Data flow

- We are admirably handling ~ 30 Hz instantaneous rates in beam spill periods
  - From what we can tell in limited sampling of data, data quality is generally good
- However, we know there are issues
  - Push to slightly higher rates and we see trigger matching results come up periodically empty, higher rates of missed Rx packets, eventually trigger timeouts and inhibits
- Could use a push on multiple fronts
  - Can we upgrade readout servers to >10g output?
  - Do we have network configured well for readout and dataflow servers?
  - Do we have buffering, timeouts, pinning, etc. tuned well to optimize data rates given beam spill structure?
  - Are we properly isolating readout traffic and dataflow traffic?
- We are pushing at the edge, so likely hitting bottlenecks in both hardware and software
- **Many aspects of investigation here coincide well with performance measurements, specifications on networking, and review of software**