

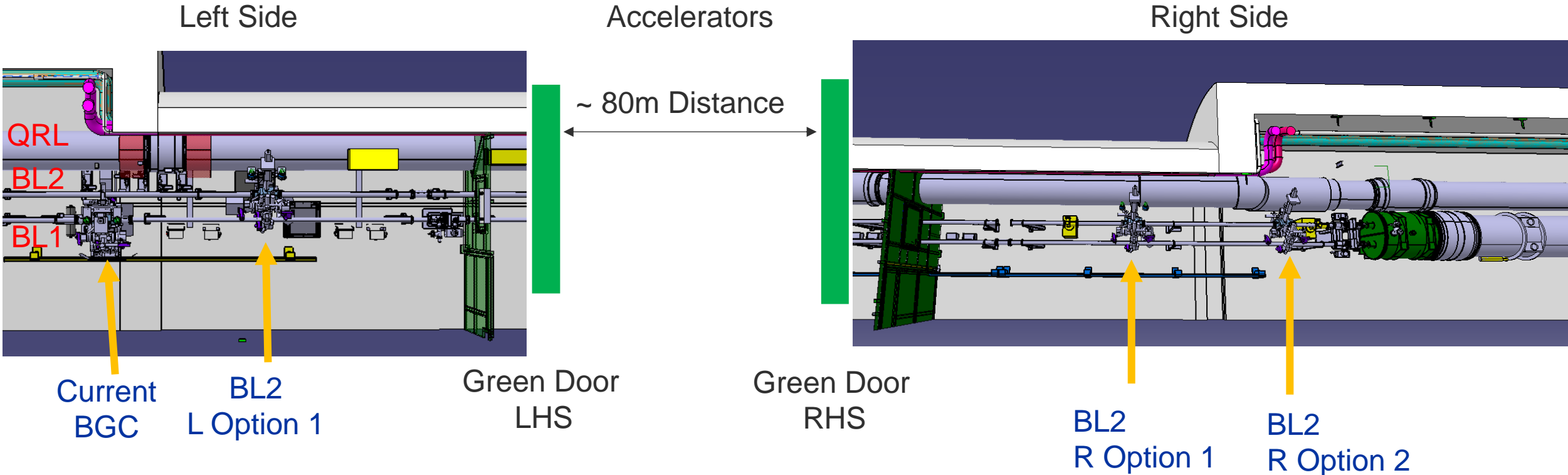
BGC Regular Meeting

BGC Integration: Beamline 2

L.Margerison 24.01.2025

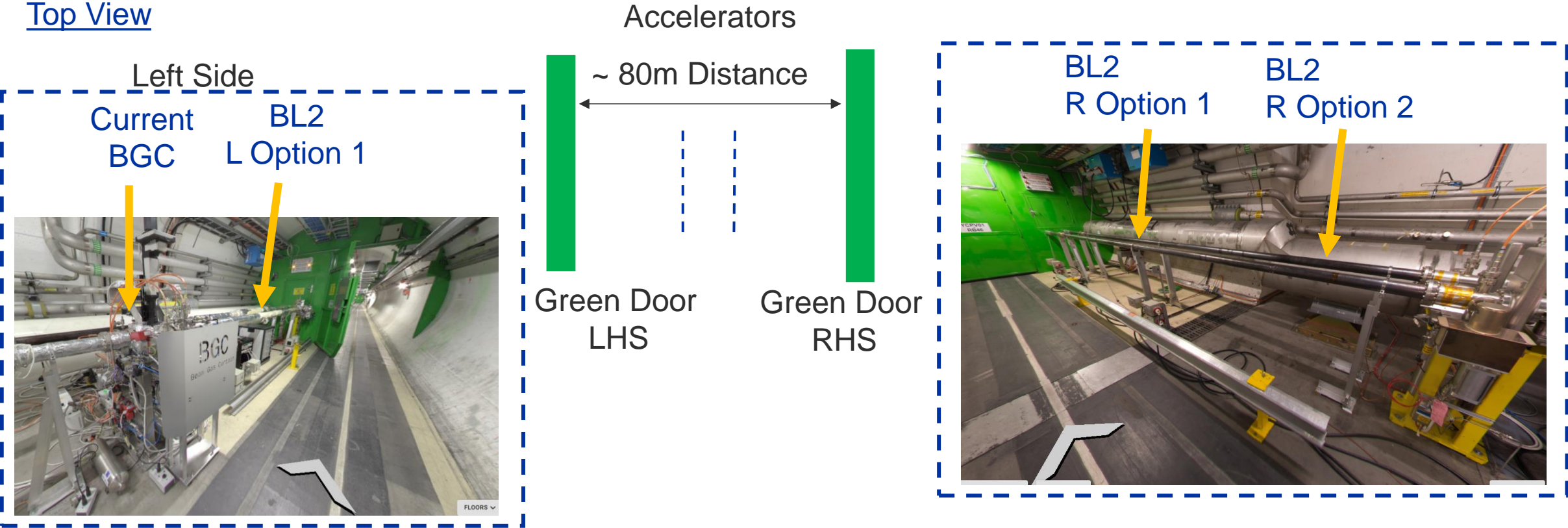
Point 4 Topography and Integration Terminology

