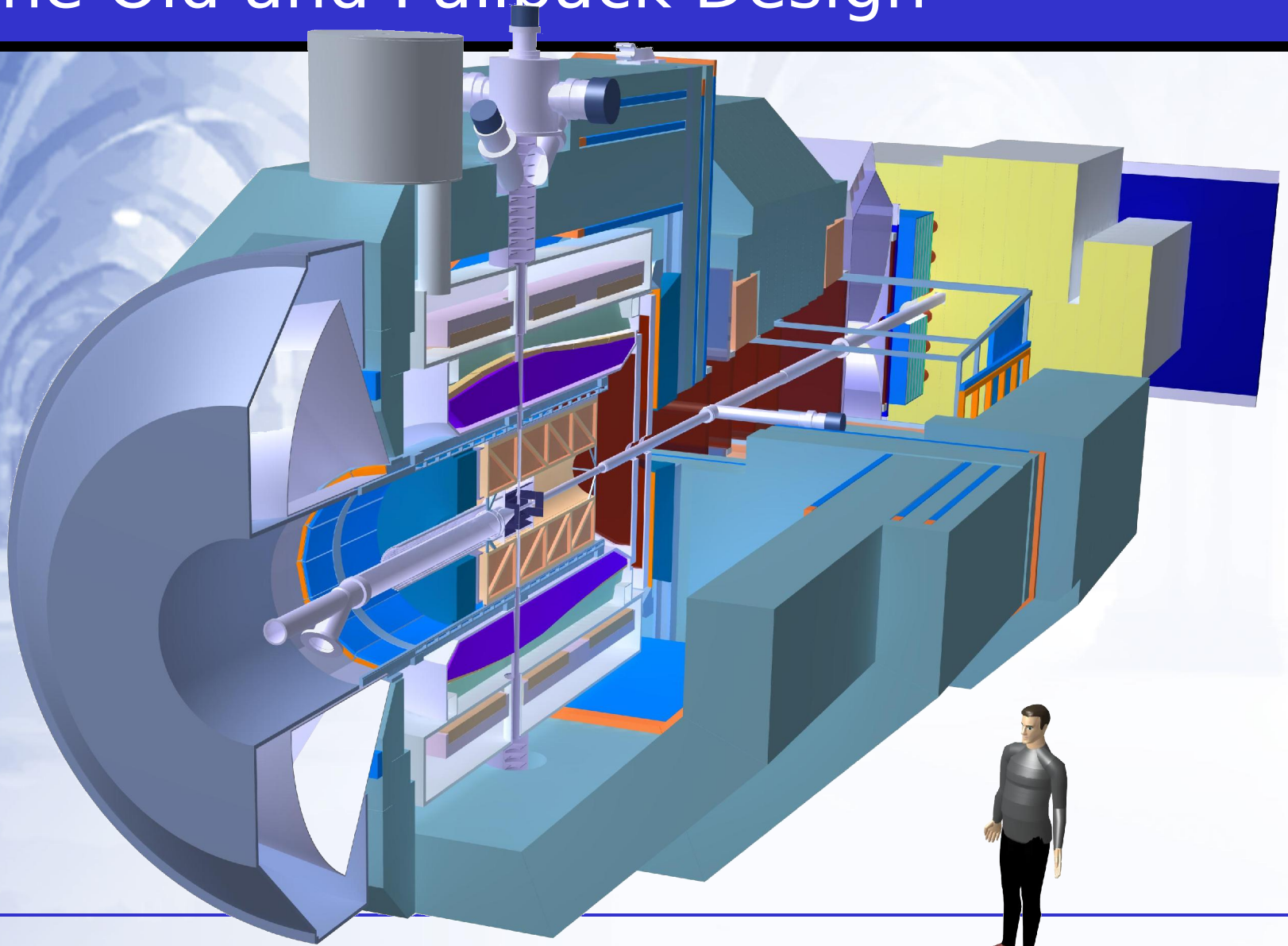


# PANDA Geometry Constraints

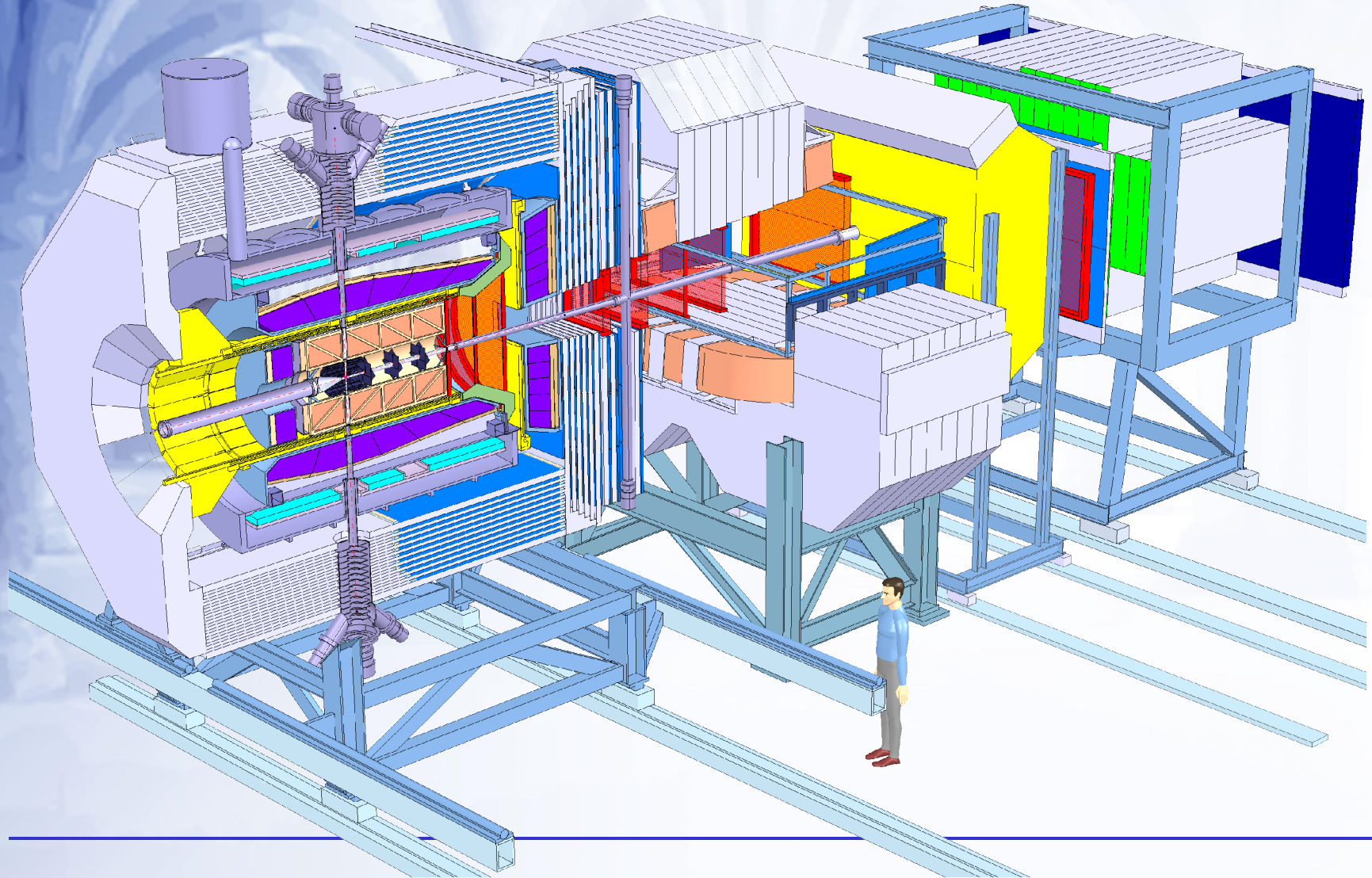
Inti Lehmann  
University of Glasgow

Ferrara 17/03/2008

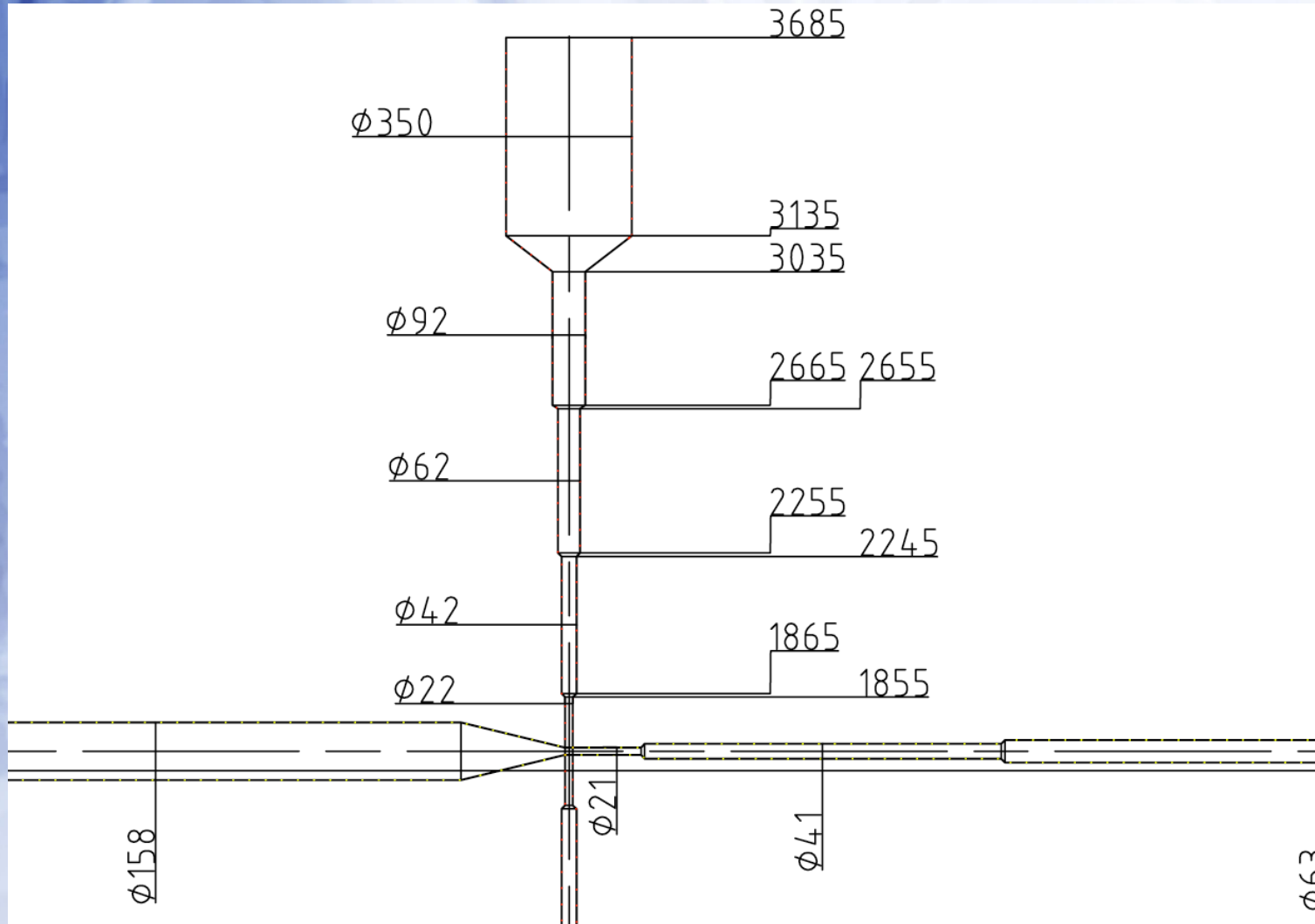
