

DSG-RICH R&D Meeting

Date: October 4, 2021

Time: 11:00 AM – 12:00 PM

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

1. SHT35 sensor PCBs received

Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, and Marc McMullen

1. PCBs will be tested in upcoming days
2. Plan is to test each PCB individually for correct functionality, then perform more extensive tests to determine which PCBs to use in detector once RMC and Backplane PCB are received

2. Collaborator meeting

1. Aerogel relocation
 - Dry cabinet is on wheels, so it could be rolled to DSG small cleanroom during floor repairs
2. Patch panel for SHT35 sensors
 - Electronic panel sensors will use 12 Switchcraft feedthroughs (part # EHRJ45D6ASB440) on external detector patch panel
 - Feedthroughs are panel-mount with #4-40 threads on screw holes so only #4-40 screws are needed to fasten them to panel
 - Feedthroughs are on hand, screws to be procured
 - Nitrogen volume sensors will use two RH Seals, six-port RJ-45 feedthroughs fastened to “cable way” on detector shell.
 - Feedthroughs order and were expected to ship October 1, 2021

3. d0 tests on spherical mirrors 5 and 5C

1. d0 tests will be repeated this week with:
 - As many sources of ambient light eliminated from cleanroom
 - Temporary cover for exit sign
 - Using tape to cover instrumentation LEDs
 - Multiple background measurements throughout measurements to ensure CCD is stable