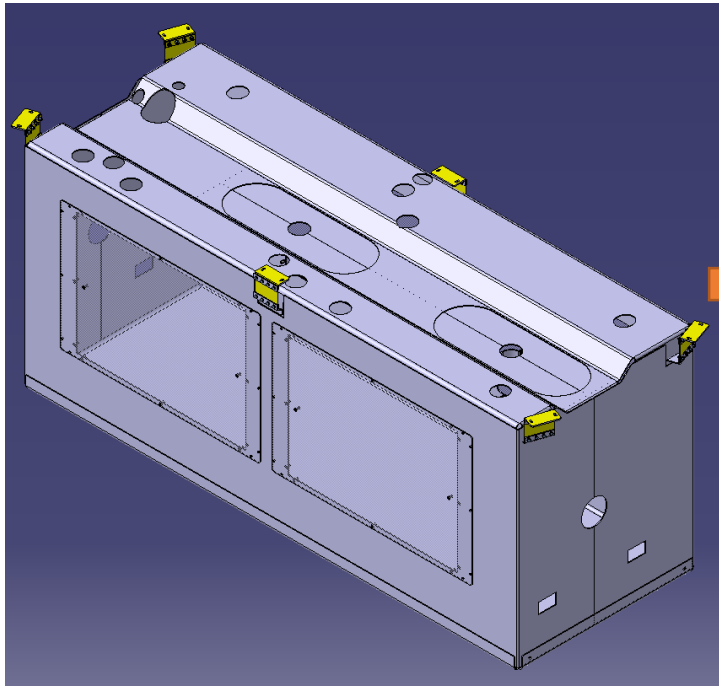
- Magnetic Test Reports:
 - ✓ Received and approved (see Carlo's slides)
- Dimensional Reports:
 - Received and approved (provisionally)
 - Awaiting further feedback
 - Querying a few dims
- Titanium mounting bracket fabrication:
 - Ongoing...



The image shows a 'Sample Inspection Report' for a 'Cold Magnetic Shield' from the University of Lancaster. The report includes a table with columns for 'Drawing Dimension', 'DMSD Tolerance & Units', 'Inspected size', 'Difference at DMSD TOL', 'Inspected size', and 'Difference at DMSD TOL'. The table contains multiple rows of data, with some cells highlighted in green and others in red, indicating pass/fail status. The report also includes a header with the company logo and name, and a footer with the report number and date.

