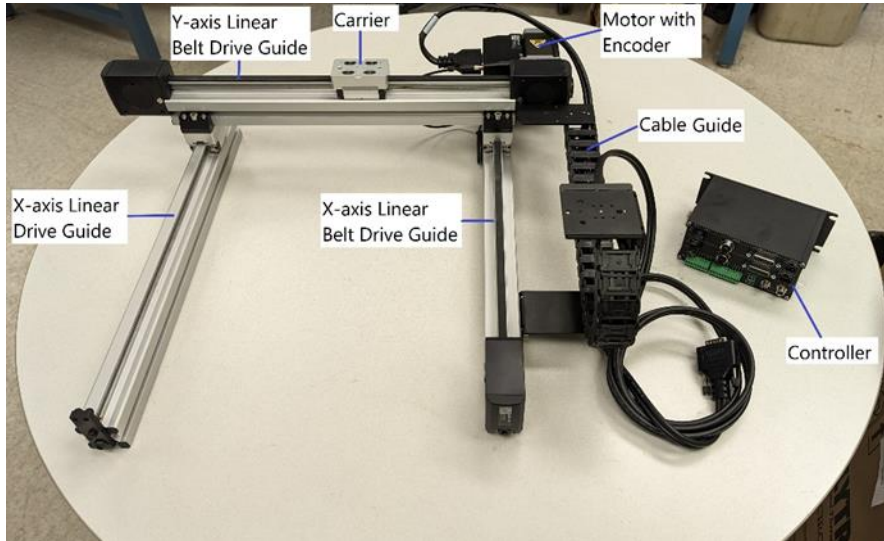


Hall A – LAPPD

Pablo Campero and Marc McMullen

- Assembled the Zaber-LC40B Gantry motorized system



Assembled LC40B gantry motorized system. For final setup, gantry will be placed on a structure in an inverted position, with the carrier facing the LAPPD window located underneath

- Installed Zaber Launcher Setup version 1.9.0 to connect with the motor controller

Hall B – Solenoid

Tyler Lemon

- Provided software and monitoring support for positive-to-negative polarity change of solenoid power supply to ensure power supply is operational after change and during ramp
 - ★ After previous failure of power supply's remote polarity switch, a bus was installed inside the power supply whose configuration must be manually changed to swap magnet polarity
 - ★ Configuration change on December 18, 2023 was first time procedure was performed
- Investigated controlled ramp down that happened after ramping to full field with negative polarity
 - ★ Archived FastDAQ data showed that voltage taps VT15 through VT19 were reading higher than before polarity change; the software quench detection for those channels caused the controlled ramp down
 - VT15 through VT19 are used in software quench detection logic on the PLC
 - Increased software quench detection limits
 - ★ Any changes to allow running solenoid in reverse polarity will be reverted when MPS is restored to its normal polarity settings



Detector Support Group

We choose to do these things "not because they are easy, but because they are hard".

Weekly Report, 2023-12-20

Hall C – NPS

Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, and Tyler Lemon

- Debugging control and monitoring LabVIEW program, vers. 2.
 - ★ Buffer arrays and latch status arrays were not initializing properly
 - Arrays were initialized using local variables, but network variables are used later in the code
 - Changed initialization local variables to network variables; resolved
 - ★ Number of elements for the front and back crystal temperature arrays was changed to 56 elements in each array, instead of two 28-element arrays for the front and two-28 element arrays for the back, but second arrays for each were not removed from front panel
 - Removed all unnecessary second front and back arrays (temperature, interlock, averaging, trip delay, and trip delay value arrays)
 - ★ Replaced local variables in the *configuration file utility* subVI with network variables
- Meshing Ansys Fluent Thermal Analysis model
 - ★ Imported model from SpaceClaim
 - ★ Added local mesh cell size features for the dividers and crystal slices (volume where the internal heat generation will be applied)

Hall D – FCAL2

Mindy Leffel

- Populated 80 PMT bases; 1110/1750 completed
- Stripped 200 wires

DSG

Mary Ann Antonioli and Peter Bonneau

- Investigated using Raspberry Pi for Phoebus alarm system tests
- Added presentations to spreadsheet to be used for a future website revision