Top View of Point 4 Tunnel Area

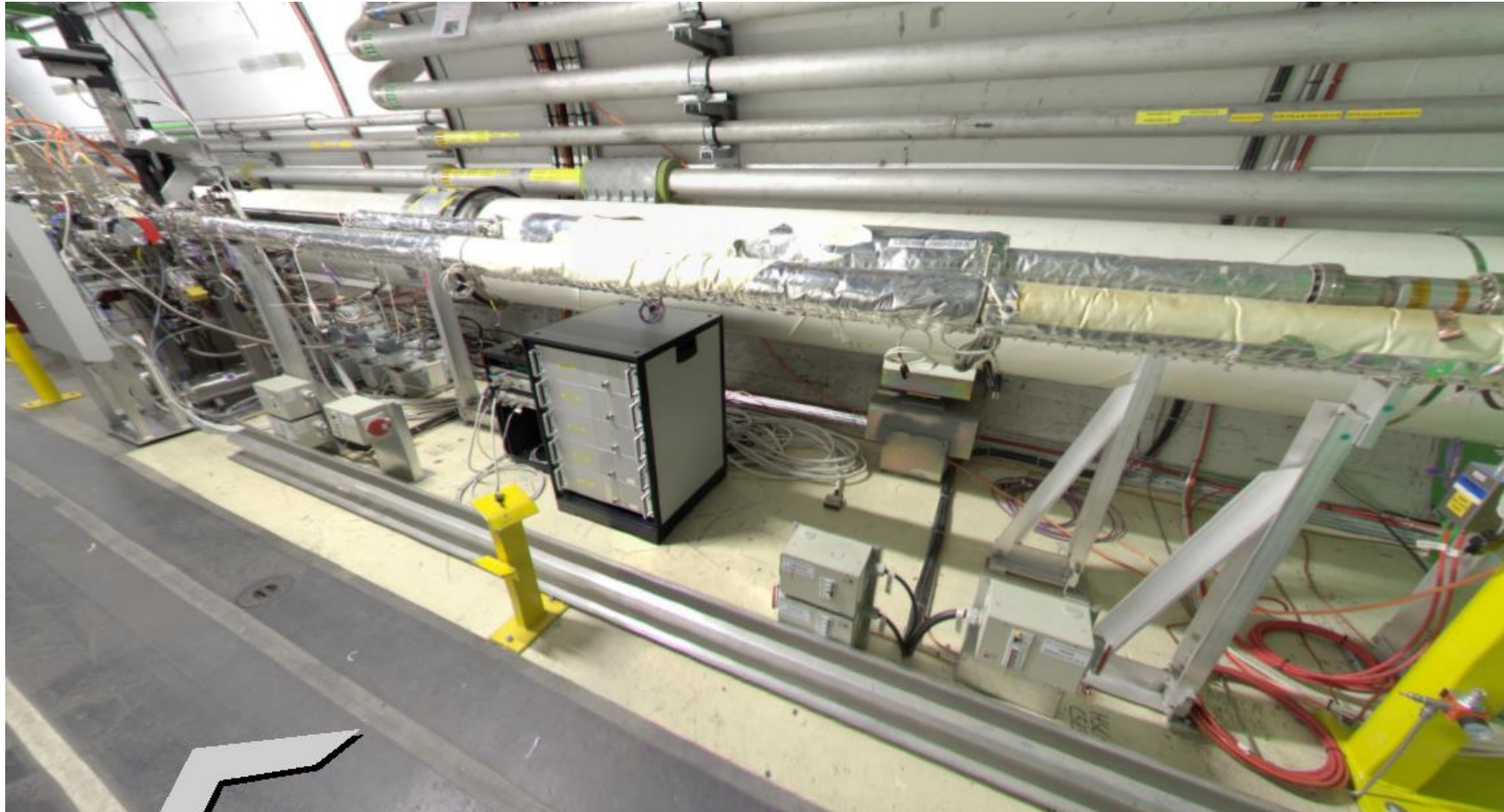


Point 4 Topography and Integration Terminology