# The Old and Fallback Design



# Default Challenging DIRC Design

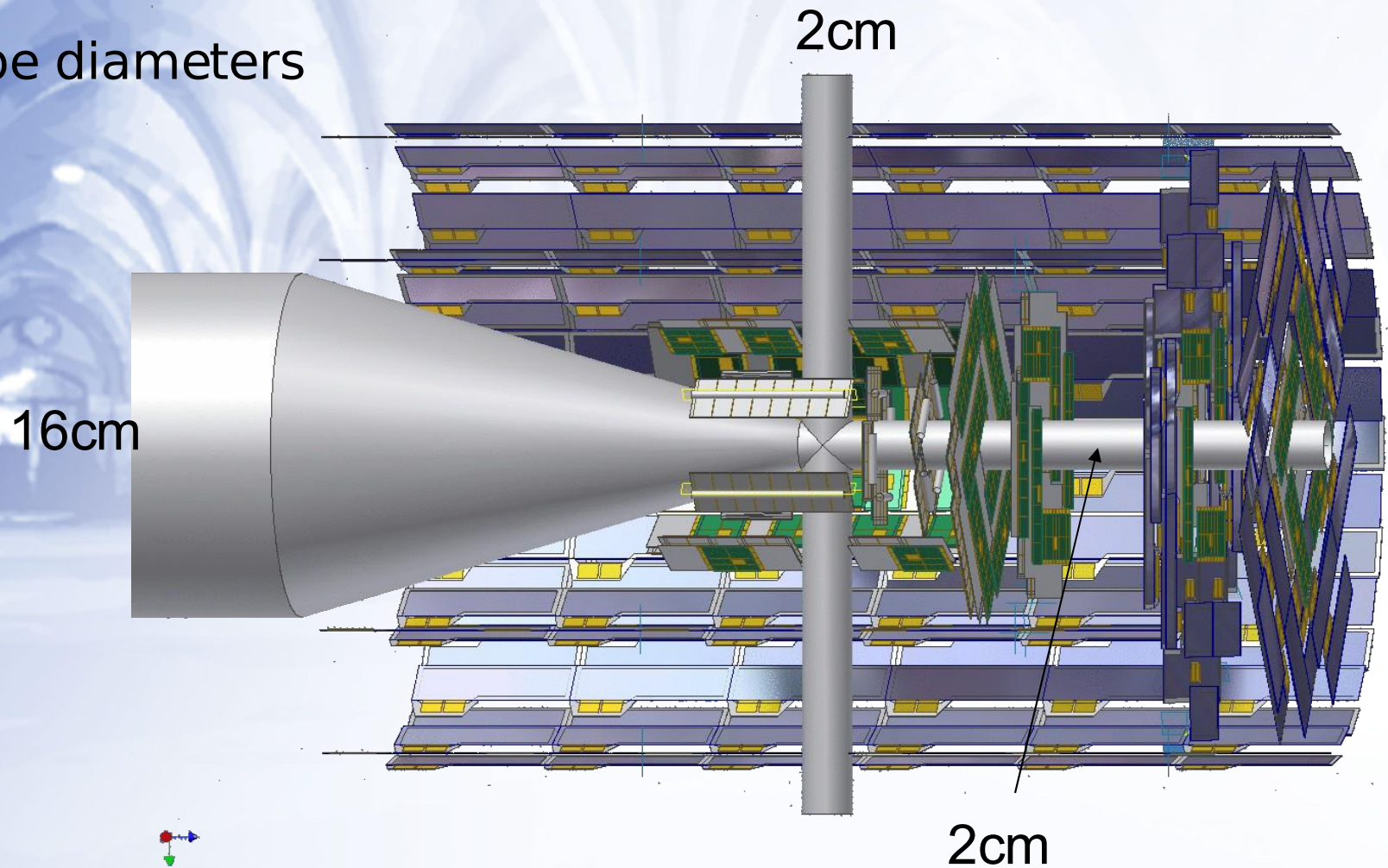


# Foreseen Target Pipes



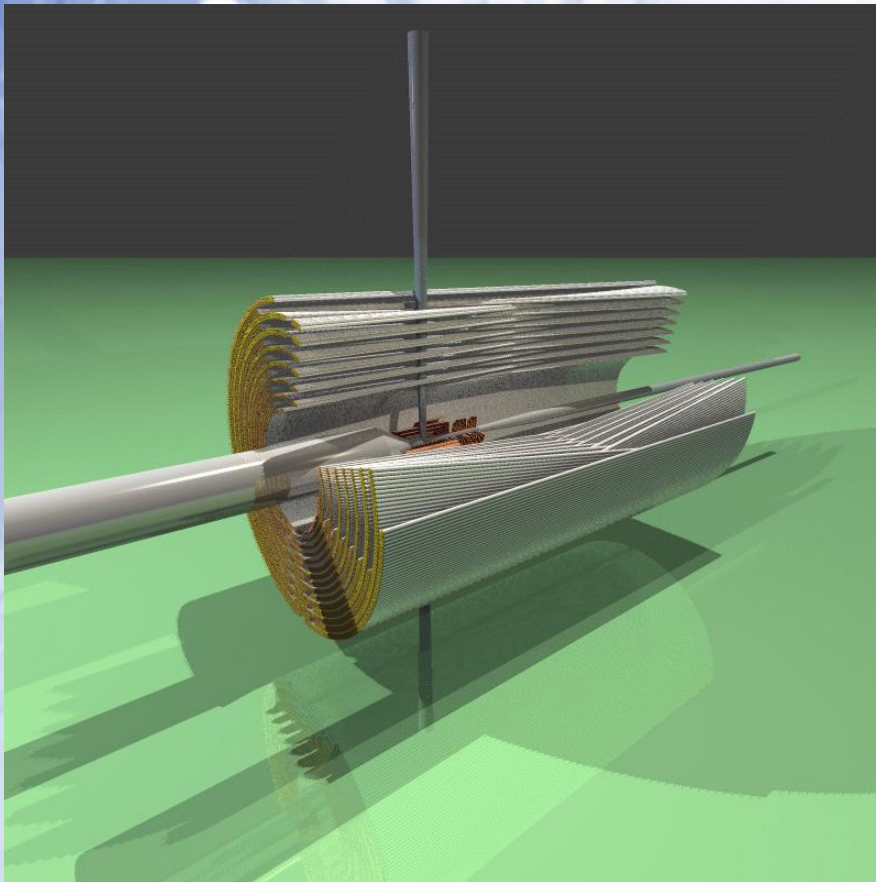
# Constraints: Micro Vertex Detector?

