

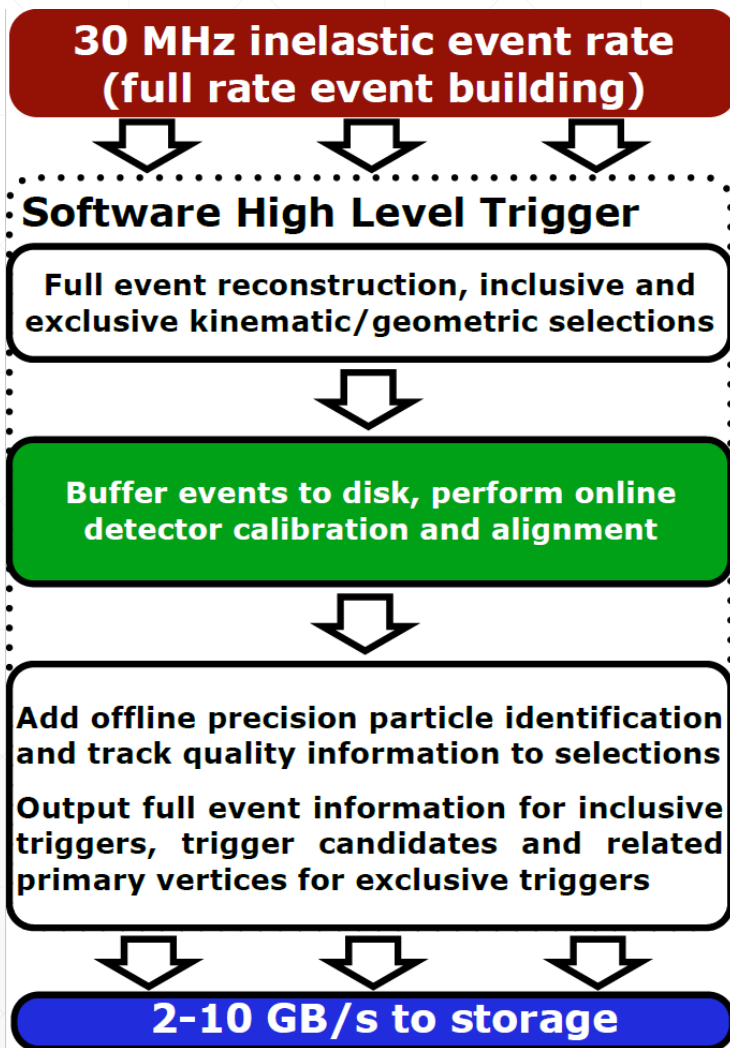


Reconstruction at 30 MHz for the LHCb upgrade

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LHCb Upgrade I Trigger System



- ❑ **Triggerless readout and full software trigger**
 - Process data at machine clock (40 MHz crossings and 30 MHz of visible interactions)
 - No L0 (hardware) bottleneck
- ❑ **No further offline processing**
 - All data taken in Turbo mode
 - Run II is a critical testbed for this technology
 - Offline resources can be used for simulation and central data analysis



**Real-time data
analysis tomorrow**