- Events enter the ADC board and are stored in a pipeline buffer.
- The sum of the 16 channels are sent to a L1 Trigger board via fiber.
- L1 Trigger board sums for a whole crate. Sum is passed via P3 backplane to slot 12.
- MACTRIS sits in slot 12 and makes decision to trigger data readout.
- L1A, 8ns clock, and LIVE signals are sent to FANOUT crate’s Master FANOUT from MACTRIS.
- Master FANOUT sends signals out front panel ports to slave FANOUT boards.
- Each slave FANOUT board sends control signals including L1A, which signals a trigger, to a whole crate of ADC boards.
- On a trigger, ADCs will capture the data as it leaves the pipeline buffer and send it to L2 Trigger board via a fiber.
- L2 Trigger will buffer data and package it for readout via Ethernet.
- An ethernet switch will connect 16 L2 Trigger boards to Mandolin
- Mandolin is a 40 node computer cluster. Each node will receive all channels of an event for processing and storage.