- Pipe diameters

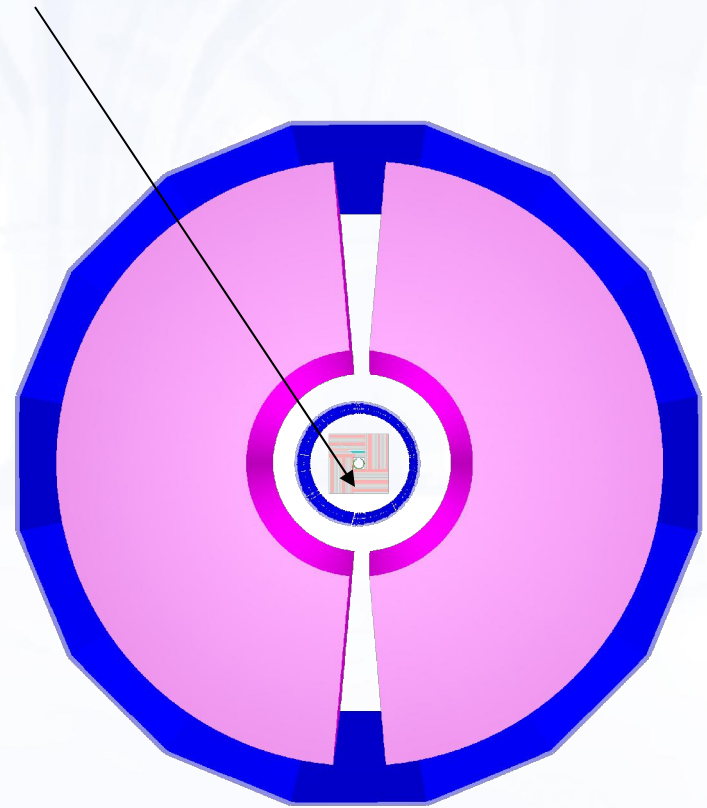


# Central Tracker (STT or TPC)

- Inner diameter: 30cm
- Outer diameter: 90cm

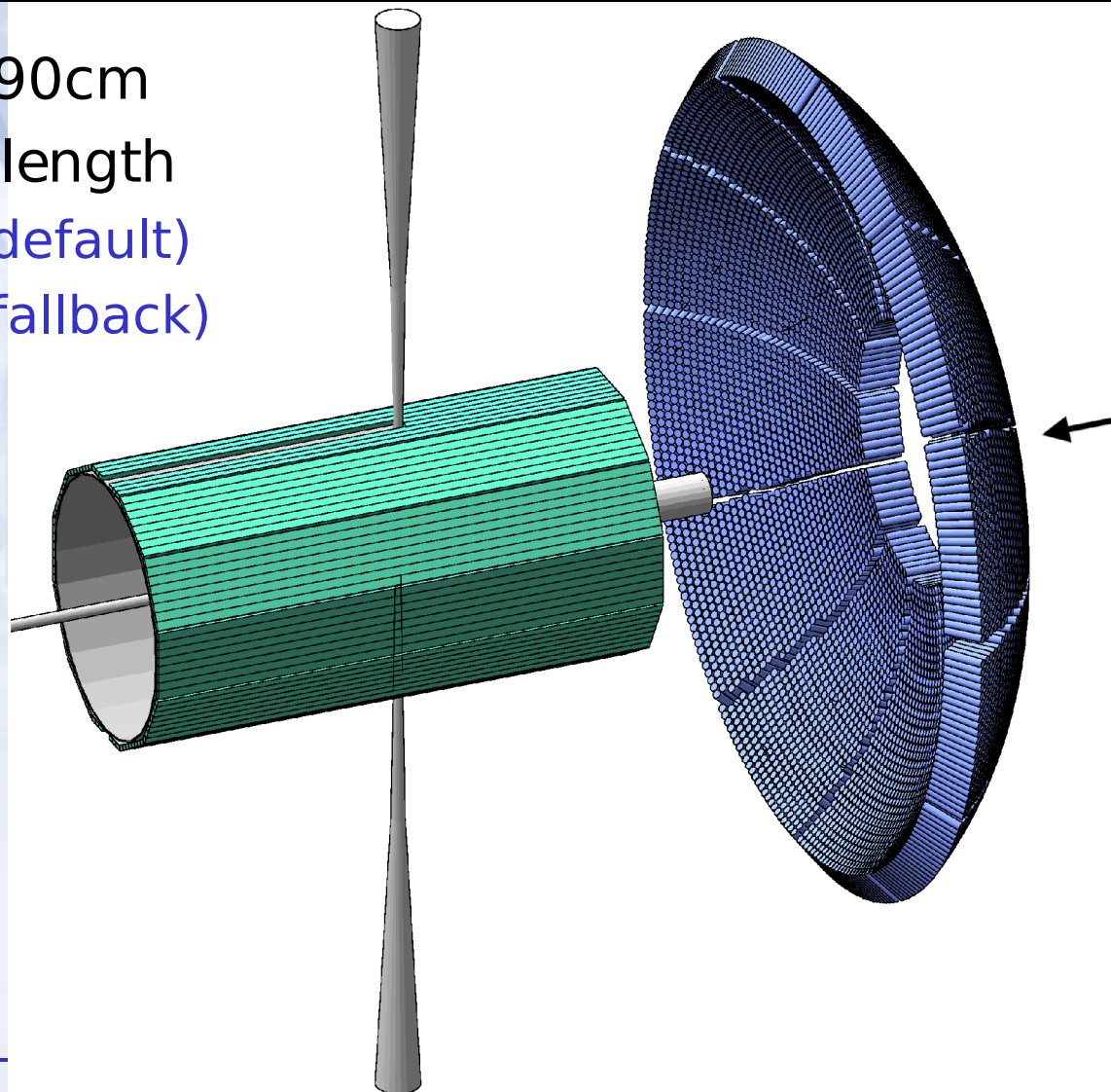


Hypernucleon target+det



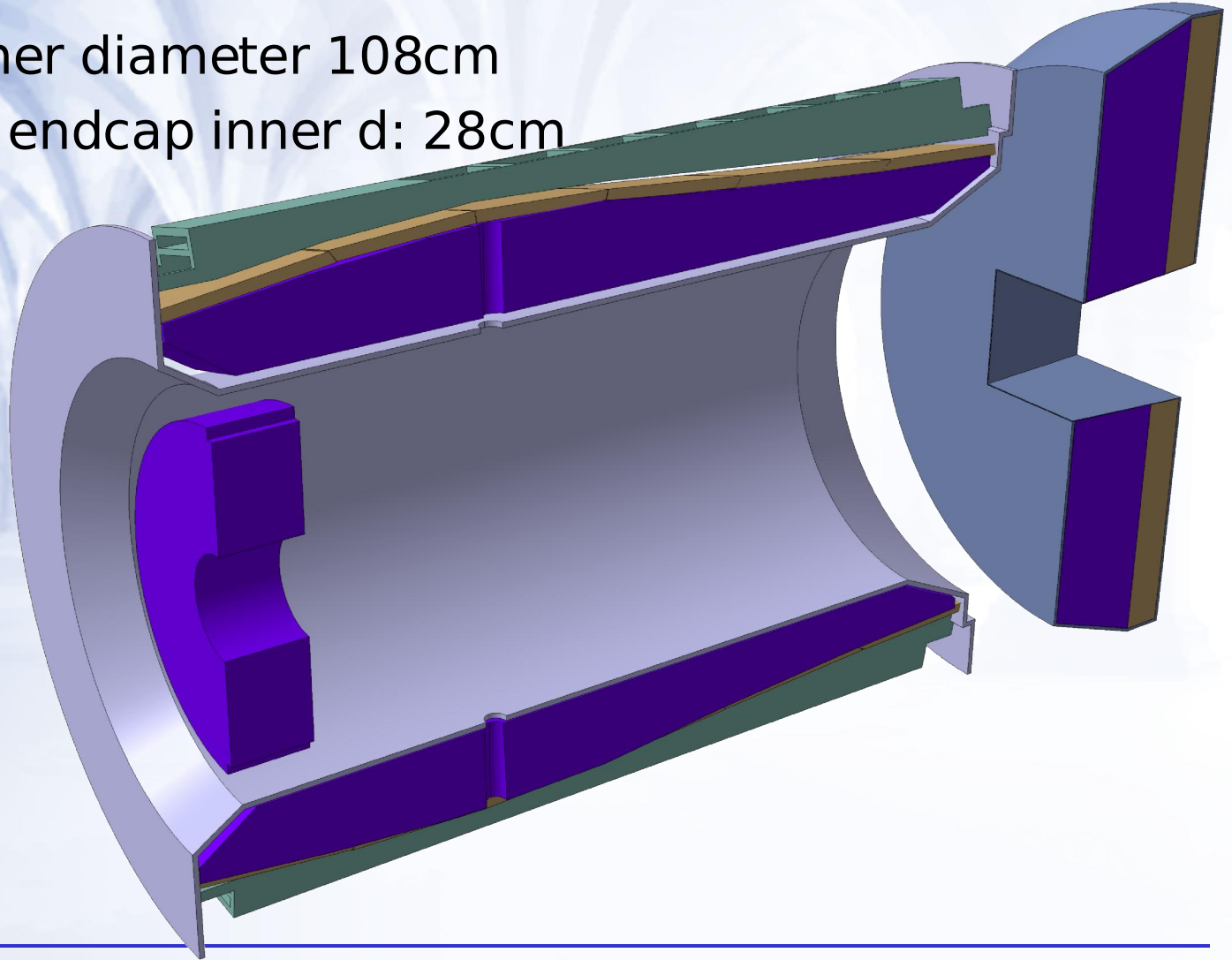
