

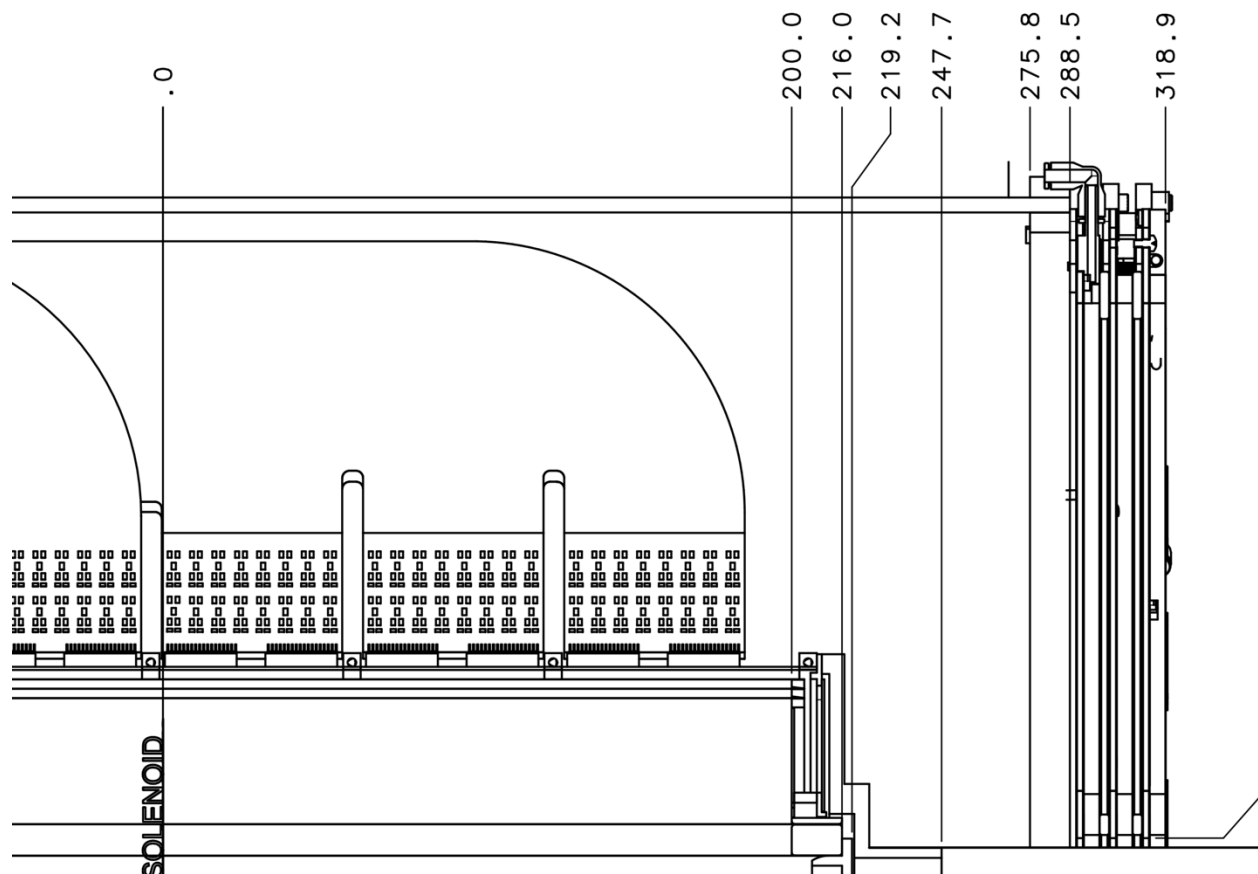
FMT Bonus Variation

Details the ongoing changes to gemc/detectors, added to clas12Tags 4.3.2.

