



University
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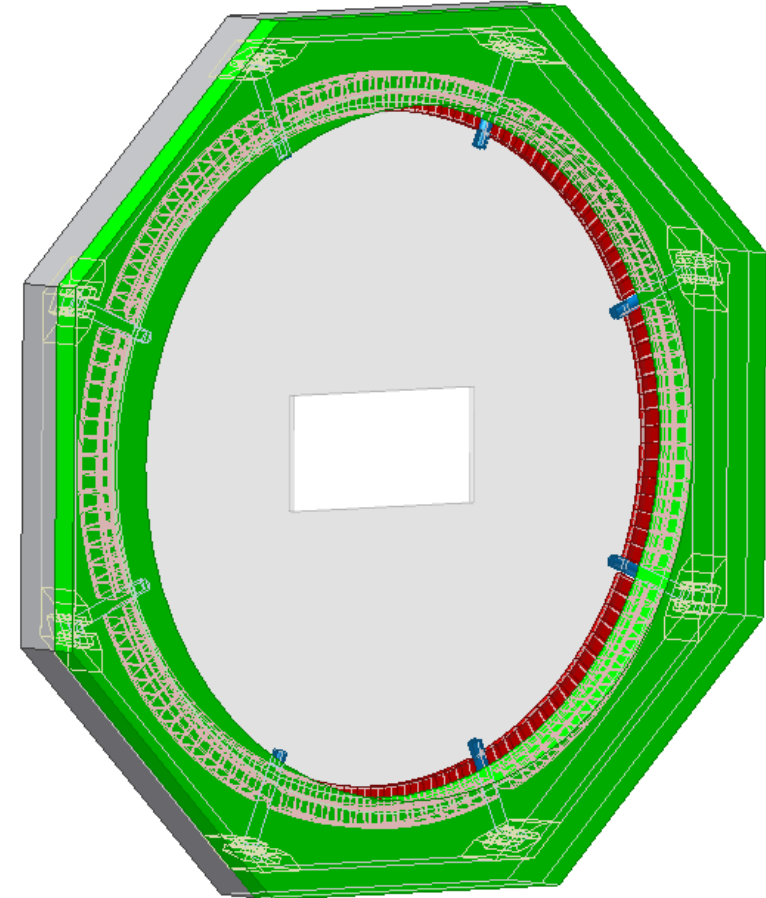
Focussing Disc DIRC & Endcap EMC Integration