# Barrel DIRC with readout

- Inner dia: 90cm
- Upstream length
  - 166cm (default)
  - 270cm (fallback)



# Electro-Magnetic Calorimeter

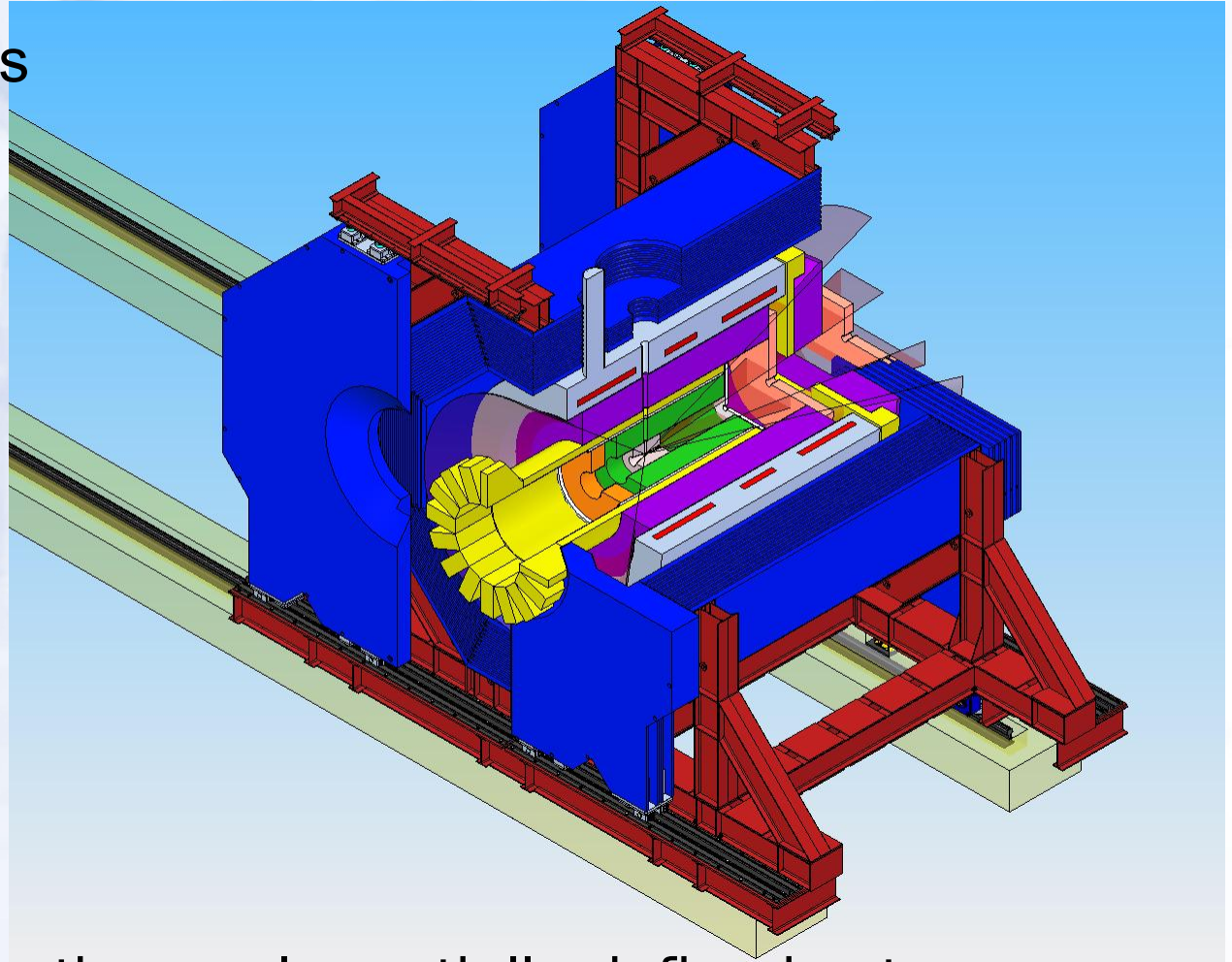
- Barrel inner diameter 108cm
- Downstr. endcap inner d: 28cm



