DSG-ECAL Controls Meeting

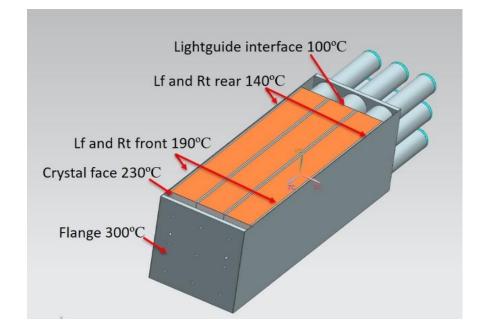
Date: March 20, 2023 Time: 10:00 – 11:00

<u>Attendees</u>: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Donald Jones, Tyler Lemon, Marc McMullen, and Albert Shahinyan

1. <u>Heater controls test update</u>

Marc McMullen

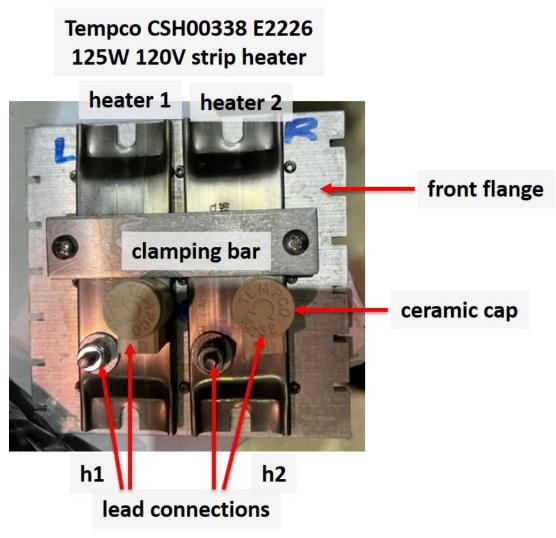
- 1. Presented update on testing of a new cartridge heater design
 - Developed a 4" x 4" x 0.5" aluminum block fitted with two Maxgee 24-V, 70-W heaters
- 2. Installed the heater block and RTDs for monitoring the temperature of the block, the front flange, and all previous locations from earlier tests
 - Reached the target temperature on the front flange of 220°C



2. Six supermodule test stand

Hall A/DSG

1. Hall A has started fitting each front flange of the supermodules with two Tempco 125-W strip heaters



- DSG will control with Omega high temperature PT100 RTDs and Lowell RPC-20-CD relay modules
- 2. Hall A is determining the best heater (cartridge or strip) for the boundary aluminum bars
- 3. DSG will modify the cRIO controls
 - The six supermodules will be divided into two groups of three supermodules each, and each supermodule flange temperature will be monitored individually
 - Omega high temperature PT-100s will be used to read the temperature
- 4. Hall A will continue to monitor the array of thermocouples using the Raspberry Pi