Welcome Engineering Meeting

Jim Stewart Nov 8 2015

Meeting goals

- Prepare for the cryostat production readiness review in December
 - Step through all the cryostat detector interfaces.
 - Document defined interfaces
 - List any urgent unresolved items and make a plan for addressing them.
- Select a preferred cathode material
- Progress the installation plan to understand better the need for a top cap and/or TCO
- Insure the engineering team present understands and can use the integration tools and document management system.

Summary of the Status Presentations

- The talks are available on the INDICO site
 - https://indico.cern.ch/event/459004/other-view?view=standard

General Observations

- CPA
 - Dimensions of the inserts in the CPA outer frame should be investigated. Understanding how long the stainless steel sleeves need to be an why would be good.
 - Material selection will be a topic for Tuesday
- Field Cage
 - Need to understand material options for profiles.
 - Thermal expansion/Contraction of mounts to the CPA need studies.
 - Need for cross bracing will be evaluated when a prototype exists.

General Observations

- APA
 - Can one have constrained connections to the field cage to insure 90 degree?
- Ground Plane
 - Ground plane must extend beyond the edge of the field cage at the ends. The extension probably need mechanically supported from the end wall field cage. This needs designed taking into account of the HV feedthru.

Document/Model management

- We had a lengthy discussion on the needs for integration and document management.
- Present integration process
 - Diamanto maintains the cryostat model
 - Rahul integrates detector components together and sends
 Diamanto the stp file
 - Diamanto integrates the detector into the cryostat and publishes the model
- A proposal/suggestion for improvements needs developed
 - Russ, Jack, Rahul, Jeff, Dimitar will work on this
- A common origin should be defined