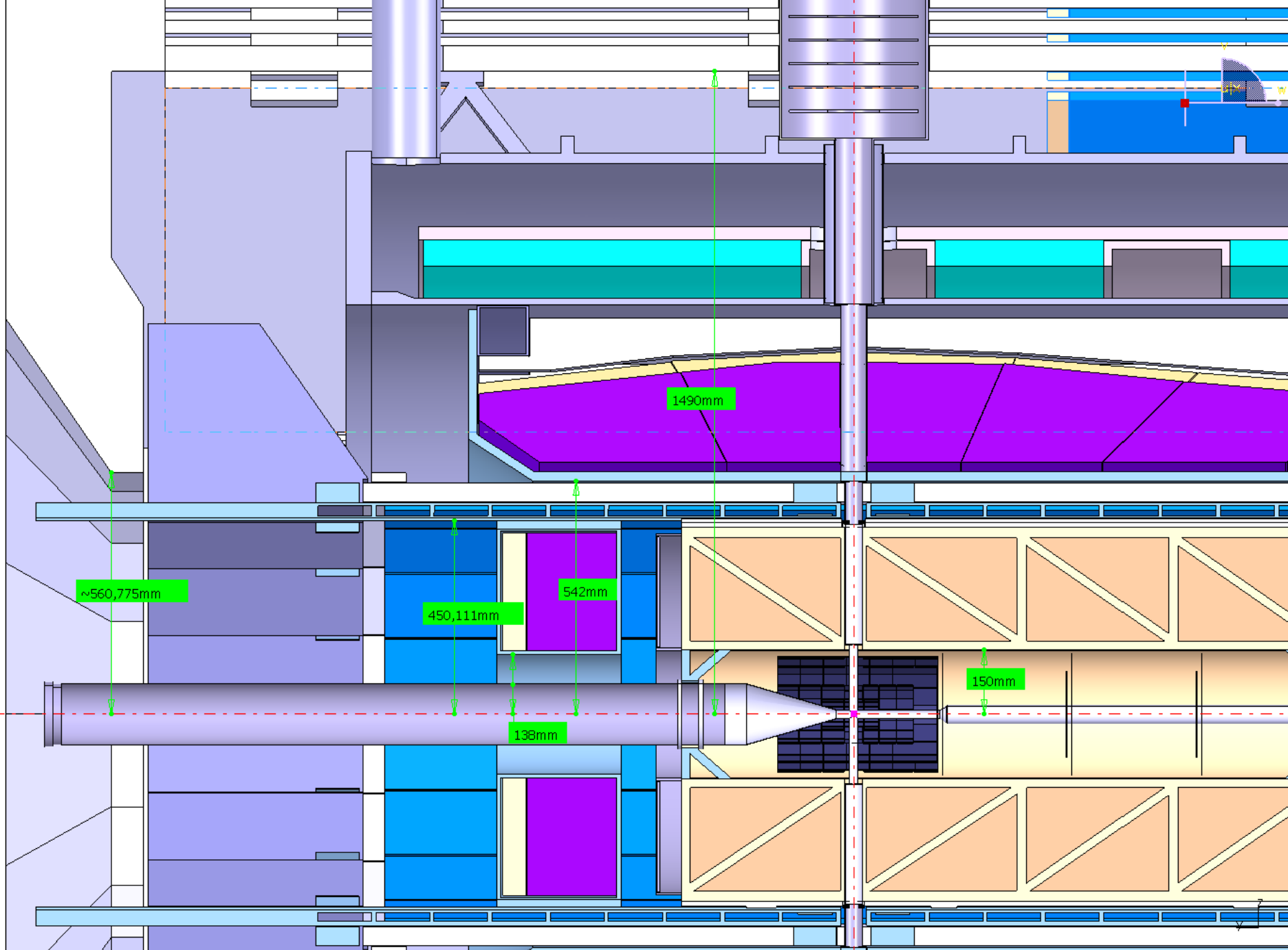


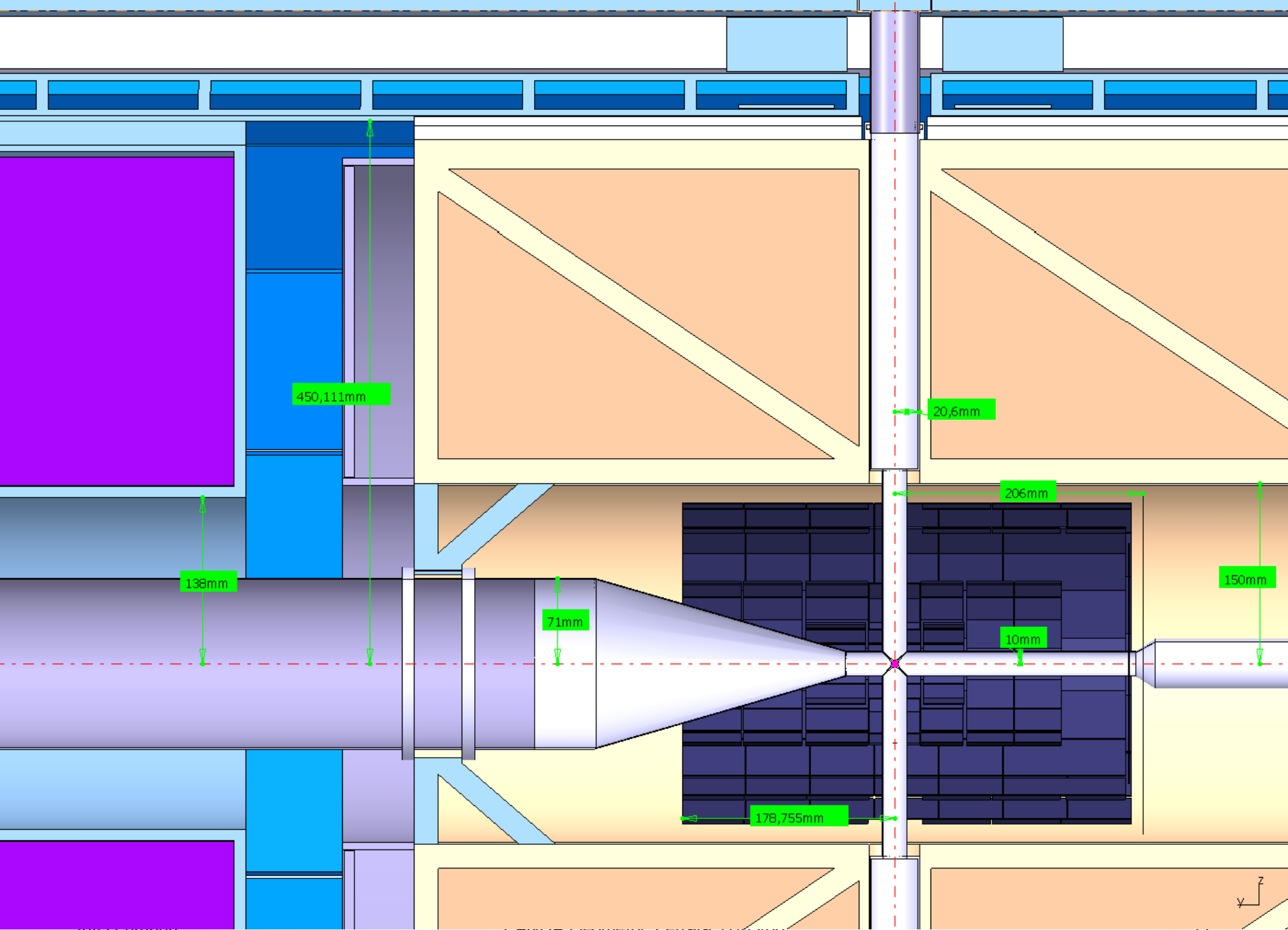
# Magnet and Mounting Structures

Closest pumps  
177cm from  