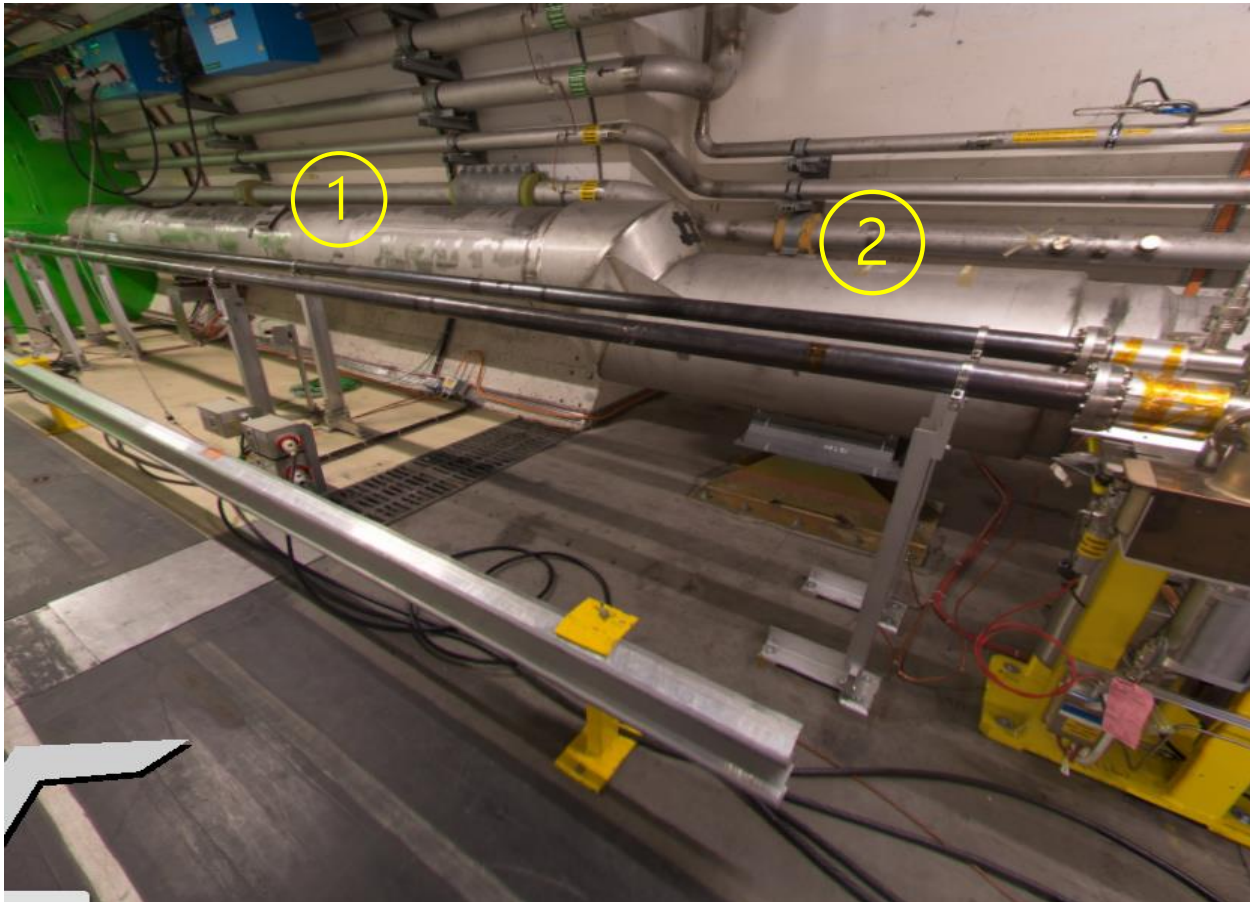
Top View



Left Side Close Up



Right Side Close Up (and differences in positions)



