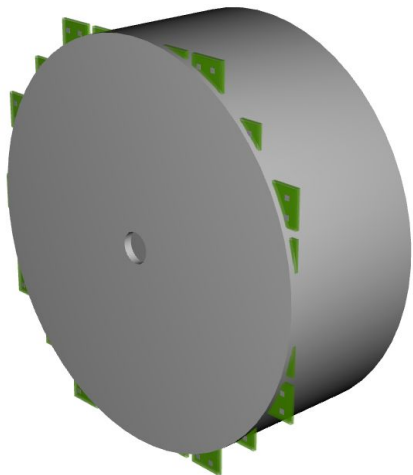
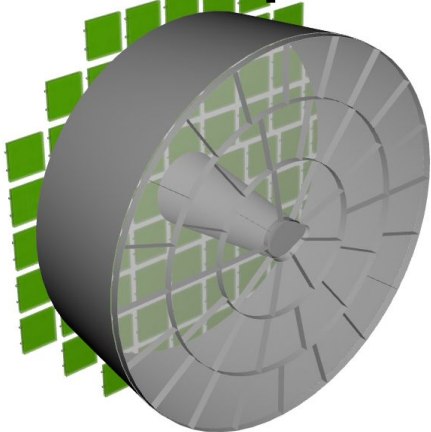


Update on pfRICH DD4HEP Implementation

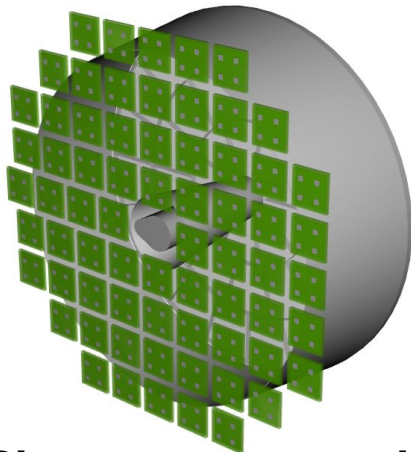
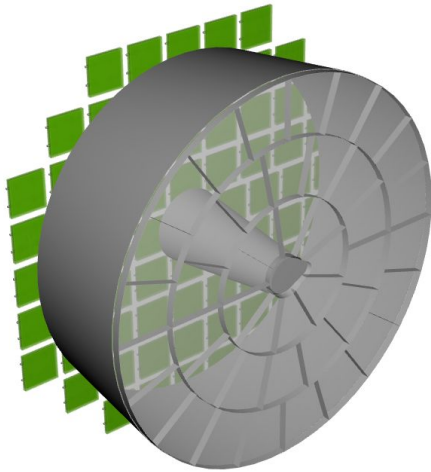


- Geometry implementation completed [Done]
- Issue created [Done]
- Pull request (will be created soon) [Done]
- Overlap issue for the detector resolved [Done]
 - Acrylic layer overlaps with outer mirror cone (resolved)
 - Acrylic layer overlaps with inner mirror cone (resolved)
 - Strange issue, 130 cm outer cylinder overlays with the outer layer of the PMTs? (resolved but double checking)
 - Cooling pipe and plate overlaps with HRPPD air volume (ignored for now)

```
<polycone
  name="world_solid"
  aunit="deg" startphi="0" deltaphi="360" lunit="mm" >
  <zplane rmin="50" rmax="650" z="-250"/>
  <zplane rmin="50" rmax="650" z="250"/>
</polycone>
```

**Imported from GDML file.
Alarming !!**

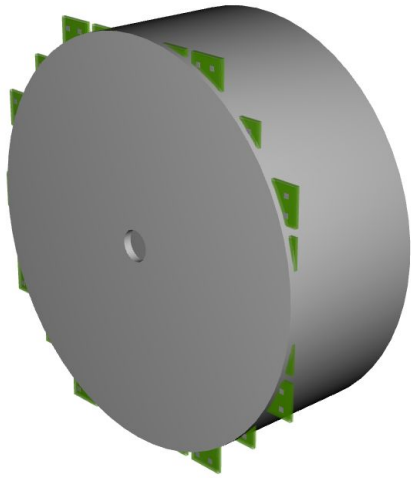
Next step on pfRICH DD4HEP Implementation