interaction  
point

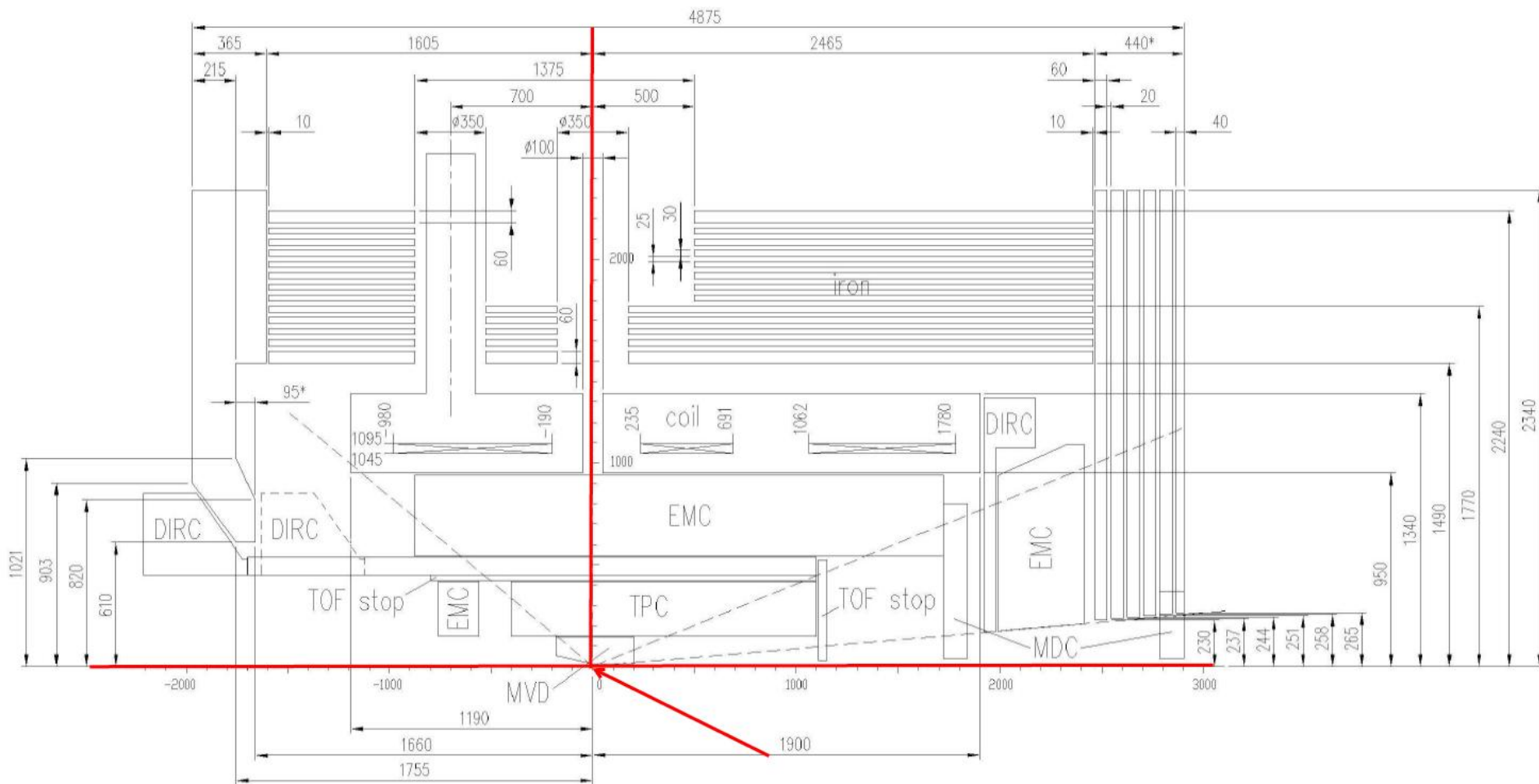


- Detector mountings only partially defined yet

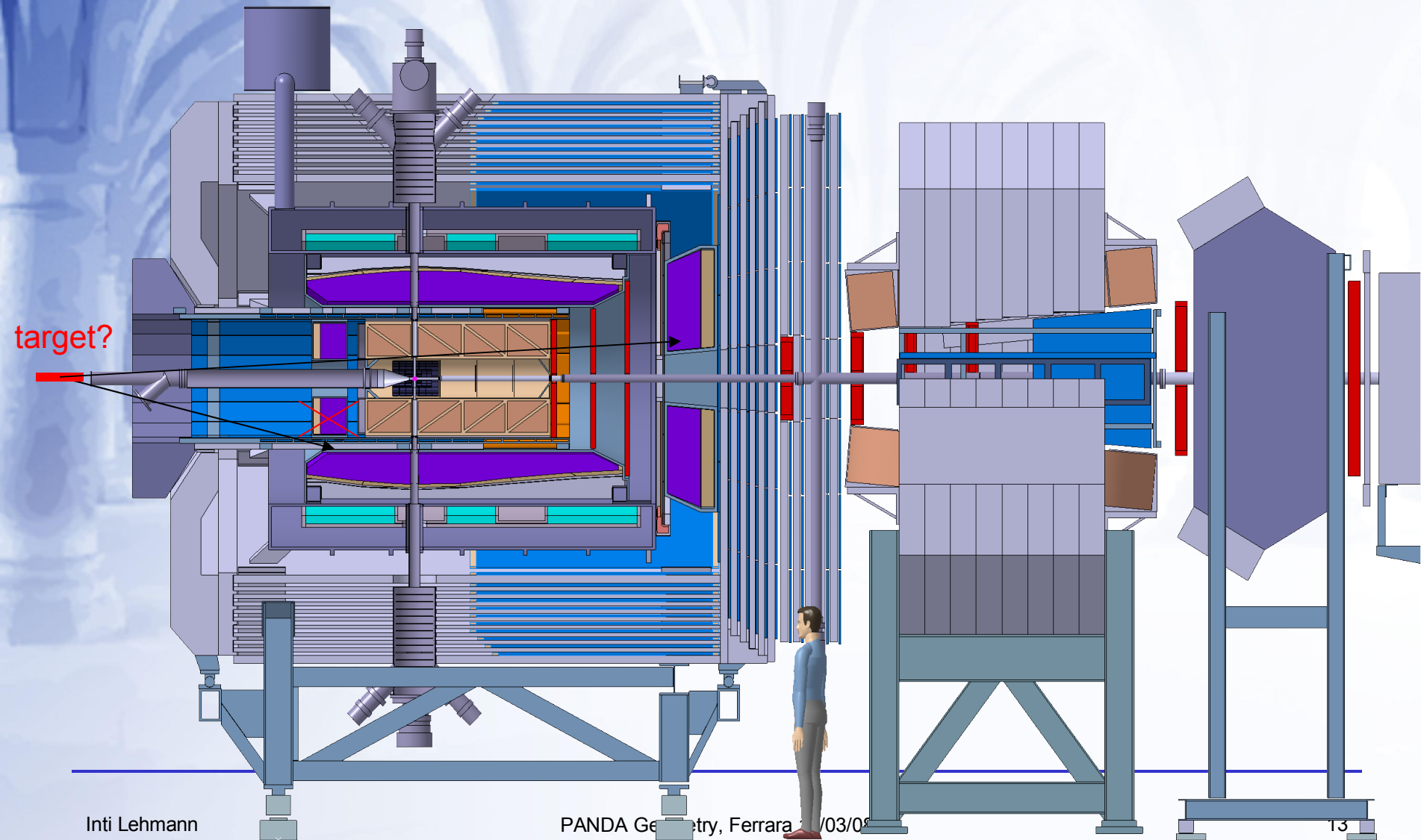