Position 1:

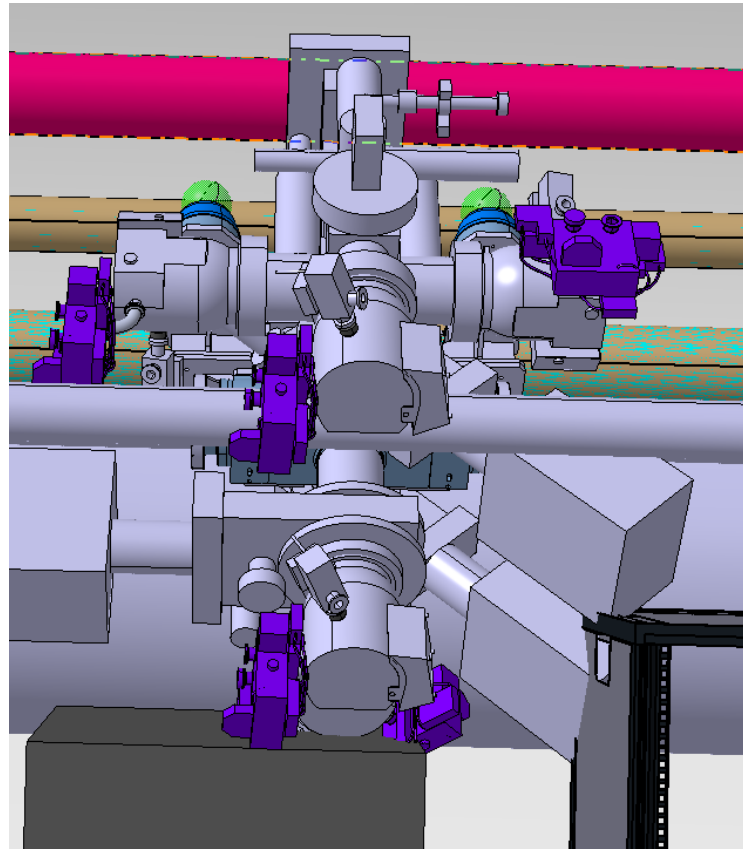
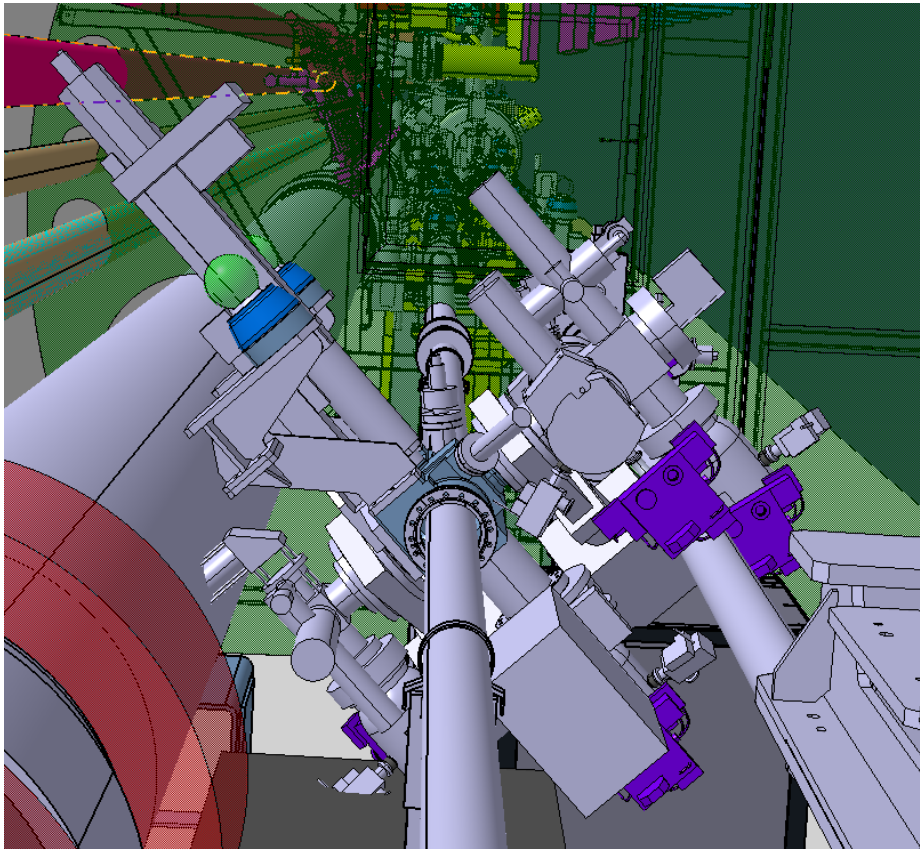
- Higher QRL position w.r.t. Beamline