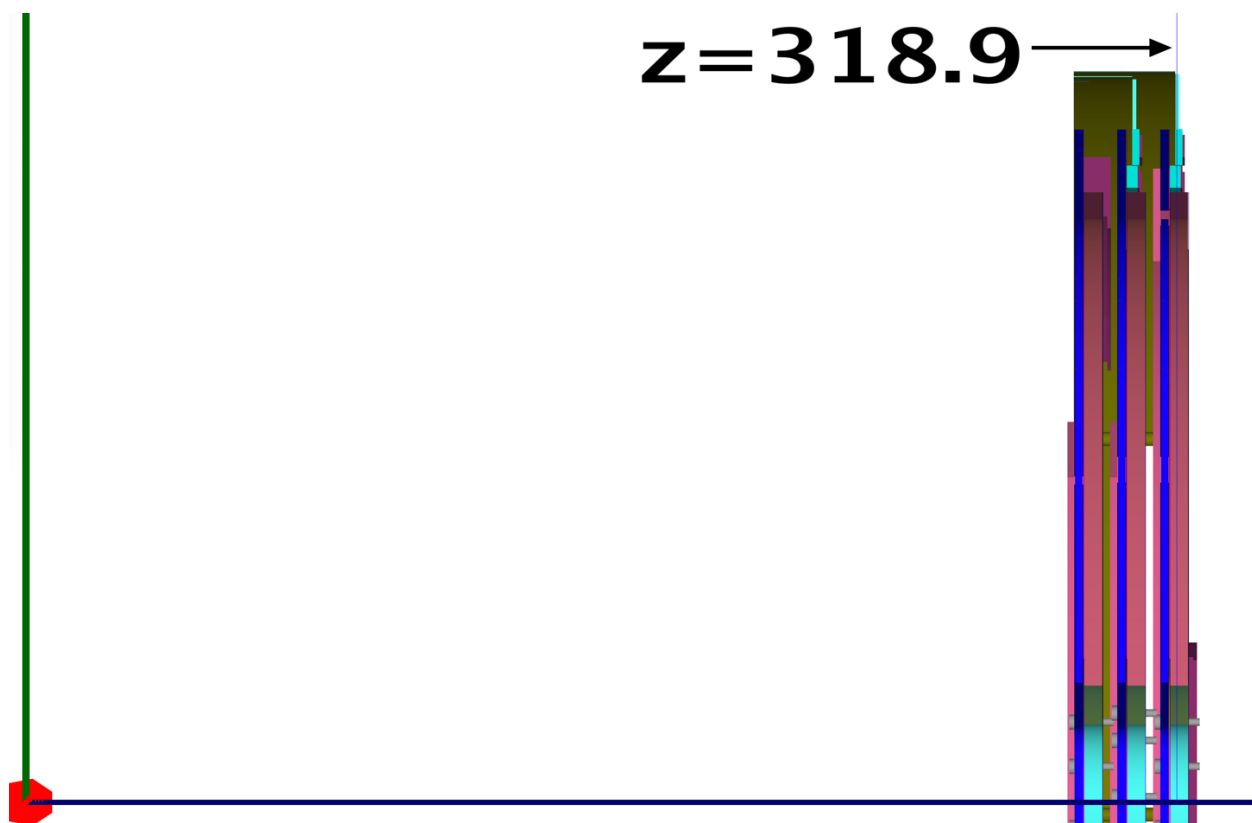
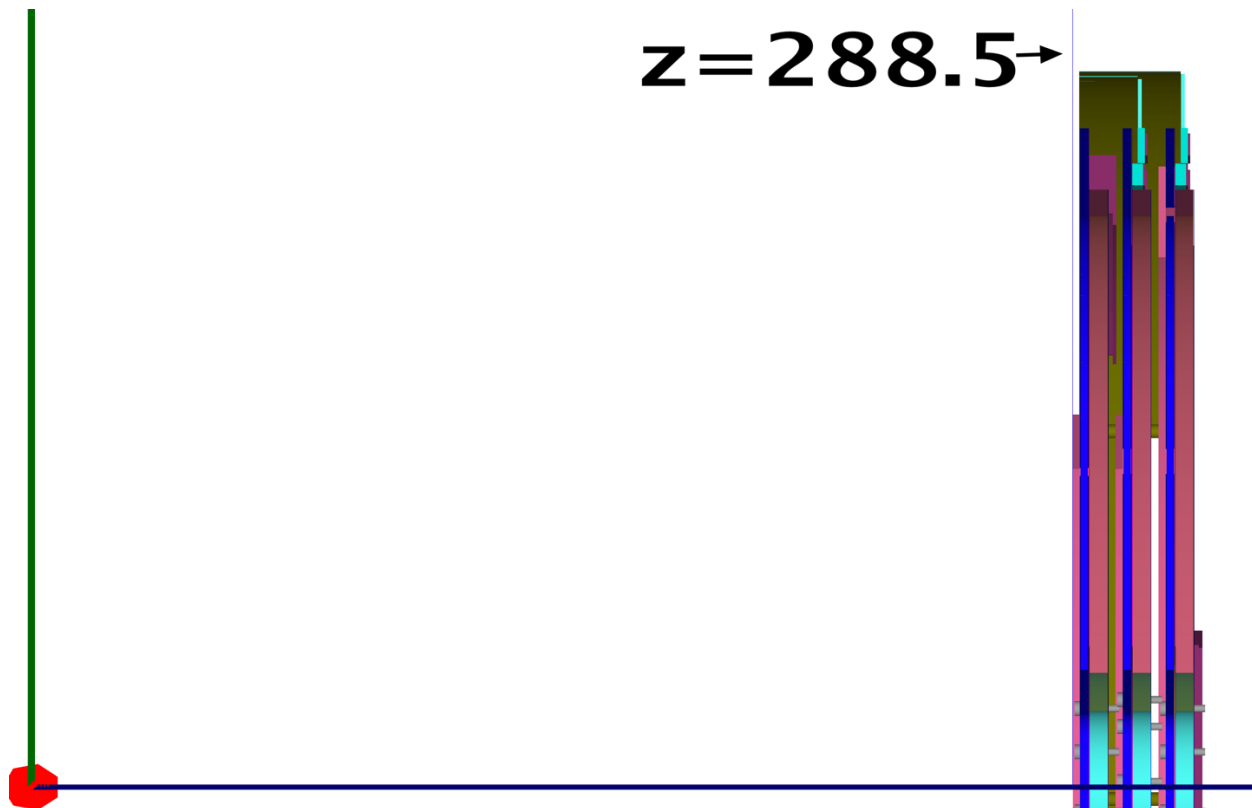
A new variation “**bonus**” is introduced. The changes below refer to this variation only, while the original “michel” variation remains untouched.