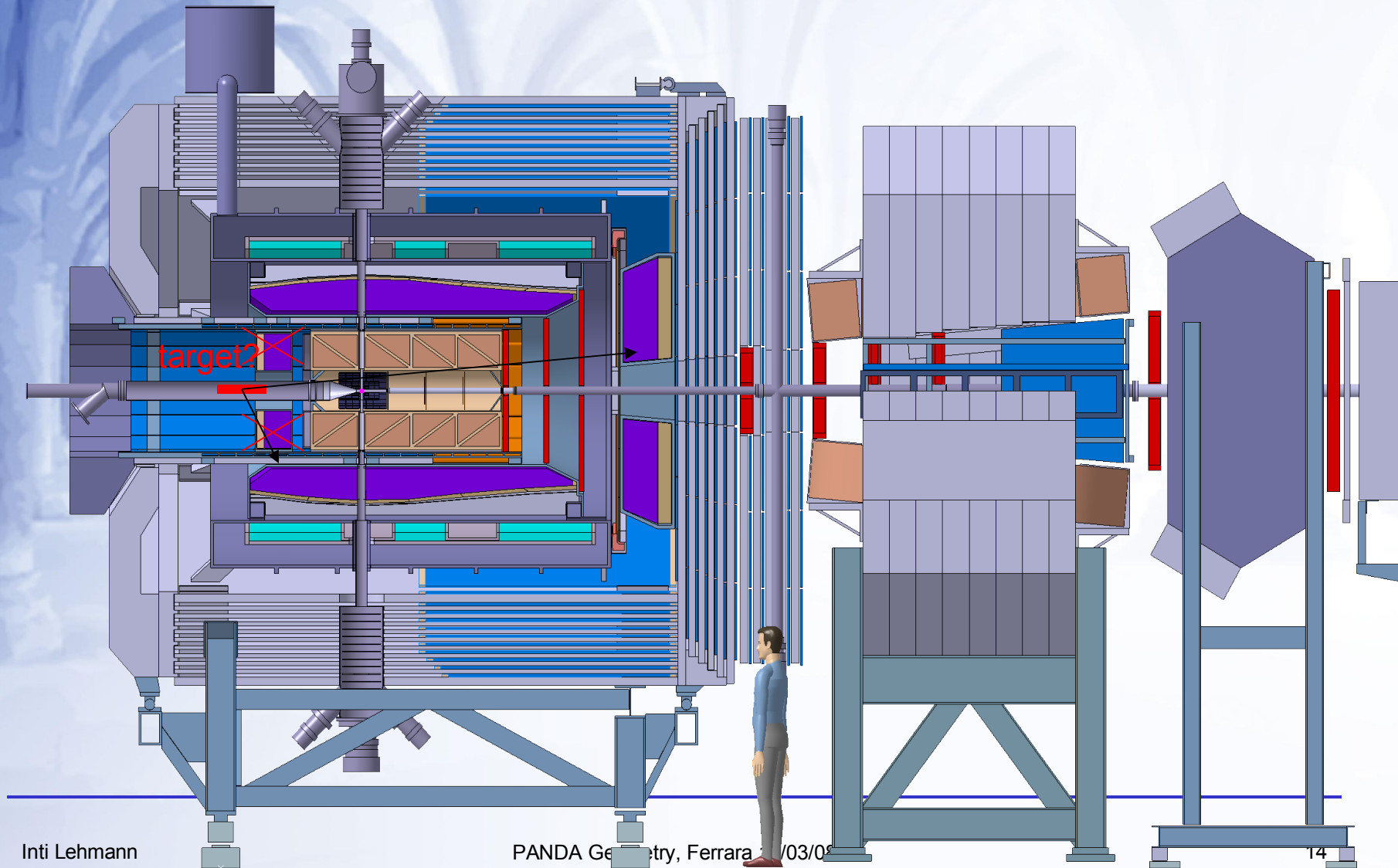
# Overall Dimensions



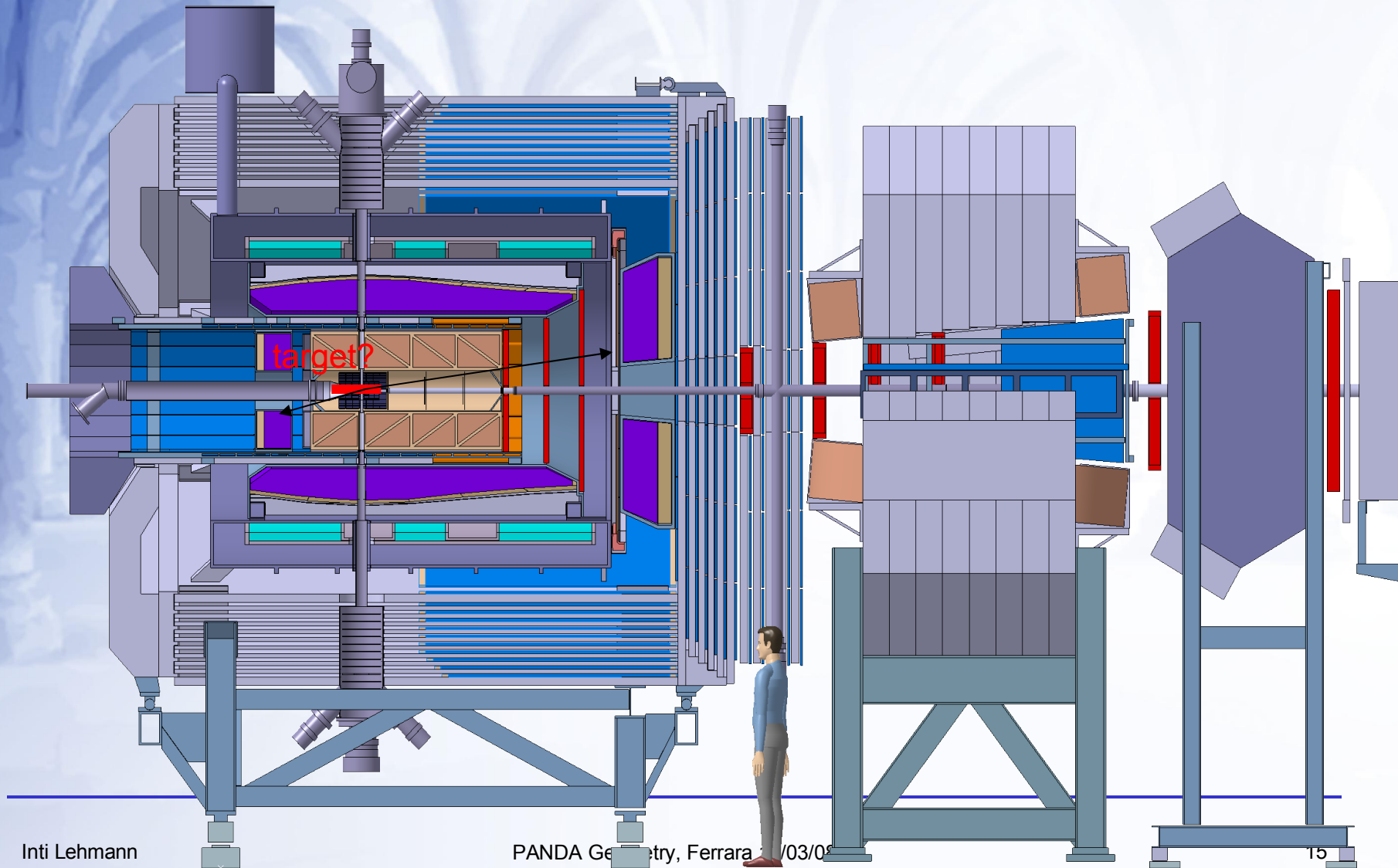
# Where to Put a Polarised Target?