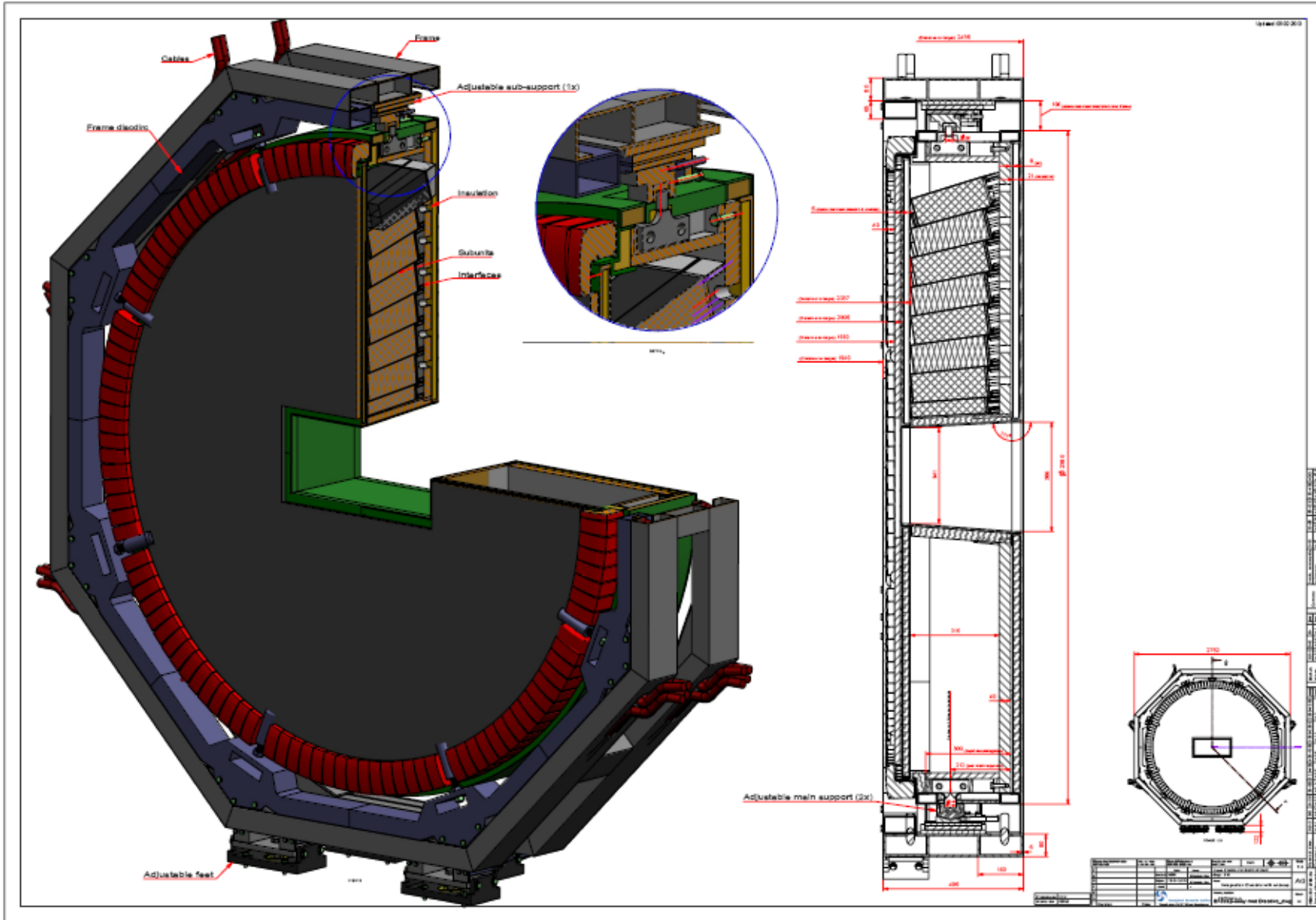
Mechanical Design Session, PANDA Collaboration
Meeting, GSI, March 2010

M. Hoek



- **Fit Disc DIRC into Endcap**
- minimal space available
 - < 60mm in central radiator part
 - More space around rim to accommodate
 - Imaging optics
 - Photon detectors
 - Frontend electronics
- Limits agreed in Nov 2007
 - Also see PANDA CAD v1.15
- **Integrate into Endcap EMC frame**



