

DSG-EIC DIRC Meeting

Date: March 6, 2023

Time: 11:00 PM – 12:00 PM

Attendees: Peter Bonneau, Aaron Brown, Imani Burton, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, Marc McMullen, and Jennifer Williams

1. Update on EEL 108 sub-room for laser controlled area

1. Fire sprinklers and a fire extinguisher installed
2. HVAC procured, delivery is pending

2. Marc McMullen is writing safety documentation on bar disassembly and cleaning process

1. Detector components that will be disassembled to retrieve bars expected in late May 2023

3. Optical table side walls and position sensors

Tyler Lemon

1. Vendor OSH Cut will cut aluminum panels to size, drill necessary mounting holes, and apply a matte, black powder coating to panels
 - Six panels are needed
 - Dimensions of final panel will be 60" long by 18" wide by 0.063" thick
2. Found three candidates for sidewall position sensors
 - Propose ordering one of each for evaluation
 - Option 1: magnetic proximity sensor
 - Option 2: tilt sensor
 - Option 3: limit switch

4. Laser interlock circuit PCB

Tyler Lemon and Marc McMullen

1. Circuit simulation in Altium confirms circuit behavior is as needed
2. Ready for PCB design
 - Completed schematic in Altium; routing and board layout needed

5. Meeting scheduled for March 7, 2023 to discuss remaining items to be procured

Tyler Lemon and Greg Kalicy

1. Optical table side walls and holders
2. Side wall position sensors for evaluation and final set of sensors after evaluation
3. Sweep button
4. Key switch for expert mode
5. Interlock PCB enclosure
6. Connectors for enclosure feedthroughs
7. 24 V power supply for interlock circuit
8. 5 V power supply for interlock circuit
9. Channels for walls of laser controlled area for routing cables
10. Cabling for interlock devices
11. Cable glands for interlock devices
12. LED laser status sign
13. Laser room door window cover
14. Light switch cover