The changes are relative to the “michel” variation.

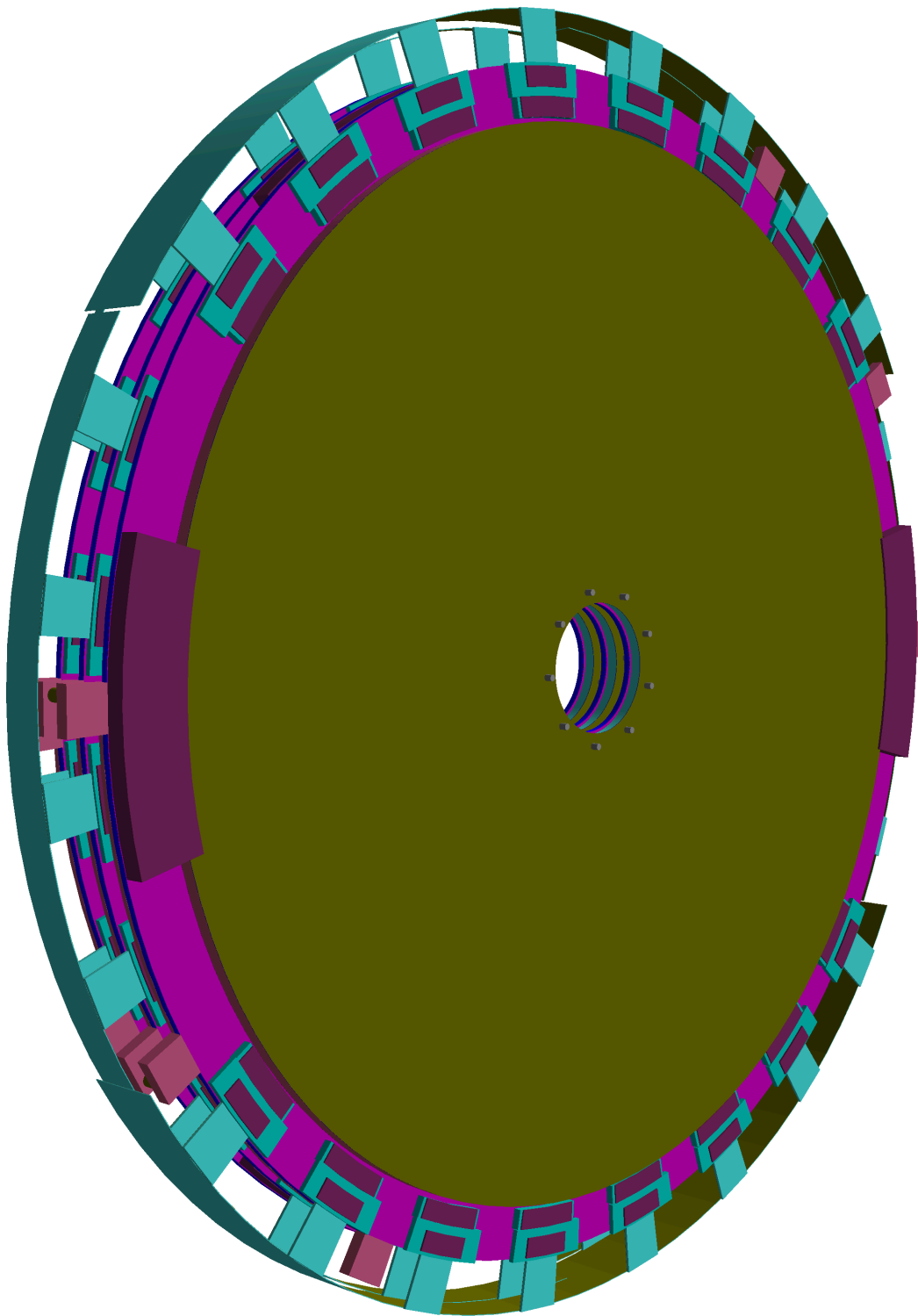
1. The BMT is removed.
2. FMT number of layers changed to 3 in parameter file.
3. Layer position shifted back by 1.8mm to match the drawings.
4. The geometry document and PDF of the setup is added to the geometry repository.