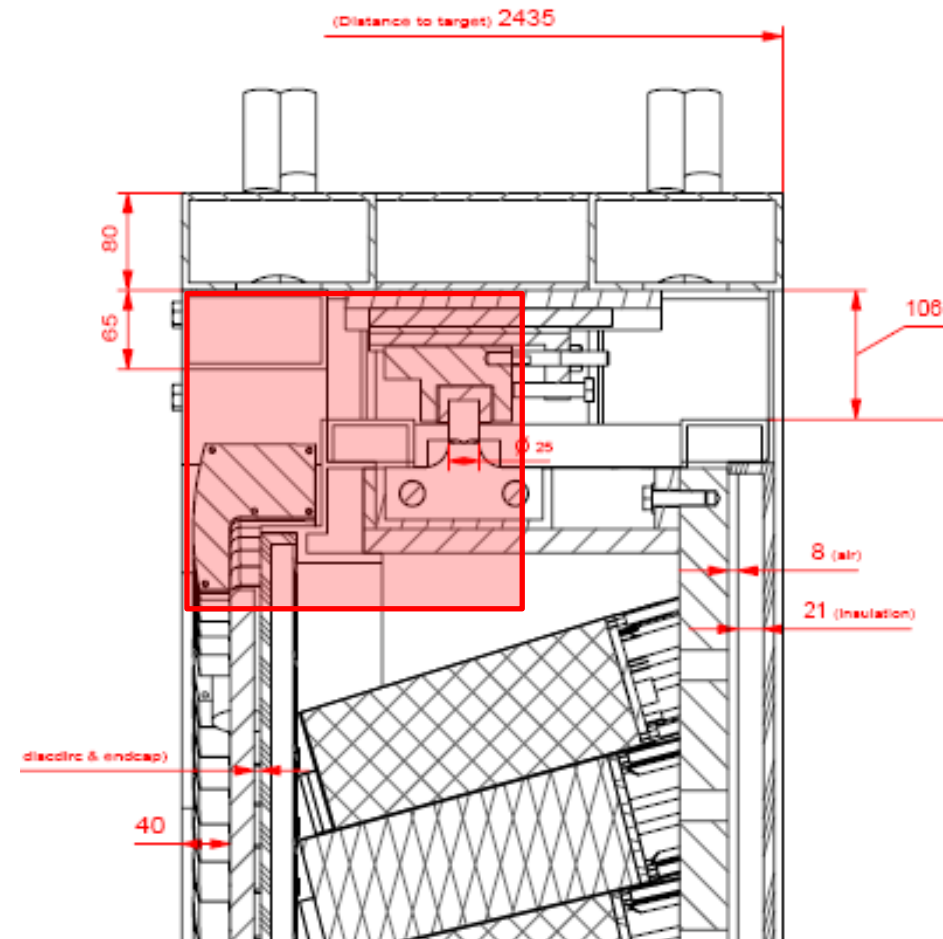


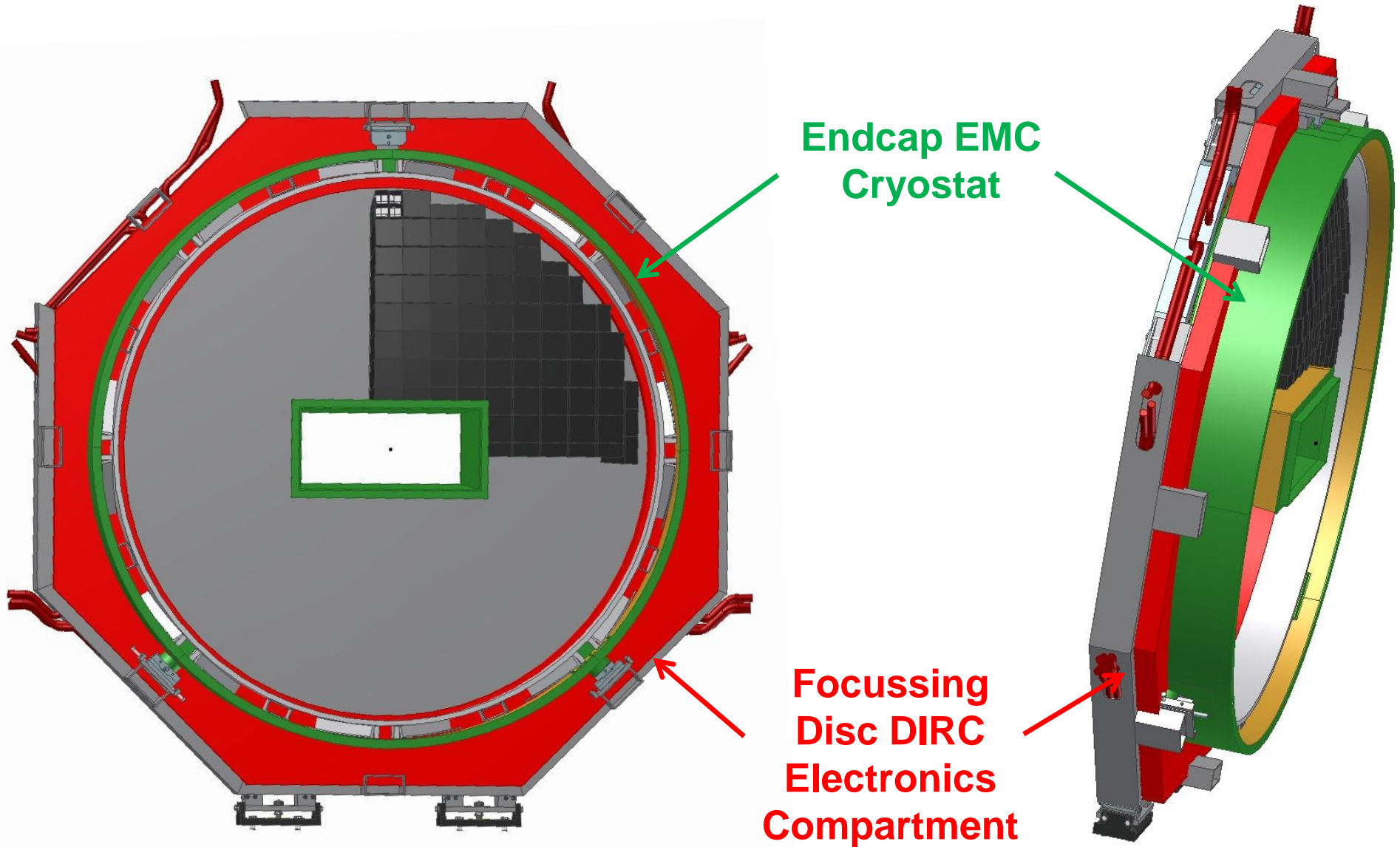
• Endcap EMC frame...