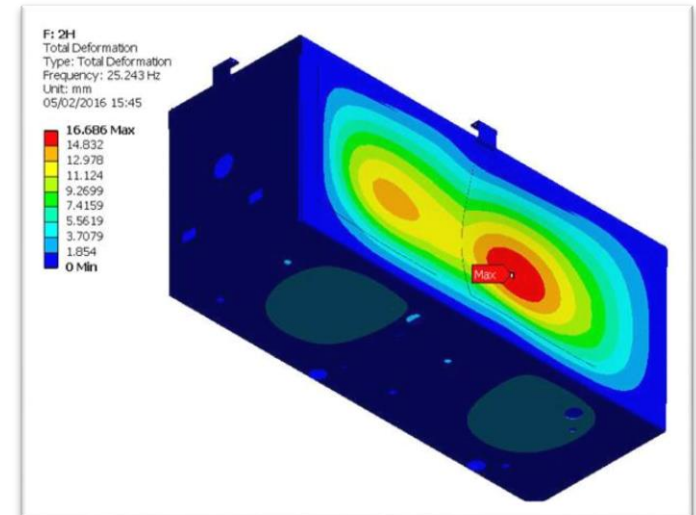
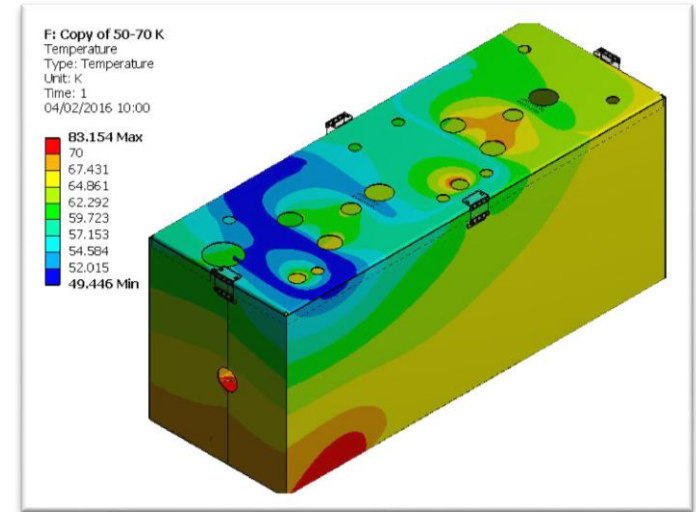
Dimension	Drawing Dimension	DMSD Tolerance & Units	Inspected size	Difference at DMSD TOL	Inspected size	Difference at DMSD TOL
1	10.0	±0.1	10.0	0.0	10.0	0.0
2	10.0	±0.1	10.0	0.0	10.0	0.0
3	10.0	±0.1	10.0	0.0	10.0	0.0
4	10.0	±0.1	10.0	0.0	10.0	0.0
5	10.0	±0.1	10.0	0.0	10.0	0.0
6	10.0	±0.1	10.0	0.0	10.0	0.0
7	10.0	±0.1	10.0	0.0	10.0	0.0
8	10.0	±0.1	10.0	0.0	10.0	0.0
9	10.0	±0.1	10.0	0.0	10.0	0.0
10	10.0	±0.1	10.0	0.0	10.0	0.0
11	10.0	±0.1	10.0	0.0	10.0	0.0
12	10.0	±0.1	10.0	0.0	10.0	0.0
13	10.0	±0.1	10.0	0.0	10.0	0.0
14	10.0	±0.1	10.0	0.0	10.0	0.0
15	10.0	±0.1	10.0	0.0	10.0	0.0
16	10.0	±0.1	10.0	0.0	10.0	0.0
17	10.0	±0.1	10.0	0.0	10.0	0.0
18	10.0	±0.1	10.0	0.0	10.0	0.0
19	10.0	±0.1	10.0	0.0	10.0	0.0
20	10.0	±0.1	10.0	0.0	10.0	0.0
21	10.0	±0.1	10.0	0.0	10.0	0.0
22	10.0	±0.1	10.0	0.0	10.0	0.0
23	10.0	±0.1	10.0	0.0	10.0	0.0
24	10.0	±0.1	10.0	0.0	10.0	0.0
25	10.0	±0.1	10.0	0.0	10.0	0.0
26	10.0	±0.1	10.0	0.0	10.0	0.0
27	10.0	±0.1	10.0	0.0	10.0	0.0
28	10.0	±0.1	10.0	0.0	10.0	0.0
29	10.0	±0.1	10.0	0.0	10.0	0.0
30	10.0	±0.1	10.0	0.0	10.0	0.0
31	10.0	±0.1	10.0	0.0	10.0	0.0
32	10.0	±0.1	10.0	0.0	10.0	0.0
33	10.0	±0.1	10.0	0.0	10.0	0.0
34	10.0	±0.1	10.0	0.0	10.0	0.0
35	10.0	±0.1	10.0	0.0	10.0	0.0
36	10.0	±0.1	10.0	0.0	10.0	0.0
37	10.0	±0.1	10.0	0.0	10.0	0.0
38	10.0	±0.1	10.0	0.0	10.0	0.0
39	10.0	±0.1	10.0	0.0	10.0	0.0
40	10.0	±0.1	10.0	0.0	10.0	0.0
41	10.0	±0.1	10.0	0.0	10.0	0.0
42	10.0	±0.1	10.0	0.0	10.0	0.0
43	10.0	±0.1	10.0	0.0	10.0	0.0
44	10.0	±0.1	10.0	0.0	10.0	0.0
45	10.0	±0.1	10.0	0.0	10.0	0.0
46	10.0	±0.1	10.0	0.0	10.0	0.0
47	10.0	±0.1	10.0	0.0	10.0	0.0
48	10.0	±0.1	10.0	0.0	10.0	0.0
49	10.0	±0.1	10.0	0.0	10.0	0.0
50	10.0	±0.1	10.0	0.0	10.0	0.0