Position 2:

- Lower QRL w.r.t. Beamline
- Radius of QRL is 60mm larger compared to position 1

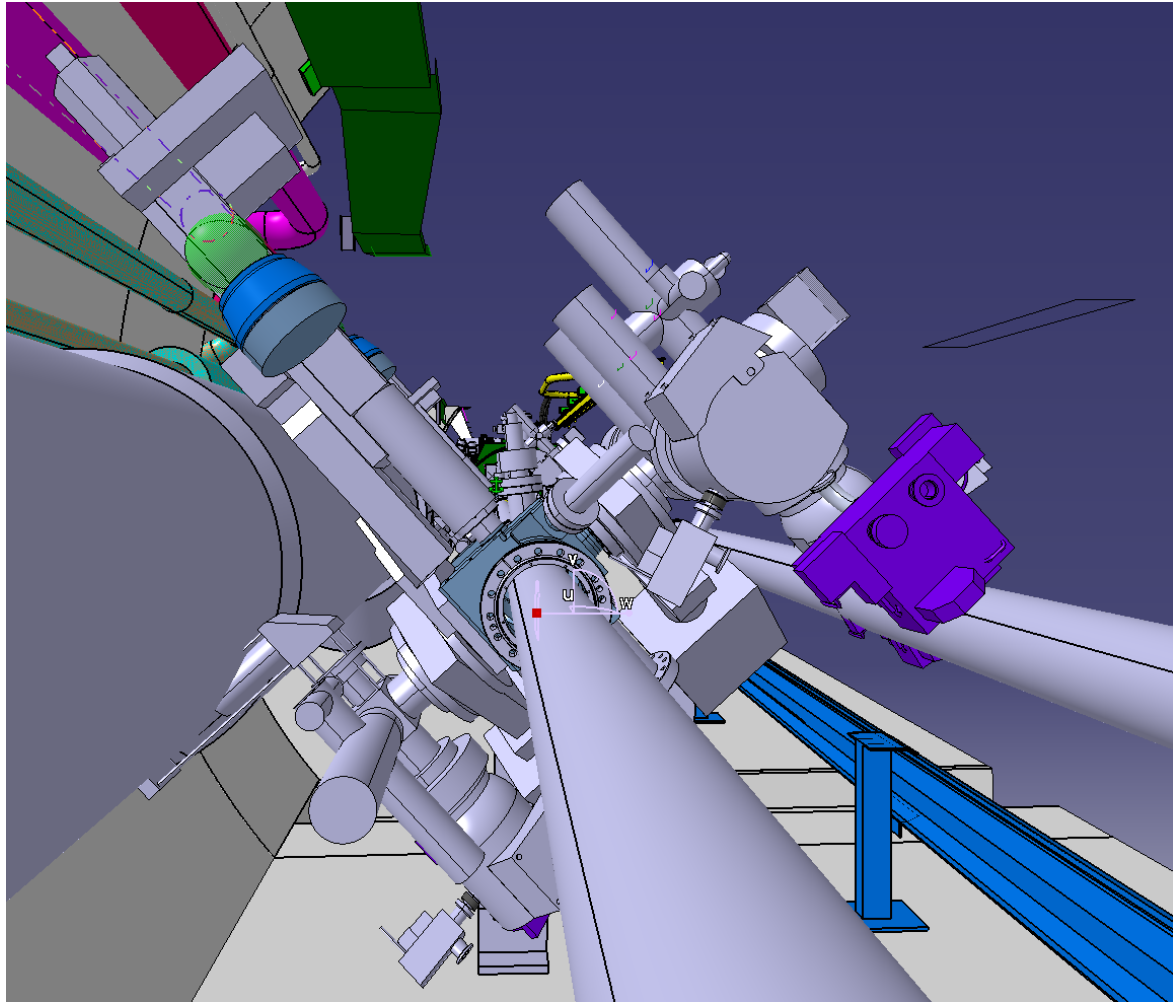
Left Side (Next to current BGC)

