

# 2020-09-18: Activities in EEL CL124: UVa GEMs

- **Assembly of GEM layer#5 ongoing:**
  - Preliminary HV tests of GEM modules to be done tomorrow (Thursday)
  - Preparation of the cabling (HV cables, HDMI..) APV25 FE cards and gas system ongoing ⇒ Plan is to complete the job next week
- **MPD DAQ / readout / software setup:** (see [Thir report](#))
  - Bryan and Thir had now set up the DAQ for all 4 layers
- **Status of the cosmic stand with 4 GEM layers:** (see [Anu and Malinga reports](#))
  - HV test at 4.2 kV for 2 hours on N2 on all 4 layers (16 GEM modules) last Thursday (08/12) ⇒ OK, see ELOG: <https://hallaweb.jlab.org/dvcslog/SBS/291>
  - will repeat the HV test this evening and overnight
  - Switch to Ar-CO2 gas mixture on Thursday ⇒ start first look at cosmic data (probably on Friday)
- **New DAQ Computer for the EEL cosmic setup**
  - Just got the new powerful PC for the EEL DAQ and data analysis from Ole yesterday
  - Will communicate with Jlab IT people to set it up then after, we will install CODA and the DAQ software PC (hopefully Bryan will help us on that too)
  - John Matter (From UVa) will then join the group and be in charge of the decoder and analysis/interface with Andrew as well as the cosmic data management
- **Need to start about the way to move the 5<sup>th</sup> layer on cosmic stand**
  - We can no longer do it manually as we did for the 4 first layers
  - The system should also be used to move layers out of the cosmic stand
  - Plan is that we built layer #6 and #7, we will replace layer # 1 and #2 right away
- **Get the Proton Recoil GEM frame in EEL 124 to test UVa GEM layers back to back**
  - Brad suggested that we accelerate the fabrication of one of the GEN-RP PR frame to move it into EEL to test the back-to-back GEM layer
  - This will be a very interesting and important exercise (maybe in a 2 months time frame)