**Hall A Gas Distribution Meeting**

**Date: 07/28/2020**

**Time: 10:30 – 11:30**

**Attendees: P. Bonneau, A. Brown, E. Cisbani, B. Eng, K. Gnanvo, G. Jacobs, T. Lemon, N. Liyanage, M. McMullen, J. Segal**

*Agenda*

1. Gas Distribution Panel (T. Lemon, G. Jacobs)
   1. Tyler can give some details on the model of the gas panel components, currently under design.
      1. T. Lemon showed the front and back view of the BigBite gas panel
      2. Nilanga suggests that the panel design may be able to be adapted to other detector gas systems (SoLID)
   2. George can go over changes to the distribution system concerning the expansion to the system
      1. Implementation of flow sensors on the exhaust
         1. Nilanga states that the exhaust flow measurement should not induce impedance to the system or allow gas to leak back into the detector.
         2. Jack suggest that an individual sensor should be mounted at the exhaust port with just a short gas line, to prevent back pressure due to line impedance.
         3. Nilanga suggest that Hall A investigate line impedance. He prefers the sensor to be located in the gas panel (10 meters away)
         4. Jack will get us some models of the detector so the exhaust port locations can be identified.
2. Flow Readback (M. McMullen, B. Eng)
   1. Marc can provide an update on the status of the readout PCBs
      1. Gas Flow Sensor boards and components for the system expansion have been ordered.
         1. The GFS\_v1 boards were received on 7/15
         2. RJ-11 connectors delivered to the lab
   2. Brian can provide information on preliminary testing of the GFS\_V1 boards and readout software development.
      1. Brian has ordered some level translators for the Raspberry Pi units to 5V signals from the flow sensors
      2. Marc will order some cable and connectors for RJ-11
3. GEM detector progress for SBS/BB (K. Gnanvo, N. Liyanage, E. Cisbani)
   1. Update on GEM assembly
      1. Nilanga is leaving the group to pursue other physics business at the lab
      2. Kondo is now the group physics representative along with Evaristo
4. Open discussion items. (All)
   1. Jack has acquired a rack to be used for the distribution system. He has another on order. The rack will be relocated to EEL 125.