Thermal Shield Design

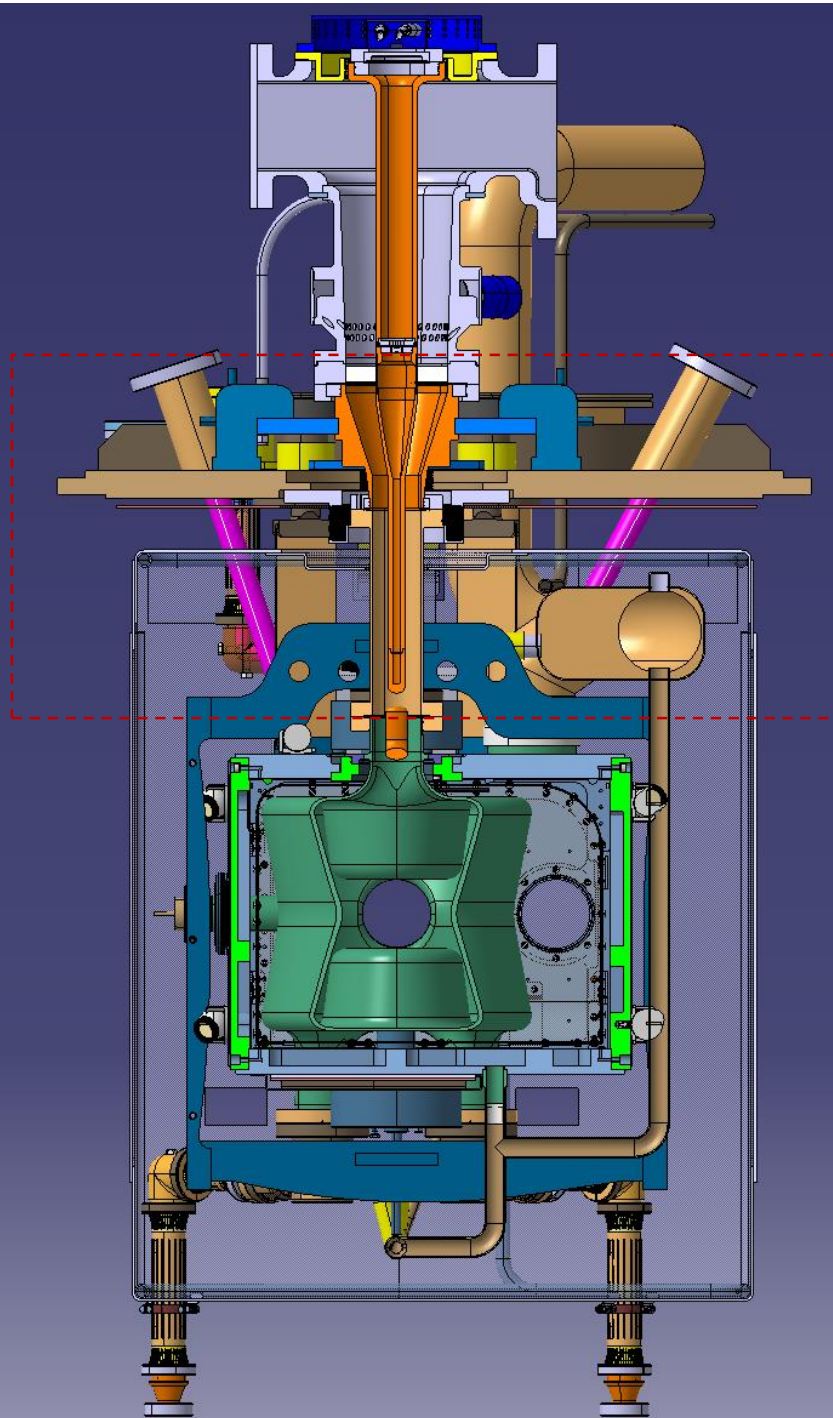


Thermal Shield Design

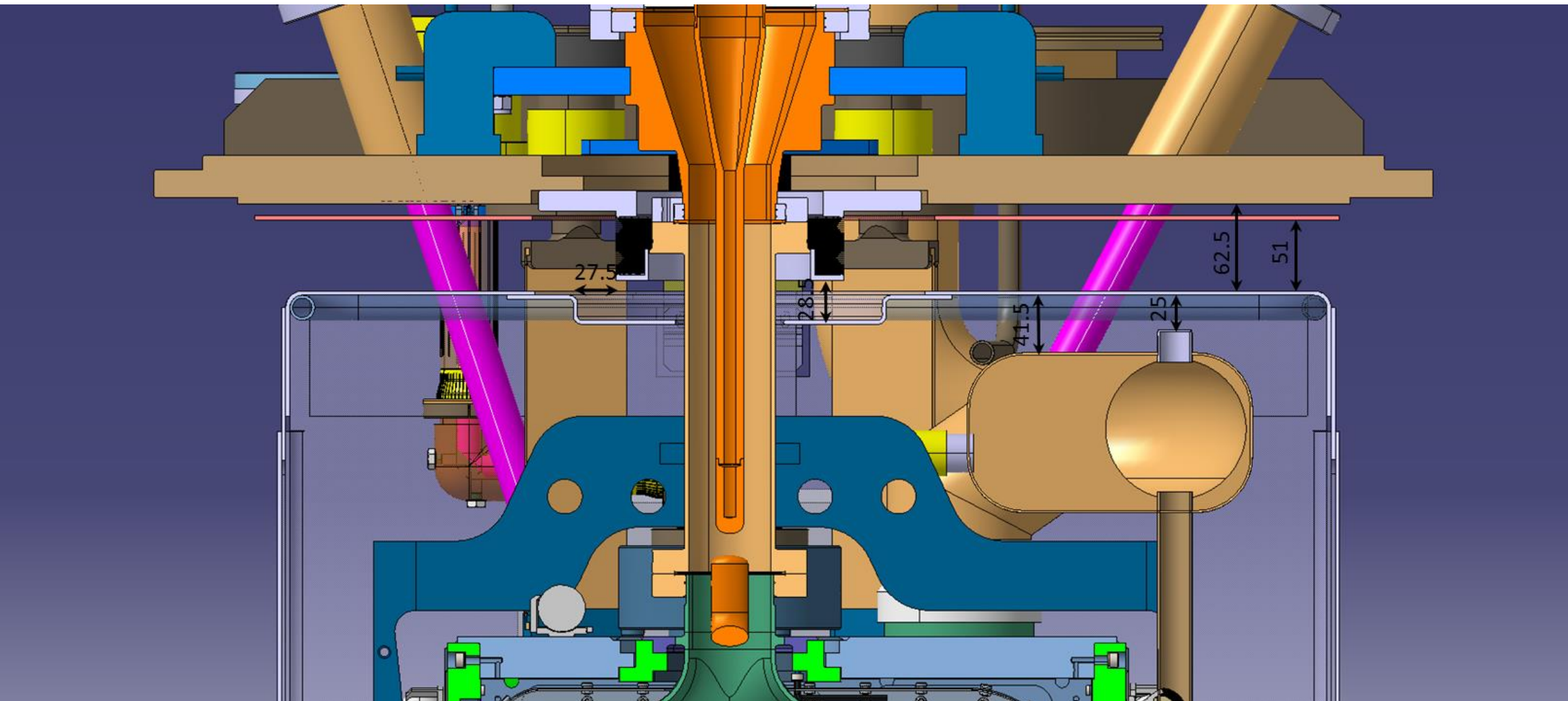
- ✓ Cryomodule integration with MLI
- ✓ Cooling Analysis and optimisation
- ✓ Modal Analysis and Stiffness optimisation
 - Connections welds & intercepts
 - Design for thermal stress
 - Design for manufacture and assembly



