## **DSG-GEM Meeting Minutes**

**Date:** February 23, 2021 **Time:** 9:30 – 10:15

<u>Attendees:</u>, Aaron Brown, Pablo Campero, Brian Eng, Kondo Gnanvo, George Jacobs, Tyler Lemon, Marc McMullen

1. Marc McMullen upgraded the prototype WEDM display to include a software heartbeat indicator and a time stamp; he is preparing to convert the prototype to the operational WEDM, which will include pressure readout from the regulator panel

			BB GEM Flo	w Readout	Software Heartbeat		
Std Flow Ch01 230 sccm Status: good	Std Flow Ch02 222 sccm Status: good	Std Flow Ch03 227 sccm Status: good	Std Flow Ch04 238 sccm Status: good	Hi Flow Ch05 0 sccm Status: good	Hi Flow Ch06 0 sccm Status: good	Hi Flow Ch07 0 sccm Status: good	Hi Flow Ch08 -0 sccm Status: good

- The prototype gas distribution system was installed and is supplying 220–240 sccm/channel of Ar/CO<sub>2</sub> gas to the four channels of the back layer of the BigBite GEM detector; operates as expected 2.1. The back layer GEM is currently taking data
- 3. INFN installed two layers of GEM detectors and is currently purging them with nitrogen; after completion this week, detectors will be connected to two high flow channels of the DSG gas distribution system
  - 3.1. Two INFN front layers will be installed in approximately six weeks, completing the BigBite GEM detector
- 4. The BigBite system will be moved to Hall A for installation in mid-to-late May
- 5. George Jacobs completed assembly of three panels—regulator, flow meter valve, and manifold—for the Super BigBite gas distribution; leak-tested the regulator panel
- 6. Super BigBite GEM layer installation on the detector frame will start in mid-March, with three UVA layers (standard flow) installed by the end of March
  - 6.1. To support three UVA layers (12 standard flow channels), two of the six gas flow sensor chassis will need to be constructed and installed
- 7. The GEM group requested that DSG develop a gas distribution system to be used during the initial building of BigBite and Super BigBite and during maintenance after commissioning, possibly an eight-channel, nitrogen system.
  - 7.1. George Jacobs suggested a small, portable system could be designed using the same concept as the BigBite distribution system, which has four standard and four high flow channels
- 8. Holly Szumila-Vance is now supervising the INFN GEM installation