Pulsar Readout within DAQ system

- Two Pulsar banks: T2PD (old) and TP2D (new)
  - T2PD (muon board readout): unchanged since fall
    - Three buffers read out: DAQ, muon fibers, XTRP
      - DAQ and XTRP are variable-length, muon is fixed-length
    - Read out on ROL 7 due to readout time (16 fibers each require separate VME read due to address mapping)
  - TP2D: what is planned
    - “final” bank for L2 Pulsar system
    - Can read all buffers for diagnostic readout or limited readout for every event
    - Flexibility in fiber readout – N fibers in hardware database
    - Address mapping for fibers....continuous address space
Readout time of L2 Decision Crate with Pulsar

- Readout of b0l2de00 increased by ~factor of two when T2PD readout was added
- T2PD readout in ROL 7 now
**TP2D: current status**

- **Readout**
  - Can read out three buffers per board, which are copies of buffers from T2PD readout
  - Multiple board readout: test version implemented but needs testing

- **Near-term plans (next week or so)**
  - Possible iteration on multi-board readout
  - Add variable number of fibers
  - Coordinate with Cheng-Ju about offline accessors
  - Code cleanup, error reporting, etc

- **Other issues**
  - Cold start configuration