

# Trigger update

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- All requested triggers (3/4, EL-REAL, EL-CLEAN) for both the single arm HMS and SHMS operations were configured for the fall run.
- The coincidence trigger was also configured and tested although it was not utilized.
- All the various legs of each of the triggers were present in the data stream during the fall run so that trigger studies could be performed offline.
- The HMS trigger was timed in with beam while the SHMS and coincidence triggers have not due to various limitations during the run. The experience gained from setting up the HMS ensures that we will be able to time in the SHMS and coincidence triggers in a timely manner.
- Both the SHMS and HMS single arm DAQ's operated without failure during the 6 days of running aside from a network failure which took the HMS DAQ down for only a matter of minutes. The reliability of the coincidence DAQ in a production environment has yet to be tested.
- Both the SHMS and HMS single arm DAQ live times, both with and without prescaling, observed during the run were identical to what was observed on the bench.
- Preliminary trigger PID efficiencies were performed and indicate that the PID triggers were performing as expected although optimization in the future with beam studies is required.