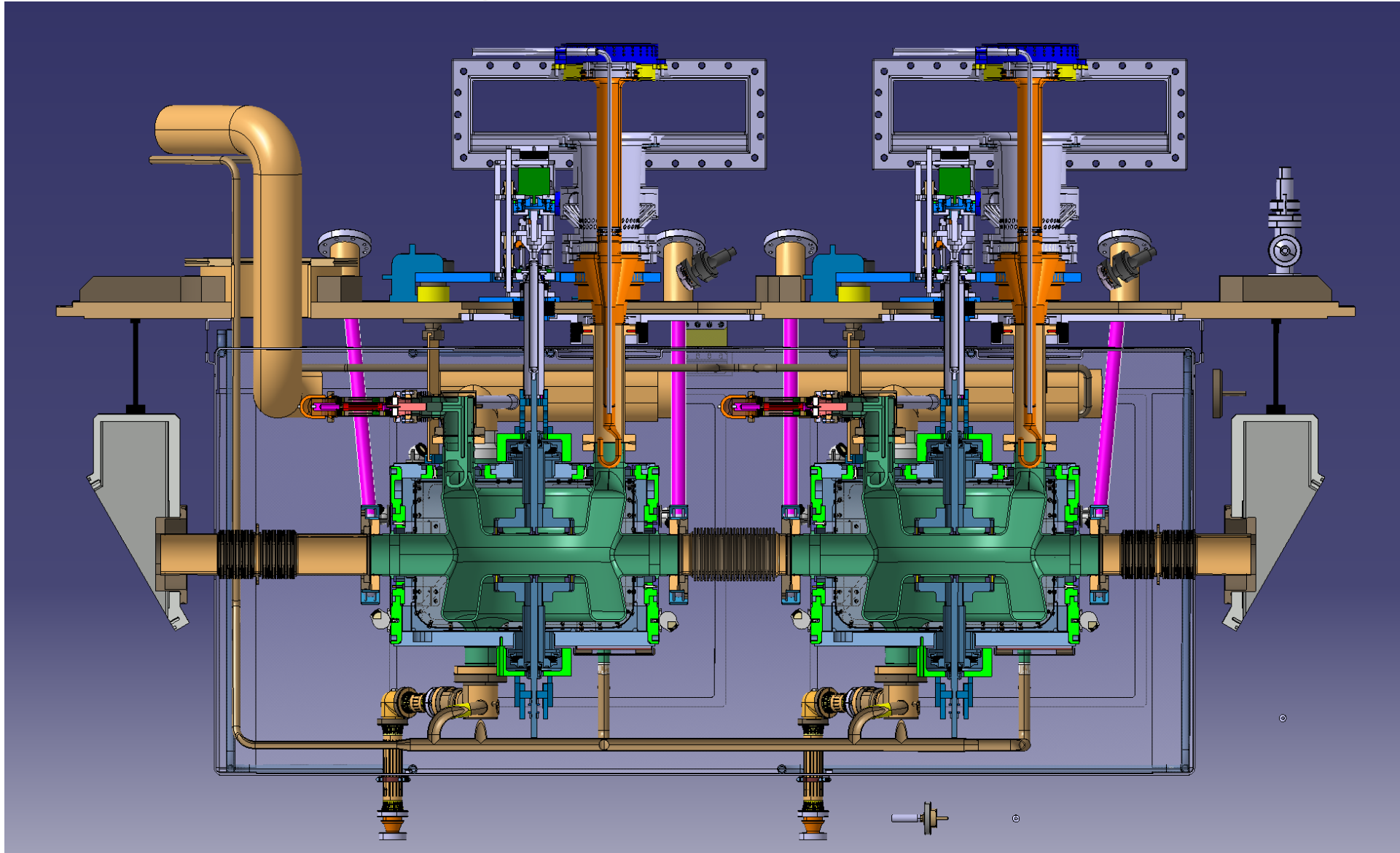
Cryomodule Integration



Cryomodule Integration



Cryomodule Integration



Warm Magnetic Shield Top Plate

