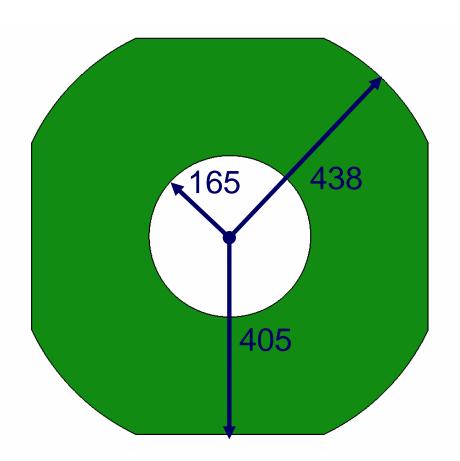




# EMC BWEC Geometrical Constraints



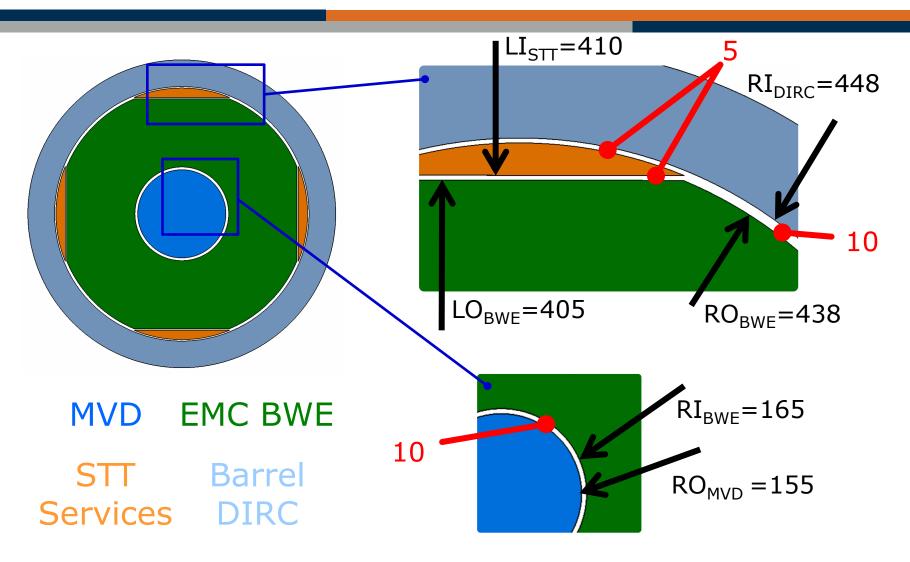




Reminder from June 2014 Technical Board (in mm)

