

Minutes – SBS Weekly Meeting for 2 March 2020

1. Provakar Datta (UConn): Simulation of UVA GEM test in Hall A from 2016
 - 1.1. Simulation of 2016 Hall A test data for understanding the resolution
 - 1.2. Intrinsic resolution 70 μm ; simulation 230 μm ; measured 250 μm
 - 1.3. Result is from multiple scattering of low energy electrons
 - 1.4. Calorimeter calibration of energy scale not precise;
 - 1.5. At 1 GeV electrons, resolution is about 100 μm resolution

2. Andrew Puckett (UConn): Initial cosmic ray tracking results from UVA GEMs in EEL
 - 2.1. Gain efficiency spotted and is known; needs HV gain changing
 - 2.2. Some trigger latency ... needs checked
 - 2.3. Tracking finding prob. 81%; global average over all data
 - 2.4. Most modules \sim 90% efficiency
 - 2.5. Cosmic resolution: x \sim 120 μm and y \sim 110 μm

3. Draft collaboration meeting agenda and discussion (Andrew)
 - 3.1. Coordinating committee meeting; contacting people for presentations soon
 - 3.2. Currently no plan to postpone meeting; remote participation encouraged if travel not possible

4. Brief verbal status reports on subsystems (Contact persons)
 - 4.1. Software (Andrew)
 - 4.1.1. SBS offline work continuing;
 - 4.1.2. Trigger rate estimates on going
 - 4.1.3. Digitization of simulation output to data-like structures getting close to work

 - 4.2. DAQ (Alex Camsonne)
 - 4.2.1. Optical fiber to test GEMs

 - 4.3. BB Pre-shower and Shower (Arun)
 - 4.3.1. HV bases installed, mapping done, checks done, closed up shower
 - 4.3.2. Coming up:
 - 4.3.2.1. Check for light leaks
 - 4.3.2.2. Install 100-m cables
 - 4.3.2.3. Install one or more cosmic counter on top of shower and pre-shower
 - 4.3.2.4. Take cosmic data

- 1.1. HCAL/GMn/Documentation (Brain)
 - 1.1.1. No Report on HCAL
 - 1.1.2. GMn magnetic field settings coming soon
 - 1.1.3. HCAL vertical offset is constant

- 1.2. BB Hodoscope and neutron spin precession (David H.)
 - 1.2.1. More broken hodoscope light guide

1.2.2. Rachel and techs testing other glues and roughing surfaces for repairing hodoscopes

1.2.3. Ralph and David is work on G4 spin precession for GEn-RP

1.2.4. Will verify/check against version for GEp in G4SBS

1.3. INFN GEM (Evaristo)

1.3.1. Testing on 3rd foil proceeding after repairs

1.3.2. Will begin assembling the GEM modules

1.3.3. Plans for travel on hold

1.4. UVa GEM (Nilagna / Kondo)

1.4.1. Getting equipment ready for u-v GEM

1.4.2. Students wiring up GEMs in EEL building

1.4.3. Analysis of cosmic data is most helpful

1.5. CDet (Peter)

1.5.1. Meet with Brad; will start testing TDC modules soon

1.5.2. Accumulating cables; meet with techs to word on solution to cabling

1.6. GEn-RP (Will)

1.6.1. High resolution field map done

1.6.2. Will start on PMT shielding model today

1.7. BB Timing Hodoscopes (Bogdan)

1.7.1. Removed BB Timing Hodoscopes; most have at least 1 broken end

1.7.2. Suspect that the surface is too well polished; need to test a better surface prep

1.7.3. Need to develop a way to reduce stress on the glue joint

1.7.4. Bogdan estimates 3-person months of work; Currently there are no personal to put toward effort

1.7.5. Coordinating committee to discuss

2. Adjourn

Recorded by Will Tireman