

## DSG-Hall A ECAL Weekly Meeting

**Date: February 15, 2024**

**Time: 09:30 – 10:30**

*Attendees: Jimmy Caylor, Donald Jones, Mark Jones, Simona Malice, Marc McMullen, Albert Shahinya, and Bogdan Wojtsekhowski,*

### **1. DSG – ECAL controls development**

1. PR427288 (Crystal and lightguide temperature monitoring cRIO modules) was submitted and has project and organization approval
  - CPO approval is pending budgeting
2. Marc will order a fourth Omega process controller to monitor the cooling volume (lightguide to PMT interface area)

### **2. Six-supermodule test stand**

1. Marc installed the cRIO and expansion chassis in the counting house and Hall
  - The software will run on the cRIO in the counting house
  - Control signal connections will be networked between the cRIO and expansion chassis over the Hall A network
  - The new setup will reduce the effect of radiation damage on the system by moving the controls software out of the radiation area
2. Verified network connection by reading back a thermocouple channel connected to the expansion chassis, using a LabVIEW program running on the cRIO in the counting house
3. Next week, the controls software will be moved to a new project using the new cRIO and expansion chassis

### **3. Full system installation update**

1. Tooling is ready to install nine PMTs on the full ECAL detector stack
2. Mu-metal material to make shielding for the PMTs is expected next week
3. Jimmy is working on HV control and PMT cooling
  - New Raspberry Pis will be used to control the LeCroy HV power supplies
4. Simona will verify the PMT-to-lightguide assembly procedure by testing for pulser signals and cosmics during G-nrp in April
5. Don is looking into how the cooling system affects the temperatures of the PMT-to-lightguide interface