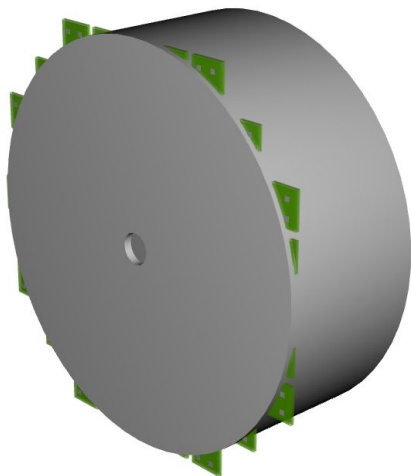
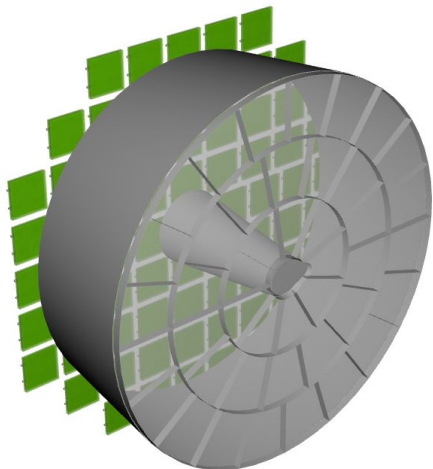
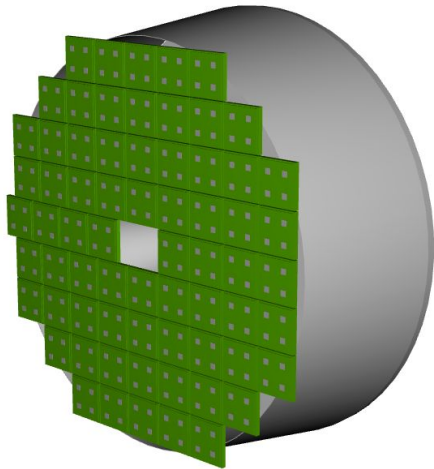
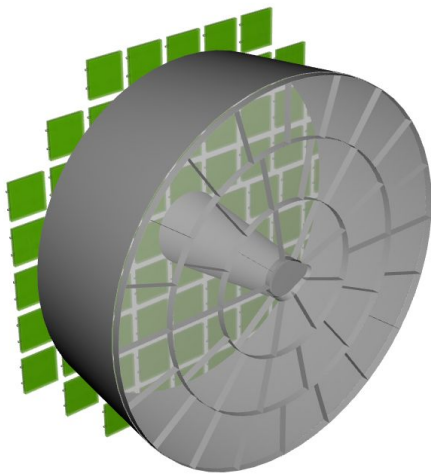


# Update on pfRICH DD4HEP Implementation



- 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)

# Next step on pfRICH DD4HEP Implementation

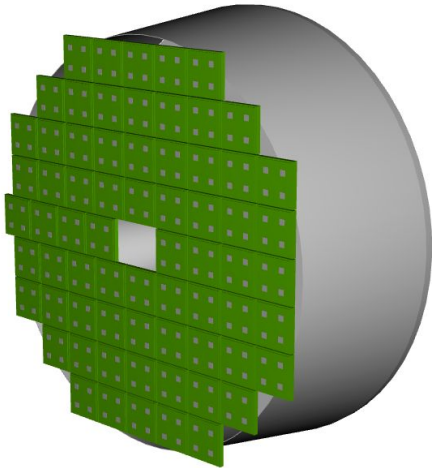
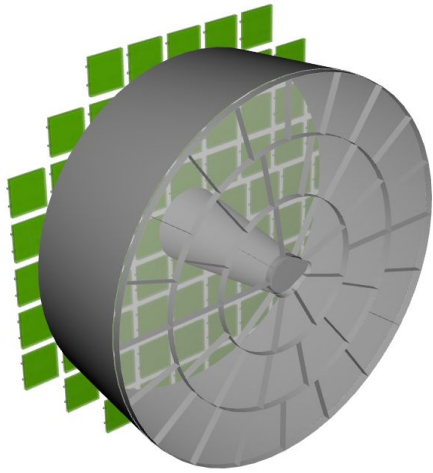


Pipes are removed

- 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 [Done]
- Request pull merge [Done]  
<https://github.com/eic/epic/pull/664>

```
billlee@lynx-22:~/ePIC_tutorial/epic/compact/pid$ gvim
dirch.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
```

# Work after merging



Cooling pipes are removed

- Coding clean up.
- Moving Parameters definition to xml file.
- Readout configuration implementation
- Consistent variable between the standalone code and DD4HEP implementation
  - i.e., `double _MIRROR_REFLECTIVITY_ = 0.90` , is not recommended by SWG
  - Cap variables are reserved for global variables
  - **Do we change the standard alone code variables?**
  - **Variable must be consistent between two sets of codes at this stage**

# Overlap checks passed

- Local and global

