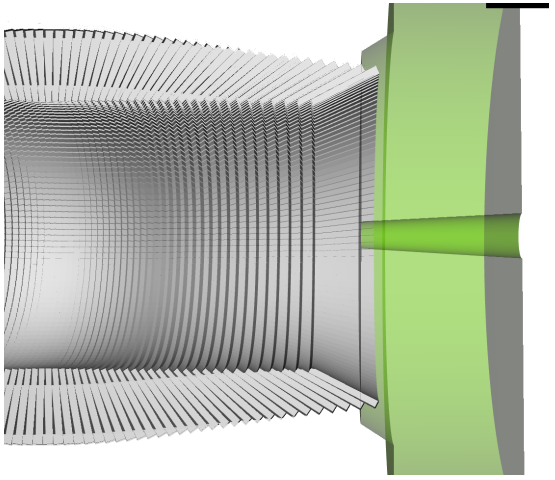
Announcements

- Mattermost Channel: https://eic.cloud.mattermost.com/main/channels/drich
- Documentation: https://github.com/c-dilks/drich-dev
  - Help Wanted: Fun4all *full* simulation (*cf.* standalone Fun4all)
- Short term tasks:
  - Be consistent with detector menagerie (see next slide)
  - GDML export
  - Check and try to improve the optics
  - Fix sensor materials – Help Wanted
  - Revive IRT implementation (will take some patience) → “baseline algorithm”

dRICH Radii != menagerie

screenshot from Wouter:



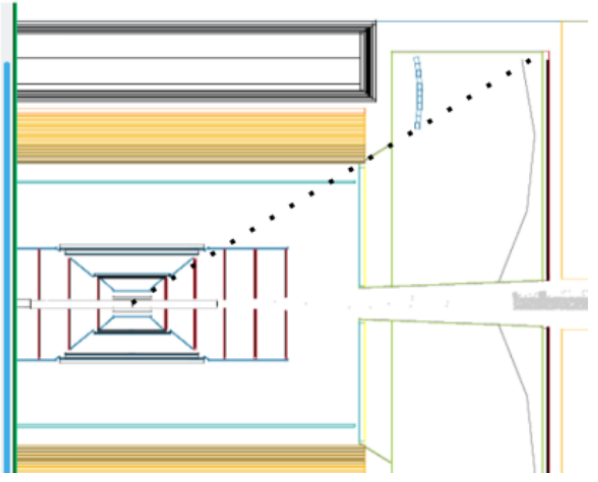
from Menagerie:

Sub-Component	WBS	Length (cm)	Inner Radius (cm)	Outer Radius (cm)
	6.10.04	100	10	
Detector Section		*80*	*10*	*195*
Aerogel Section		*20*	*10*	*110*

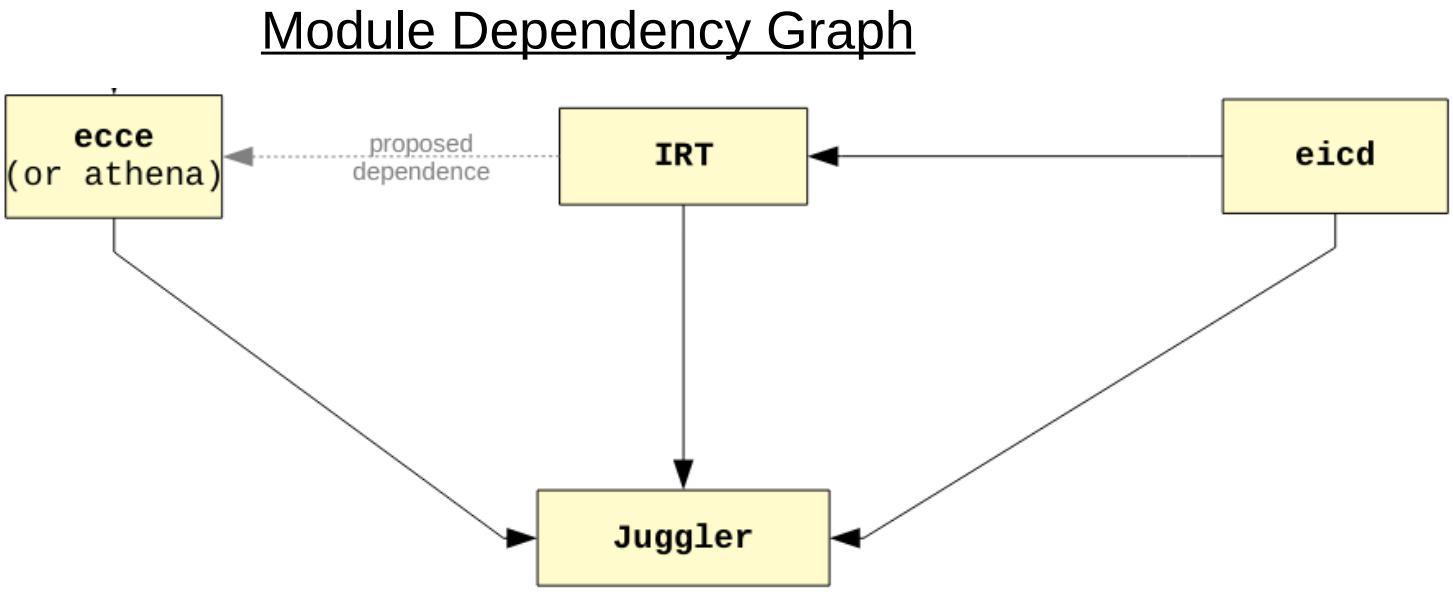
current radii:

```
DRICH_rmax0 = 115.714  // @ snout frontplane
DRICH_rmax1 = 128.571  // @ snout backplane
DRICH_rmax2 = 180.000  // tank (cylinder) radius

DRICH_rmin0 = 7.837   // bore radius at frontplane
DRICH_rmin1 = 13.628  // bore radius at backplane
```



IRT Integration



Alternative to proposed IRT → ecce dependence:

- Use Juggler Geometry Service
- Cons:
  - Access to boolean solids needs improvement
  - Creates a *second* place to maintain the geometry
- In practice, it was much easier to keep IRT geometry code *within* the detector geometry code

Long Term

- Reach out to survey respondents to those who expressed interest in working
- Help wanted:
  - Dual Mirror Tuning
  - Sensor Placement: sphere not ideal?
  - Pattern Recognition / Reconstruction
  - Benchmarks
    - After IRT → automate performance plot production