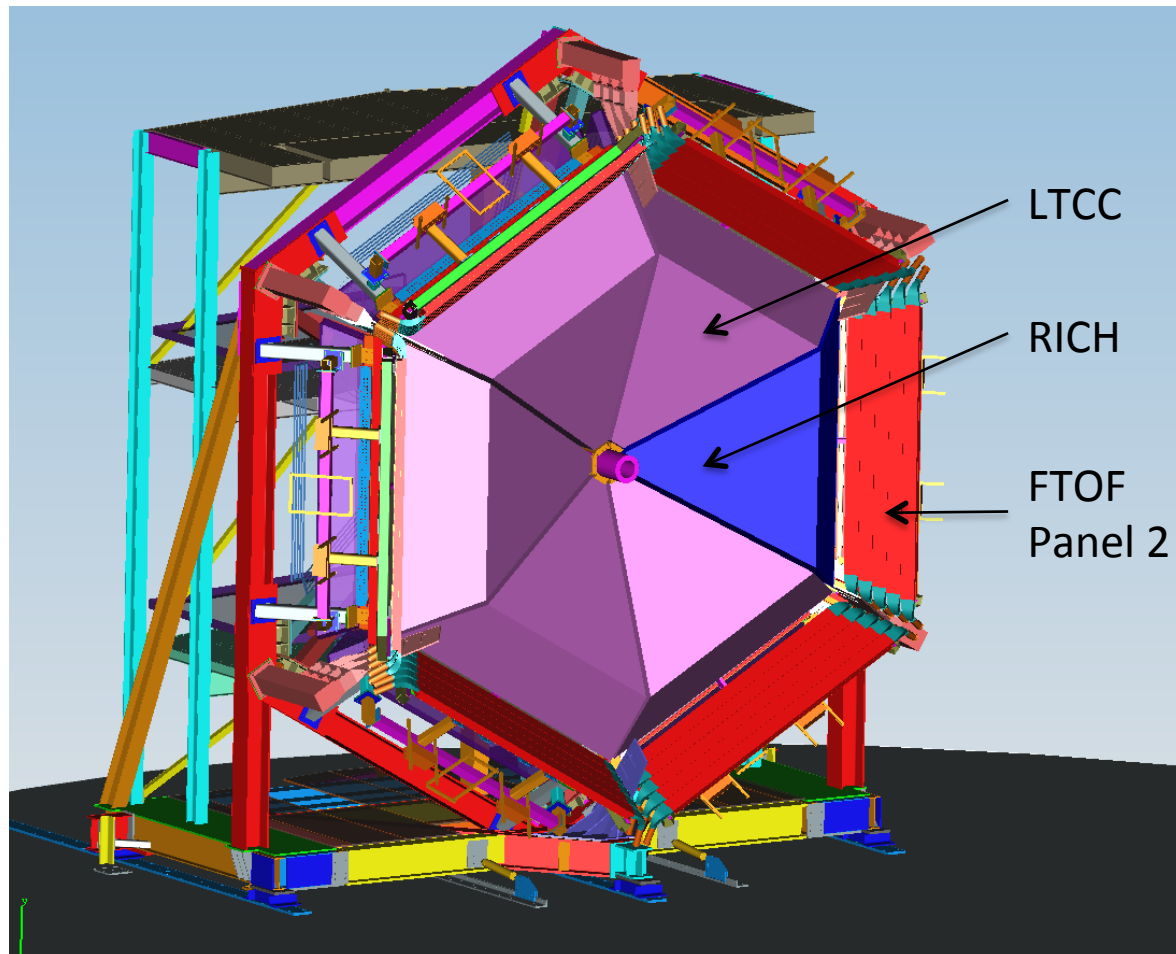


# RICH Detector in CLAS12

Joe Guerra - Hall B Designer - June 26, 2013

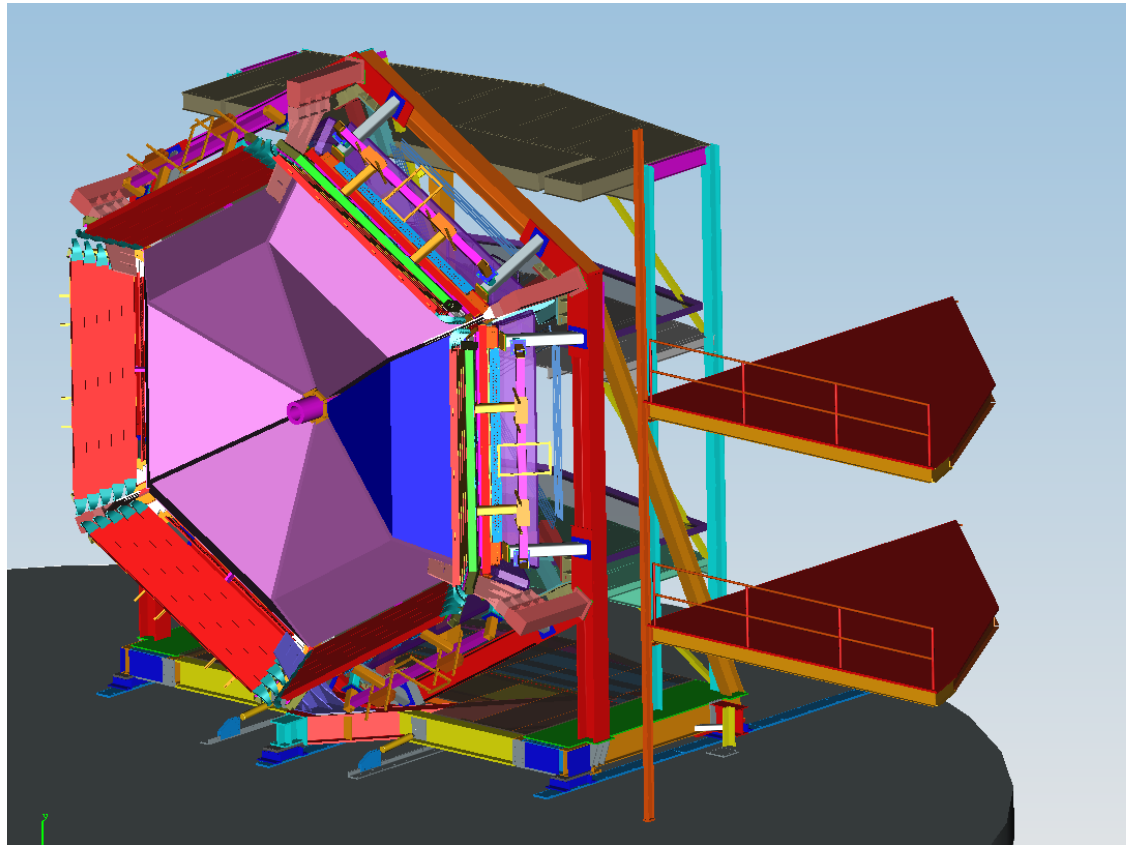


# RICH S4 MOUNTED TO FORWARD CARRIAGE



# CABLE ROUTING AND RACK LOCATION

- Cables must be routed between the FTOF panel 2 at the LTCC mount area
- Electronics locations will be evaluated based on the RICH requirements



# Installation Tooling



Crane

Installation  
Tool

Counterweight



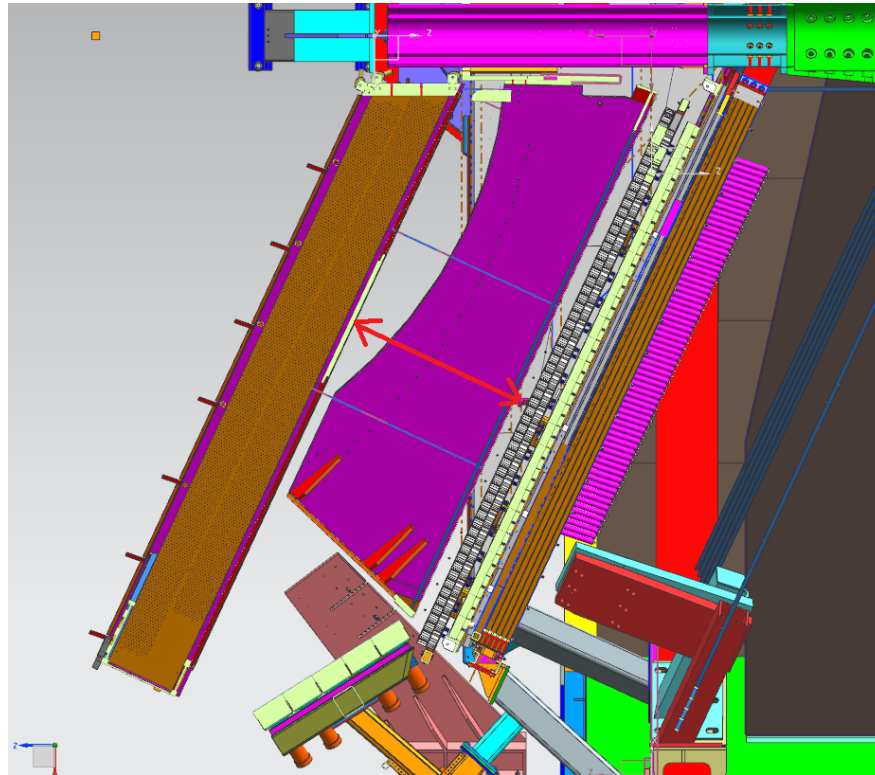
# Detector Removal

The LTCC or RICH detectors can be removed using the following steps:

1. Move Forward Carriage to its maintenance position
2. Disconnect cables and gas lines from the detector
3. Lift installation tooling with the crane and attach it to the detector
4. Disconnect mounts and remove the detector
5. Approximately 5 days are required to remove and reinstall a detector

# Space Available for RICH Detector

- The RICH detector must fit into the envelope of the CLAS12 LTCC to provide clearance to the surrounding detectors. (49.042" [1245.66] )



# Space Available for RICH Detector (Cont.)

- The weight of the RICH is limited to 3300 lbs.
- The mounts to the Forward Carriage must also match the LTCC mounts
- New installation tooling brackets are required. These brackets attach the RICH detector to the installation tooling. The brackets will be designed to keep the installation tooling axis at the center of gravity of the RICH.