Levels of Triggering in Run II

Level 1 →

Input Rate: 7.5 MHz

L1 Triggers Use:

Special signals from their detector system's front-end.

Action in readout crates in response to an L1_Acpt:

Save full detector data in buffer for events awaiting their L2_Decisions.

Send trigger data to L2 Trig PreProcessor.

Level 2 →

Input Rate: 1.2 kHz

L2 Triggers Use:

Typically special signals from their detector system's front-end. As good or better data then used by their L1 trigger.

Action in readout crates in response to an L2_Acpt:

Send full detector data to L3 Trigger/Readout.

Action in readout crates in response to an L2_Reject:

Discard this event data.

Level 3 →

Input Rate: 800Hz

Output Rate: 40Hz

L3 Trigger Uses:

Data from the full D-Zero readout

Action in response to an L3_Acpt:

Send the full readout data from this event to the data logger, i.e. write the event to tape.