- Current BGC model rotated roughly 45° to investigate integration onto BL2

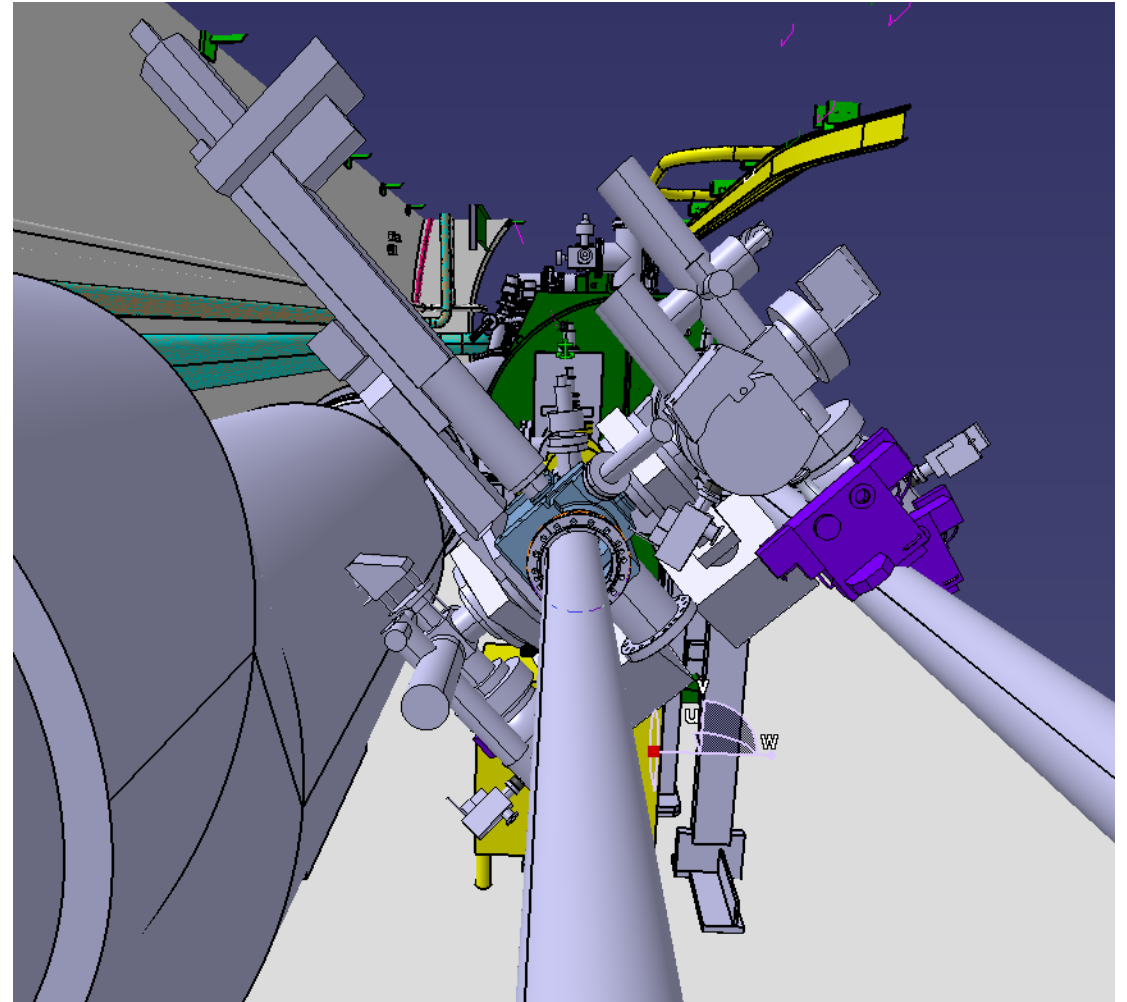


Right Side

BL2
R Option 1

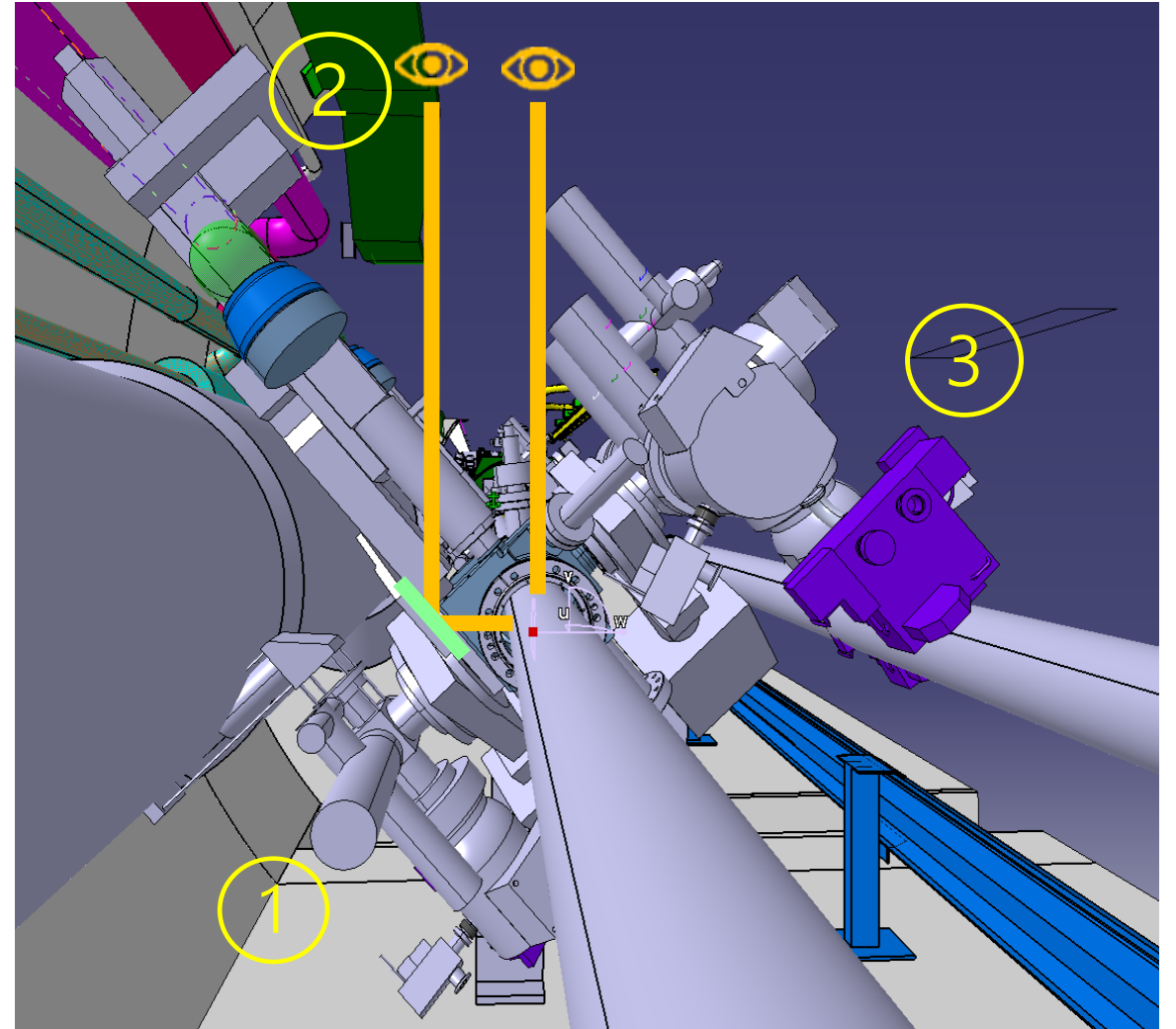


BL2
R Option 2



Key Areas Currently Identified for Modification

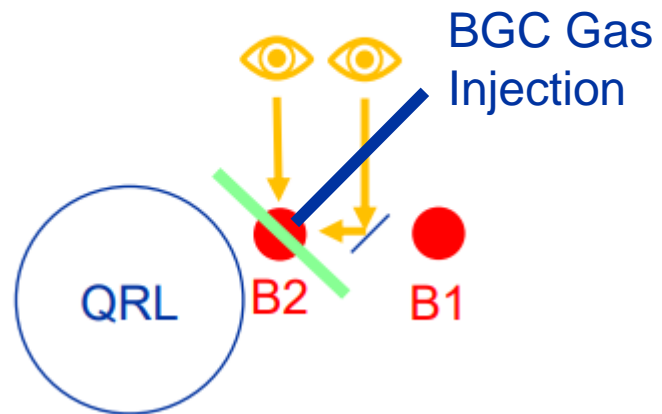
1. Gas jet dump
2. Optical line(s) integration
3. Turbo molecular pump integration/positioning
 - and their respective valve blocks



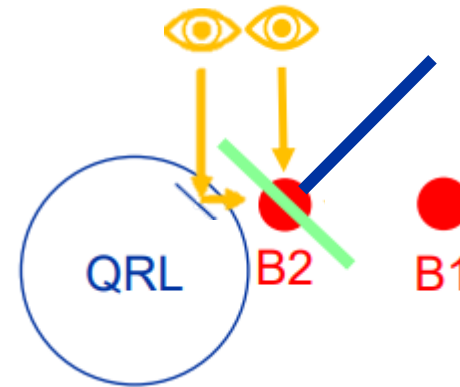
Next Steps

- **More detailed analysis of integration to determine the more suitable position**
 - More detail will unearth certain constraints/boundaries from each position, which will help determine the best position
- **For Example:**
 - Modifying CAD to integrate components that currently clash with surroundings
 - Implementing optical line solutions

Two optical lines



Alternate Options



*Preferred option

