

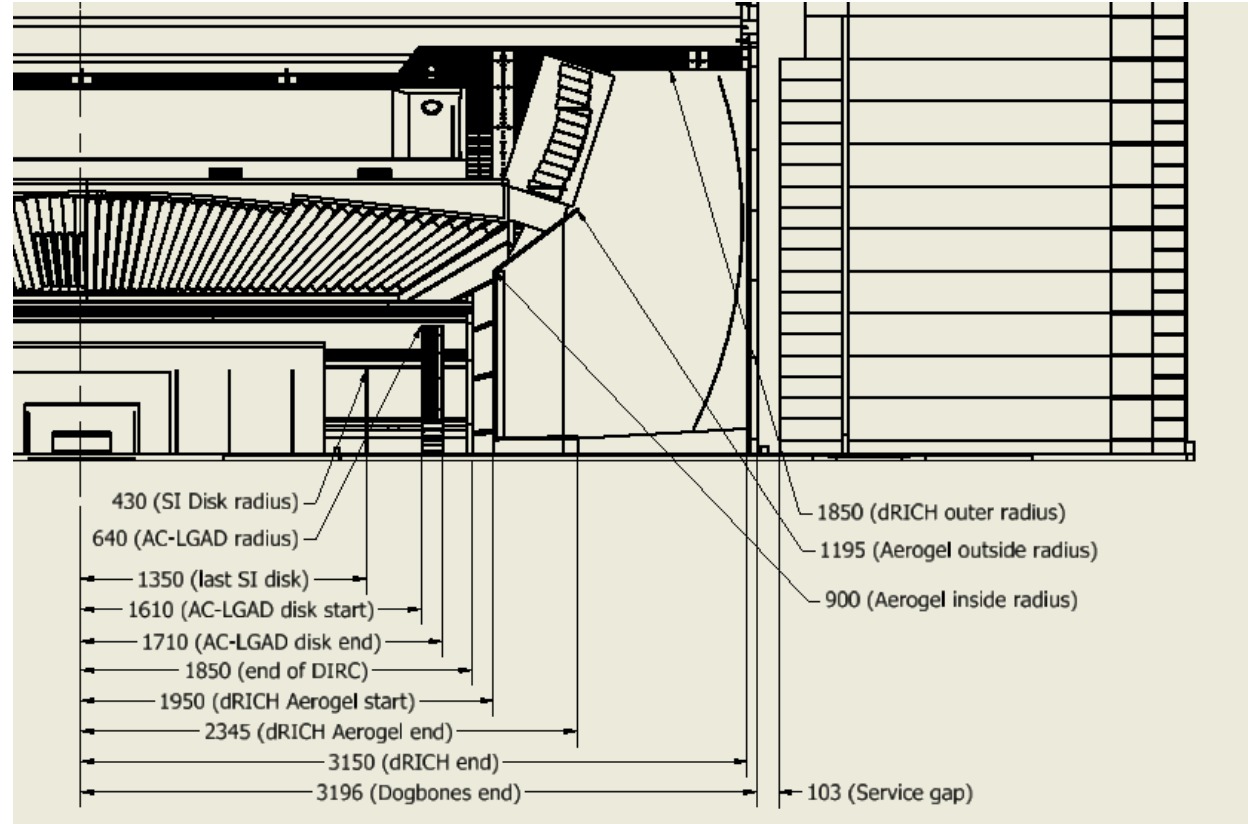
dRICH Envelope Updates

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dRICH Meeting
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GD/I Geometry Update

- Snout Length
 - $z_{min} = 195$
 - $z_{max} = 234.5$
 - increased from 215
 - snout length will be ~2x longer!
- Snout Radius
 - 90 at z_{min}
 - 119.5 at z_{max}
- Consideration for sensor extrusions?

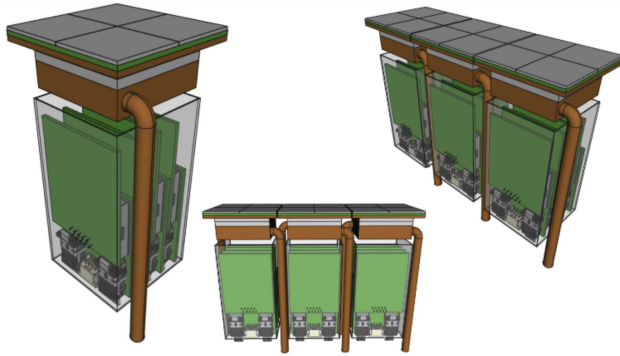


Sensor Placement

Figure from Marco Contalbrigo

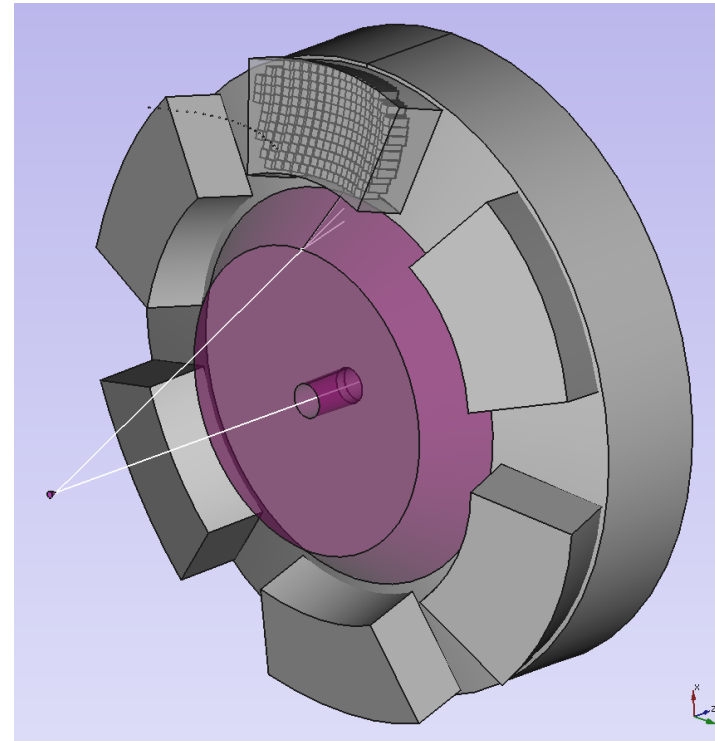
- 20 cm behind the sensors

Readout modular unit and services



- Sensors housed in “extruded boxes”
- Keep the mirror at large radius, allowing for longer gas-path length at high η

Global layout and tolerances



Reconstruction Status

- **Still debugging EICrecon IRT usage...**

- Fixed several small bugs, but still:
 - θ is off by $\sim 20\text{mrad}$
 - NPE (not rejected by IRT) is too low, *especially* at low p
- Does track projector fail to correct for magnetic field?
 - Reconstructed track point momenta are all the *same*, but in reality the direction changes along the trajectory
 - Difference between true and reconstructed tracks is higher when:
 - Near back of vessel
 - Momentum is small
 - Observed differences consistent with $\sim 20\text{ mrad}$ offset in reconstructed θ
 - Testing PID with true tracks and things look a bit better

- **Noise injection**

- **Track reflections**