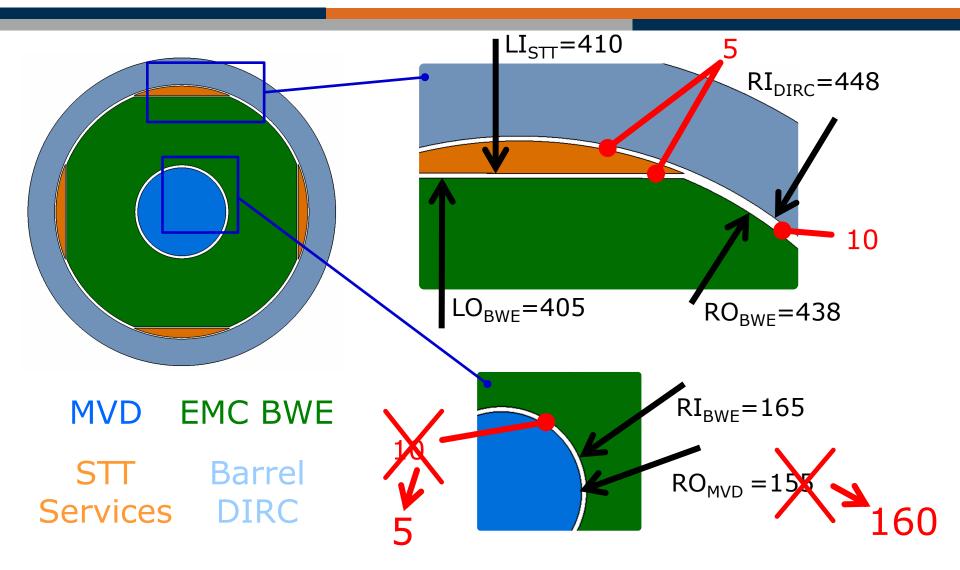
















## From Tommaso June 2017

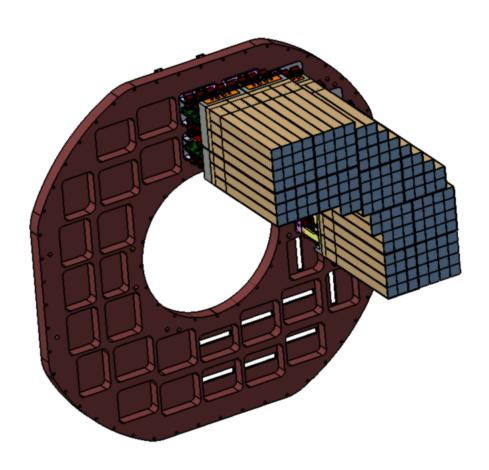
## Work ongoing

- Updated design of GBT sector in progress:
  - Evaluation of possible solutions to accommodate more, larger boards
  - Increase of outer diameter to 340 mm seems until now unavoidable
- Mechanical tests of silicon strip sensors ongoing (IKV, stave producer) to established minimum required robustness of stave

