

DSG Engineering Meeting Minutes

Date: February 20, 2024

Time: 2:00 PM – 3:00 PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Pablo Campero, Brian Eng, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. Hall A SoLID LAPPD

Pablo Campero and Marc McMullen

1. Gantry support design
 - Completed 3D model for the gantry support
 - Reviewed gantry support model to ensure that the dimensions of the T-profiles are correct and there will be no interference when the gantry is moving
 - Discussed leveling requirements for the structure to ensure perpendicularity between the end of the optical fiber end and the LAPPD window
 - Parts will be ordered this week
2. LED box design
 - No need for battery power supply to be placed inside the LED box; removed battery from model
 - LED power will be supplied by pulse signal generator
 - Added hole in the center of the box base for wiring of LED power connection
 - Reduced height of box from 73 mm to 57 mm
 - Modeling inner support for LED head placement
 - Discussed methods to attach optical fiber to LED
3. Reviewed LAPPD pixel readout board dimensions

2. Hall A Moller

Mary Ann Antonioli and Brian Eng

1. Drawings for the power distribution to the instrumentation rack will start this week

3. Hall C NPS

Aaron Brown

1. Debugged temperature sensors located at the front side of the crystals
 - After testing power distribution units for the NPS cRIO, 40 temperature sensor readouts were lost
 - Recovered readout channels after swapping spare cable #3 for cable #9
 - Suggested fabrication of additional spare cables
 - Further investigation needed to find out the cause of the cable problems

4. Hall D FCAL2

Mindy Leffel and George Jacobs

1. Populated 65 PMT bases; 1505 of 1650 are completed
2. PMT base testing will be redone after removing the regulator since it cannot handle radiation exposure

5. EIC DIRC

Tyler Lemon

1. Discussed options for remote pressure monitoring by chase car of shipping crates' air suspension system
 - Option 1: Bluetooth, wireless pressure transducer
 - Option 2: Pressure-actuated switch to turn on a light visible by chase car
 - Option 3: Router-based setup with controller reading pressure transducer data