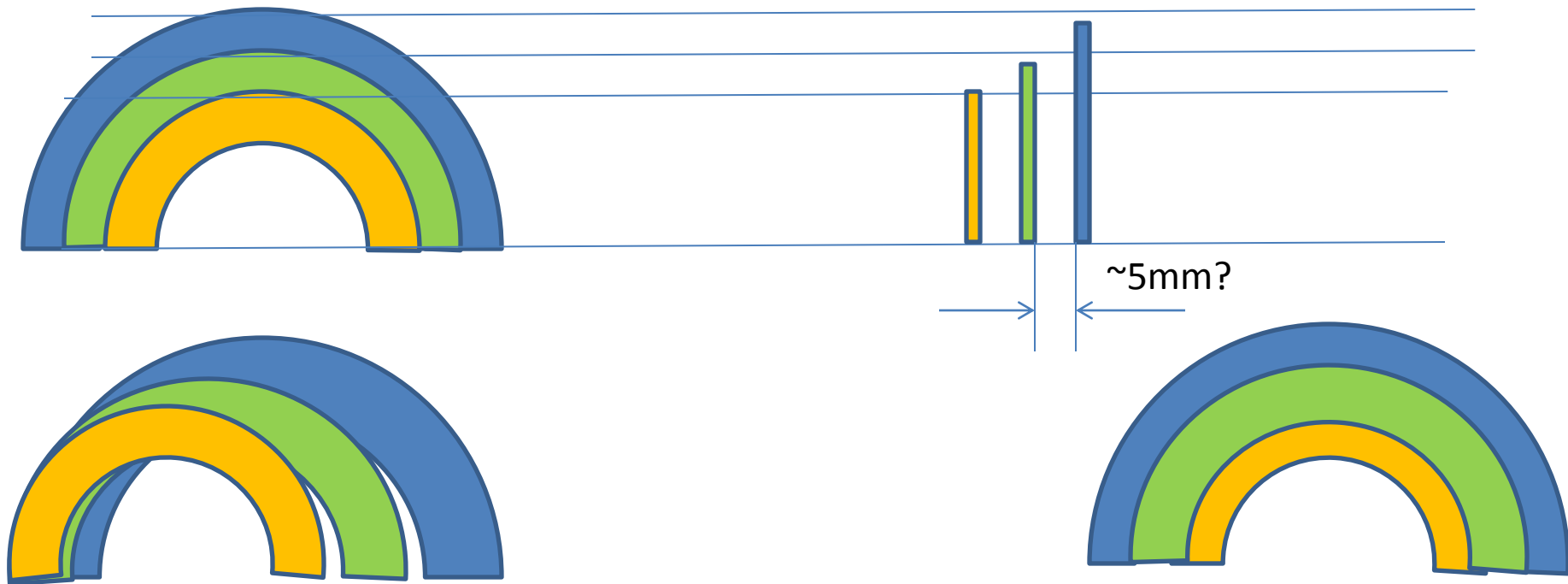


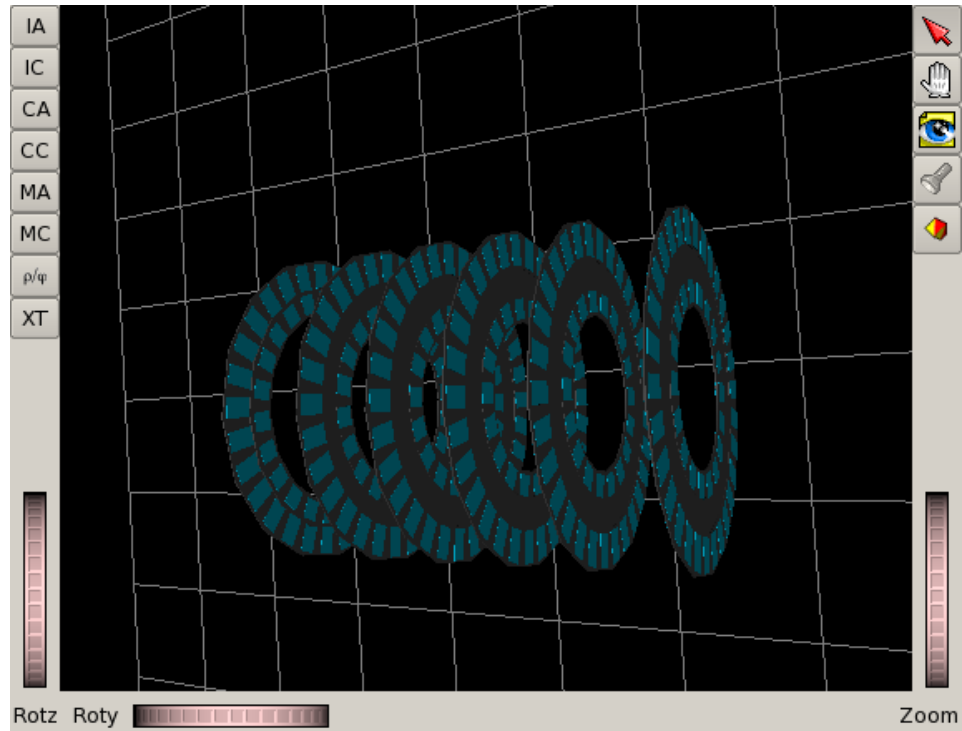
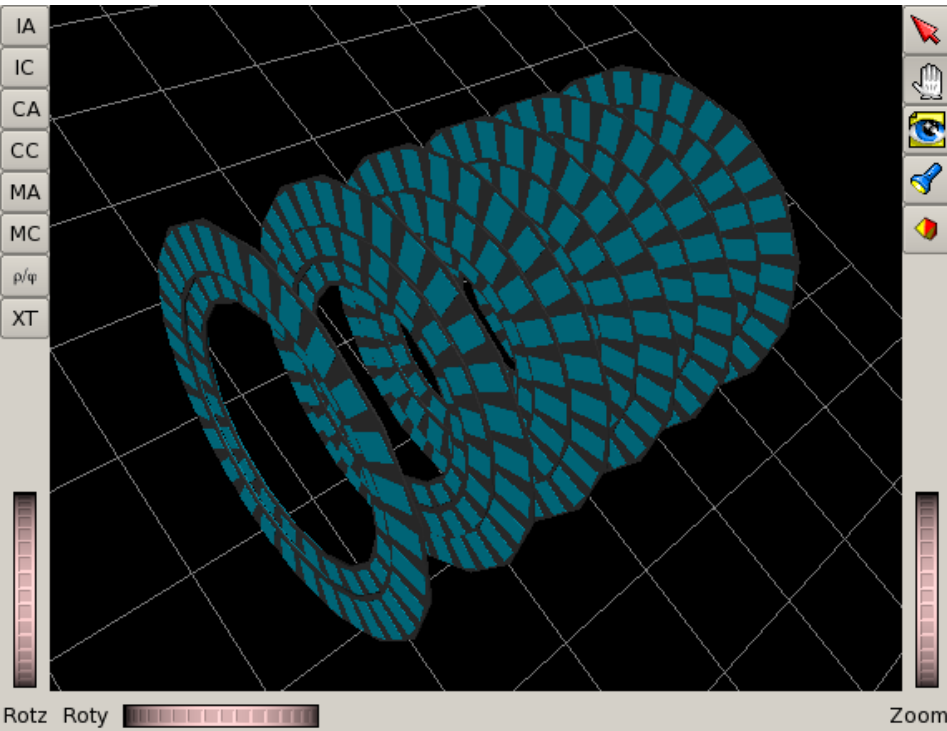
Ideas on Rings Structures

S.Burdin (Liverpool) @ WP2 meeting, 26/6/2013



- Reasons for the stepped geometry:
 - Overlap of middle and inner/outer rings
- The rings structures where rings are separated in space solve this problem
 - End-cap halves are built from half-rings

Rings in G4 simulation



Pros and Cons

- Pros:
 - The staves are much simpler
 - Similar to the barrel but bent?
 - Better cooling
 - Simpler module mounting
 - Simpler flex tapes
 - Flexibility for EOS positioning in radial extensions of the rings
 - Detachable inner rings?
 - Prototype is much more advanced and simpler
 - Producing and testing the half-rings from the same type modules could be easier than sectors
- Cons:
 - Integration of the rings into disks
 - More material?
 - It is difficult to bend the cooling pipe if the bending radius is large
 - Wiggled cooling pipes?

Questions

- Is there anything which makes this solution impossible?
- What studies shall we do to see if this solution is viable?