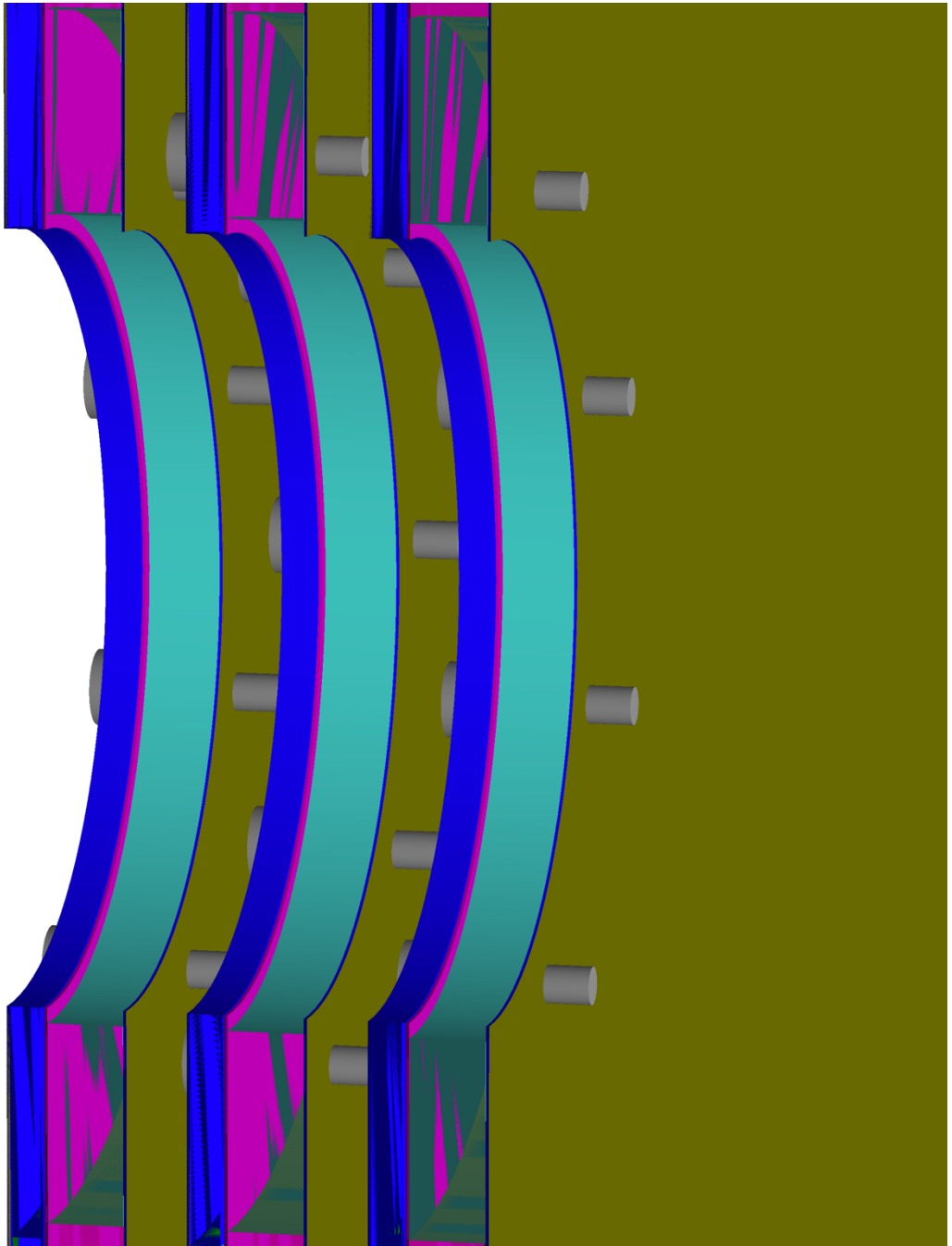
The drawing positions of layer 1 and layer 3 for the Bonus experiment. This is a zoomed-in particular of the setup pdf file added to the MM geometry repo. Notice: if I understand the line at 288.5, this is not the exact start of the active layer, but of the passive material, which is reflected in the GEMC implementation below.



Top: geantino at $z=288.5\text{mm}$, Bottom: at 318.9mm . The first one is the start of the passive material, the second one the position of layer 3 active module.



All 3 layers of the FMT, notice the mounting structure at 9am and 3pm



Details of the peek support (materials to be changed).

Open Questions:

1. Double check that the geometry document written by M. Garcon on November 16, 2016 matches the implementation
2. Need to check that the implementation matches the engineering model and reality.