

DSG-RICH R&D Meeting

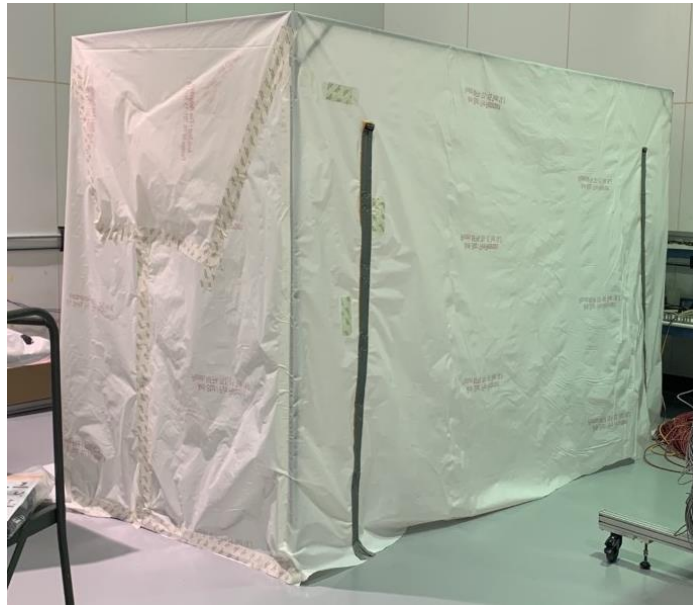
Date: May 2, 2022

Time: 11:00 AM – 12:00 PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. Dry tents for aerogel assembly

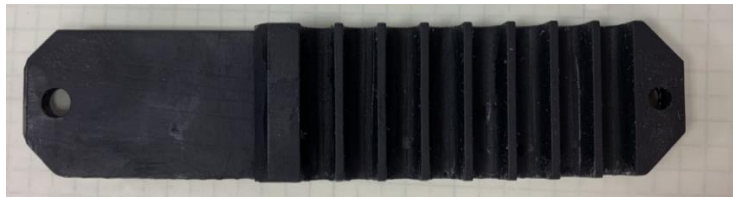
1. Frame of tent 1 covered with non-flammable plastic sheet
 - Sheet taped to frame with non-flammable duct tape
 - Magnetic closures added to front of tent for easy access



Tent 1 in EEL 124 cleanroom. Grey stripes down front of tent are magnetic closure strips.

2. 3D printer fabrication status

1. Nitrogen support bracket
 - Five of six fabricated
 - One cracked when removing supports and is being reprinted



Nitrogen support bracket

2. Camera support bracket
 - Issue with part cracking during fabrication resolved by modifying support locations
 - One of two parts fabricated



One successfully printed camera mount.

3. New reflectivity test station

1. Modified program to use two spectrometer integration times for higher and lower wavelengths to allow better reflectivity measurements at wavelengths less than 500 nm
 - Program now uses 125 μ s for wavelengths of 450 nm – 1000 nm and 575 μ s for wavelengths of 200 nm – 500 nm
2. With test measurement of RICH-1 sample 23, reflectivity measurement is still noisy for lower wavelengths (< 400 nm) since the light intensity detected by the spectrometers is still small