R=170mm



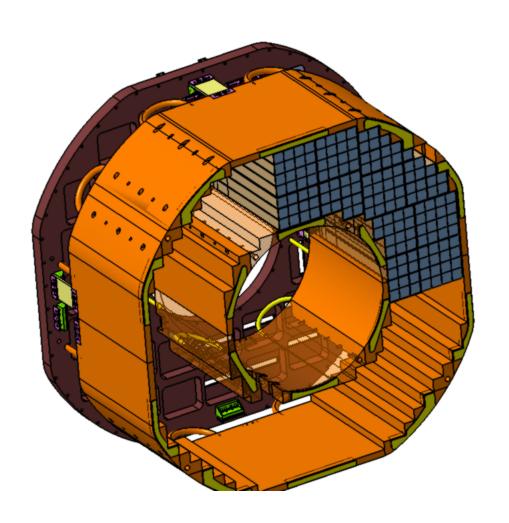




## BWEC Quarter with Mounting Plate



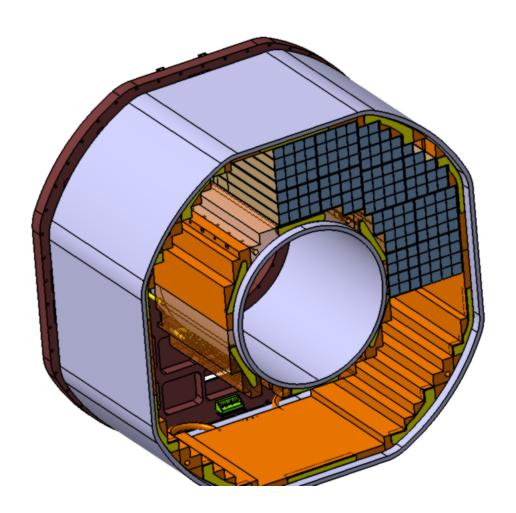




### **Cooling Shells**



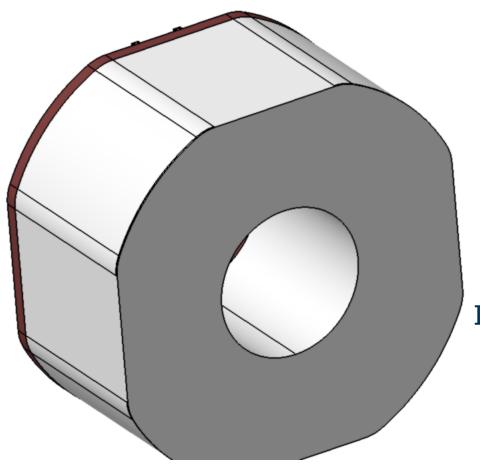




**VIPs** 







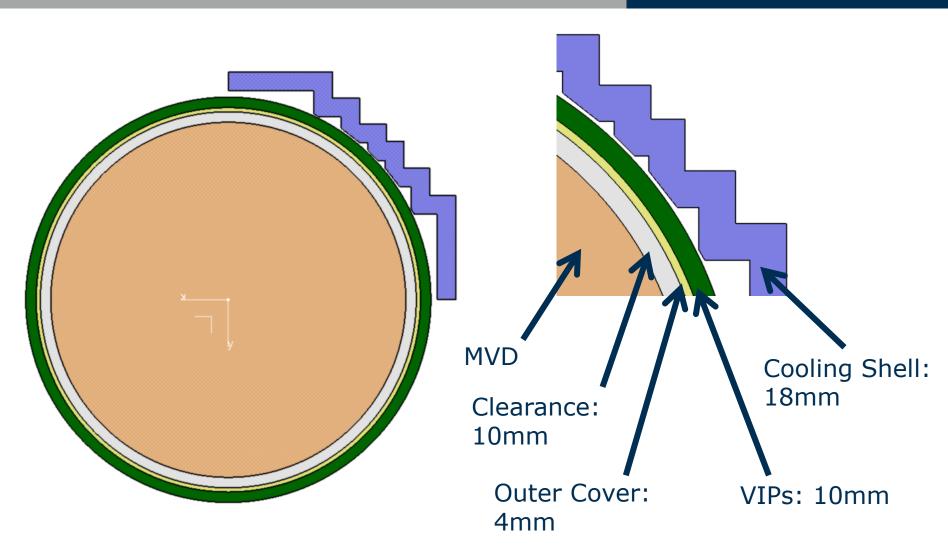
**Outer Cover** 

Inner Radius: **165mm** (as agreed)

(D=330mm)





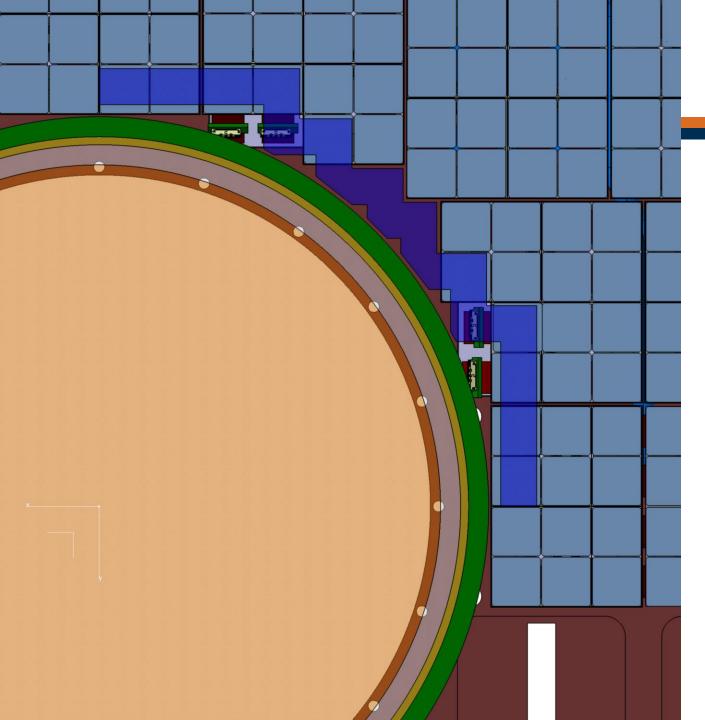






#### **Assumptions:**

- Cover tolerance stays within 4mm
- We can live with 10mm VIP
- Cooling shells feasible (prototype in construction)



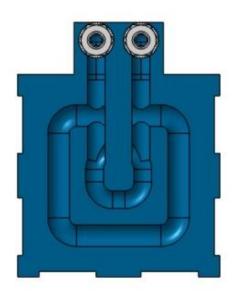


In a quarter: 10 crystals lost 40 in Total Minimum





# Thank you



- S. Ahmed
- L. Capozza
- A. Dbeyssi
- P. Grasemann
- J. Jorge Rico
- F. Maas
- J. Mateo Cardena
- E. J. O. Noll
- D. Rodríguez Piñeiro
- S. Wolff