- ✓ fits within available space
- ✓ complies with Muon Detector requests
- ✓ fulfils solenoid yoke mechanical requirements
- ✓ Great job by KVI engineers

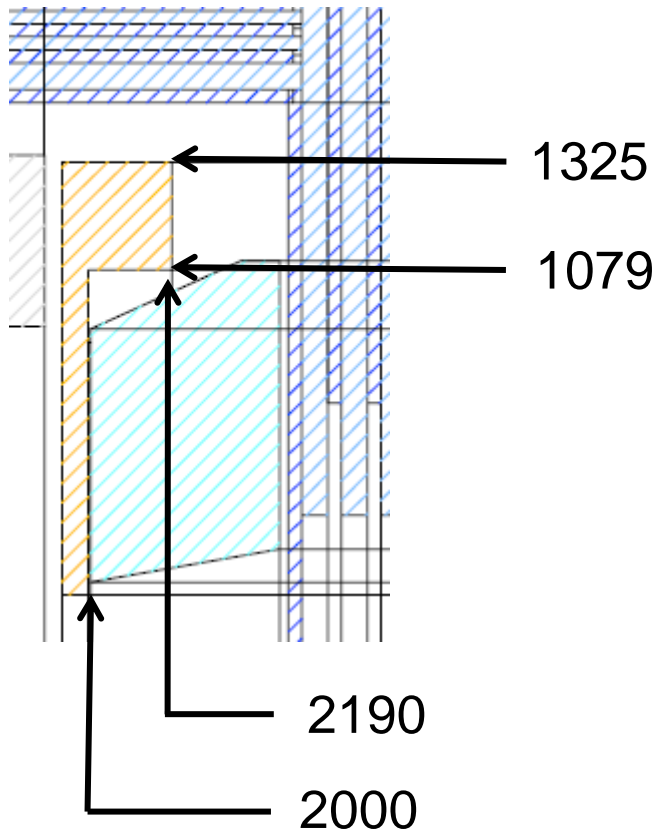
• but Endcap EMC...

