## Hall A – CLEO Magnet

Aaron Brown, Brian Eng, Marc McMullen

- Completed NX12 design for mapping sensor enclosure base
  - ✶ Modified design so assembly hardware not needed
- Continued work on the enclosure cover
- Removed display power saving functionality (prior, button press was needed to turn on display backlight) so now display is always on; several days of runtime possible
- First print of enclosure failed, probably due to contaminants in resin
  - ✶ Possibly may improve printability by separating base into two components and making areas where internal supports are needed more accessible by removing side walls

Hall A – ECAL

Marc McMullen

- Received twelve prototype heaters from Custom Heaters and Research
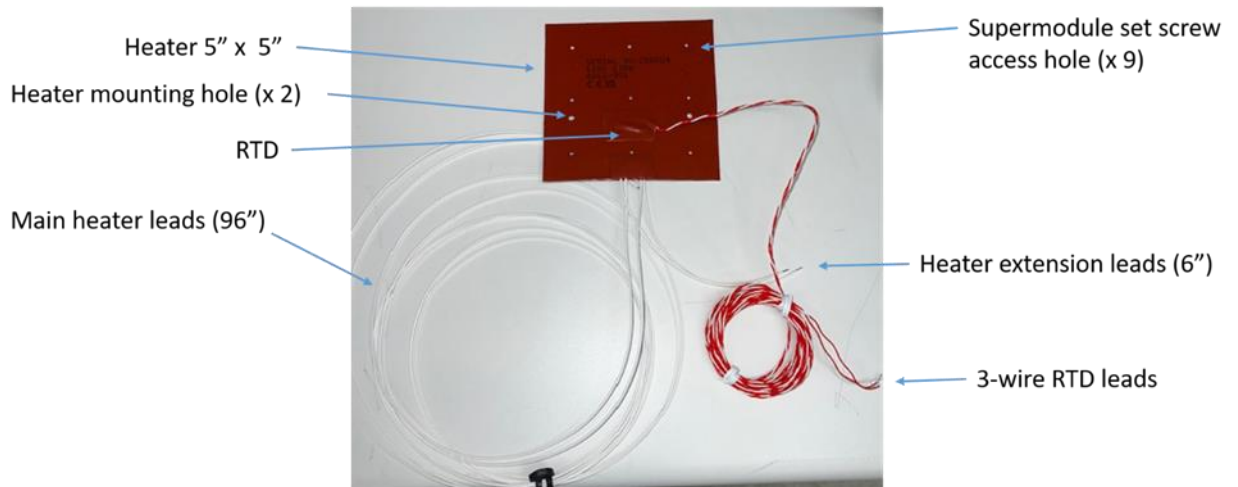
ECAL supermodule heater prototype

Hall A – Møller

Brian Eng

- Submitted PR for PT100 sensors with Kapton housing and leads for evaluation as potential temperature sensor
- Met with Siemens distributor team leader to discuss possible options for a Siemens PLC setup
  - ✶ Will provide different quotes—one based on current Allen-Bradley and several with full signal list with different module capabilities (basic, standard, and high feature)

Hall A – SoLID

Mary Ann Antonioli, Pablo Campero, Mindy Leffel

- SoLID turret rework
  - ✶ Cut all wires, removed heat shrink, cleaned flange contacts, stripped and tinned wires, curved wire ends to prep for soldering to flange contacts, and soldered flanges A, B, and C
- Completed pinout for voltage cable between voltage tap connectors and resistor box

Hall C – NPS

Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Brian Eng, Tyler Lemon,
Marc McMullen

- Revised detector frame Phoebus screens, reducing number of sensors from 20 to eight; revised manual with new pictures
- Added eight cables to the humidity sensor power distribution box to connect the sensors' positive and negative signals to the Keysight terminal block

NPS eight-channel humidity sensor power distribution box

- Created application and IOC based on example templates
  - ✶ Errors when trying to call VLD initialization functions
- Reworked Python scripts used to generate three histogram plots based on Ansys simulation data
  - ✶ Each script generates a text file with individual counts for each histogram bin and the total number of counts across all bins
- Redid temperature profile plot of single peripheral crystal based on Ansys simulation to include four regions instead of three
  - ✶ region 1: carbon fiber dividers
  - ✶ region 2: copper cooling shell
  - ✶ region 3: overlapping copper cooling shell and mu-metal
  - ✶ region 4: mu-metal

Temperature Profile for a Single Peripheral Crystal
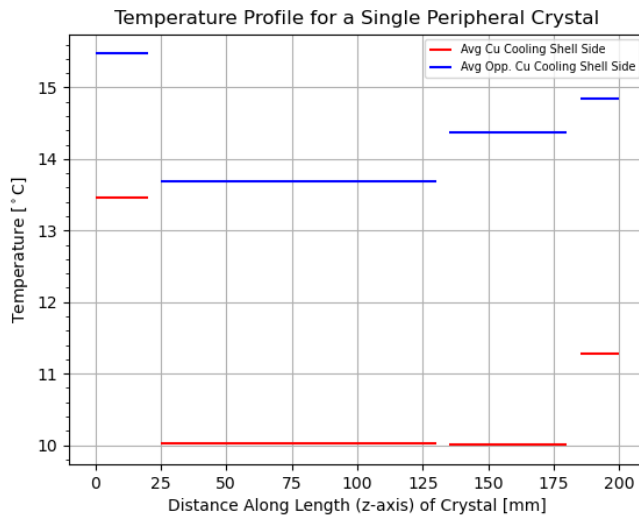
- Debugging error on Ansys Fluent
  - ✴ Program closes by itself while trying to open project
  - ✴ Verified that mesh is correct
  - ✴ Error message is not specific
- Tested 10/17 control and monitoring screens; documented problems in a spreadsheet

Hall D – JEF
Mindy Leffel
- Wrapped seven crystals

EIC - DIRC
Tyler Lemon, Marc McMullen, Peter Bonneau
- Met with DIRC group and EHS to discuss work modes for the laser lab; safety documentation will be updated with procedure changes
  - ✴ Automated data-taking
  - ✴ Manual data-taking (expert mode)
  - ✴ Laser alignment
- Received comments from EHS on the draft Laser Task Hazard Analysis and specific lesson plan