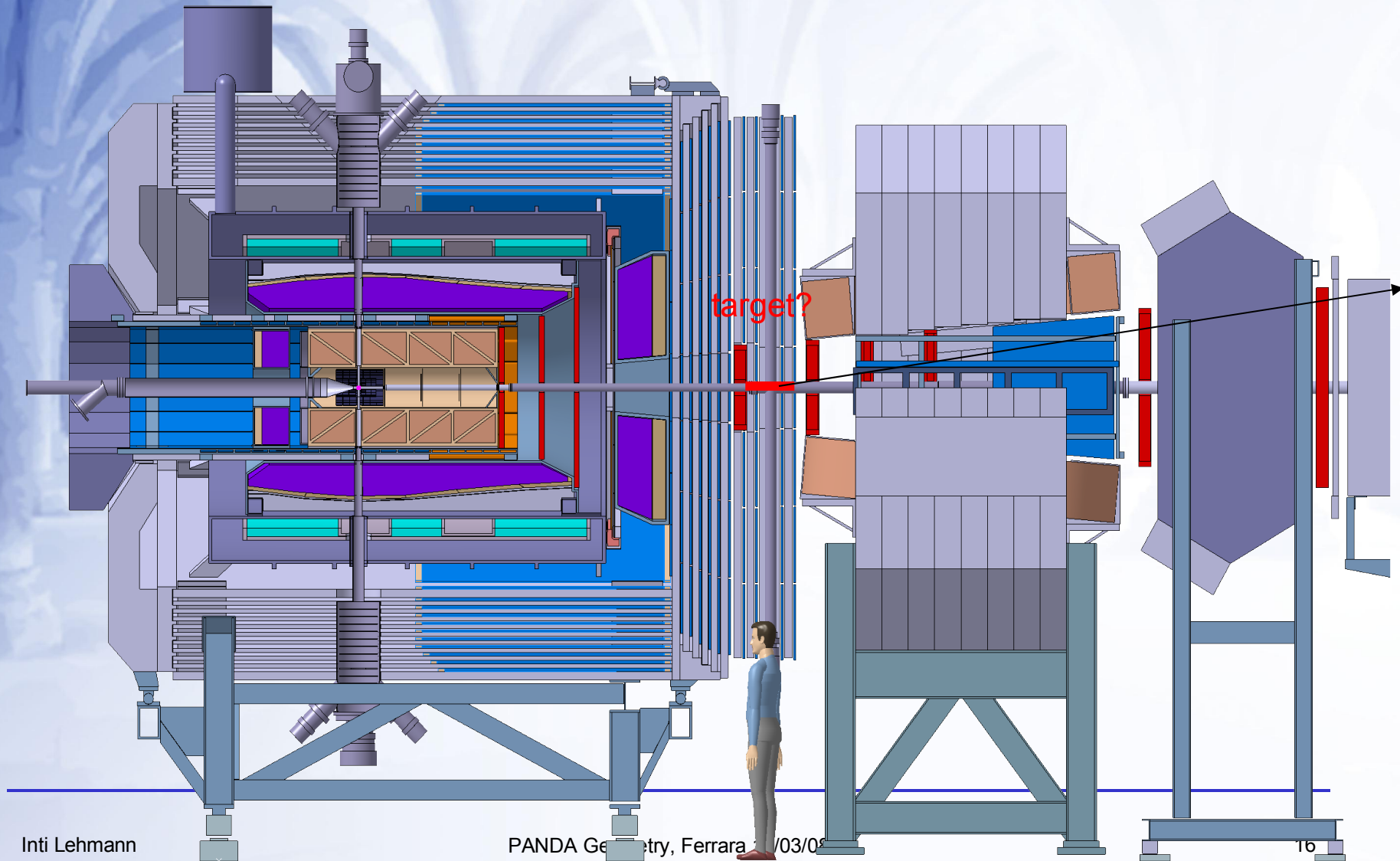
# Where to Put a Polarised Target?



# Where to Put a Polarised Target?



# Where to Put a Polarised Target?

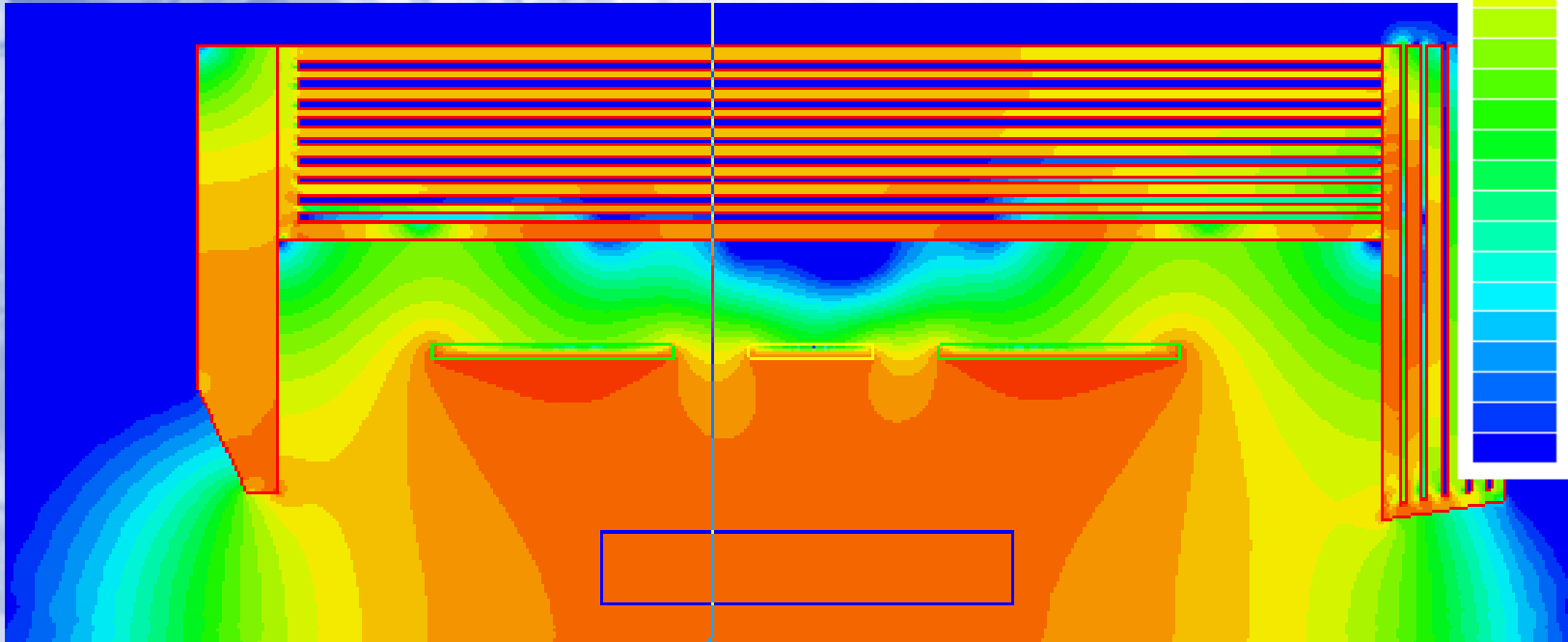




# Magnetic Field Considerations

B [T]

3.0000e+000  
2.3830e+000  
1.8929e+000  
1.5036e+000  
1.1943e+000  
9.4868e-001  
7.5357e-001  
5.9858e-001  
4.7547e-001  
3.7768e-001  
3.0000e-001  
2.3830e-001  
1.8929e-001  
1.5036e-001  
1.1943e-001  
9.4868e-002  
7.5357e-002  
5.9858e-002  
4.7547e-002  
3.7768e-002  
3.0000e-002



# The Hall