- ✗ takes up most of Focussing Disc
DIRC electronics compartment



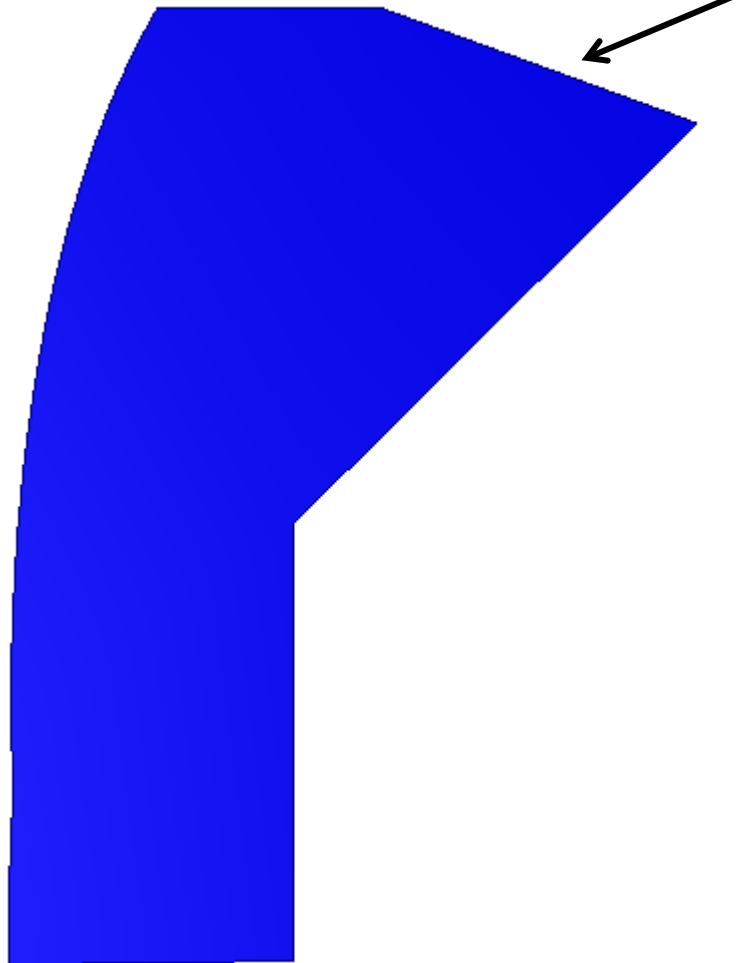


- **Space available to detectors**
- Agreed at Mechanical Workshop in November 2007
- **Focussing Disc DIRC design**
- **not finalised yet!**
- Imaging units subject to change
- Depends on photon detector etc.
- Space is absolutely crucial to Focussing Disc DIRC

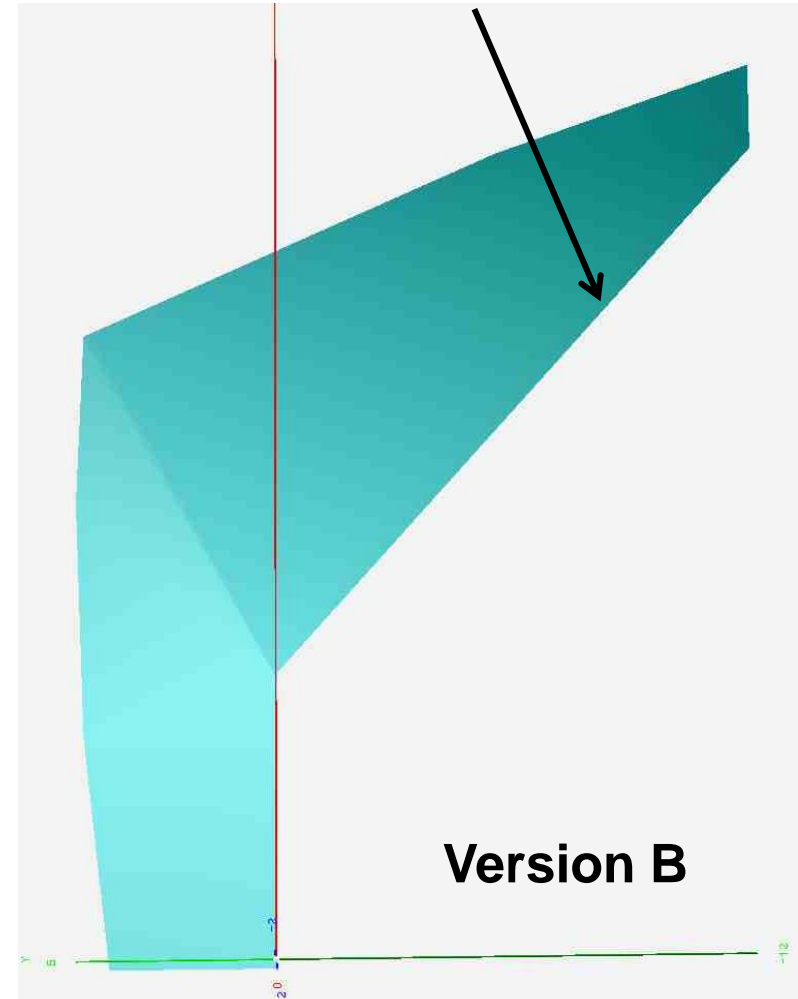


PANDA v1.15
(Mech Workshop Nov 2007)

Version A



Photon Detector Position



Version B

- **Common Endcap EMC & Focussing Disc DIRC frame seem feasibly within given limits**
- **there are still some open points that need considerable work**
- Working together with Endcap EMC to solve remaining issues