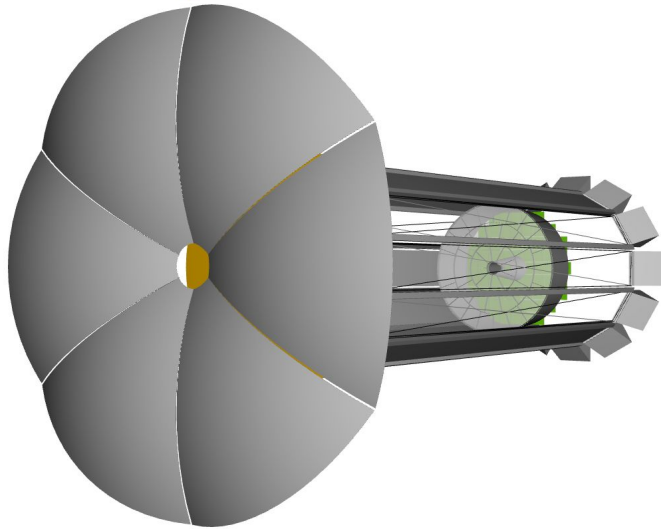
Pipes are removed

- Double check the dimensions [Done]
 - Move the dimension of world definition to the .cc file
 - Sanity check
- Overall overlap check [Done]
- Create Pull request [Done]
- Cleanup
- Request pull merge

```
billlee@lynx-22:~/ePIC_tutorial/epic/compact/pid$ gvim
dir.xml          pfrich.gdml
drich.xml        pfrich_gdml.xml_bad_mod
mrich.gdml       pfrich_gdml.xml
mrich_gdml.xml  pfrich_gdml.xml_Dec_01_bak
mrich.xml        pfrich_prototype_gdml.gdml
pdrich_import_test.gdml  pfrich_prototype_gdml.xml
pdrich_import_test_gdml.xml  pfrich.xml
```

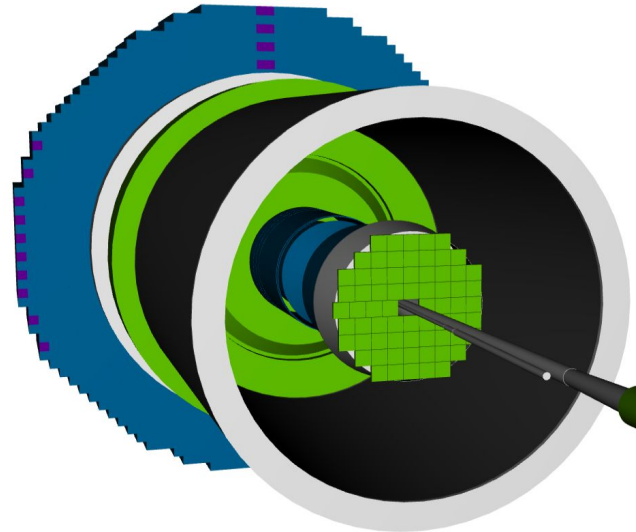


PMT gapping is wrong



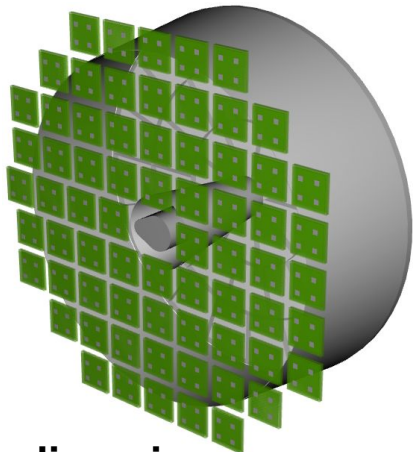
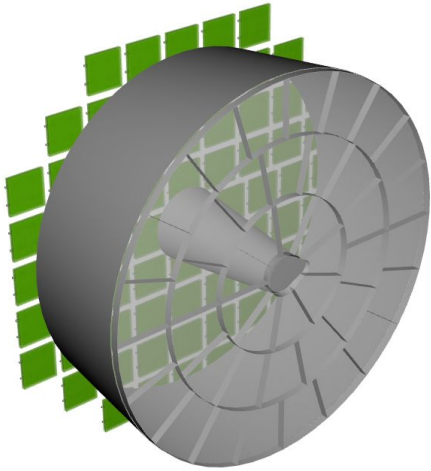
Overlap checks passed

- **Local and global**



Work after merging

- Coding clean up.
- Moving Parameters definition to xml file.
- Readout configuration implementation
- Simulation test.



Cooling pipes are removed