

# LHCb 2015 Trigger Diagram

**40 MHz bunch crossing rate**

**L0 Hardware Trigger : 1 MHz readout, high  $E_T/P_T$  signatures**

**450 kHz  
 $h^\pm$**

**400 kHz  
 $\mu/\mu\mu$**

**150 kHz  
 $e/\gamma$**

**Software High Level Trigger**

**Partial event reconstruction, select displaced tracks/vertices and dimuons**

**Buffer events to disk, perform online detector calibration and alignment**

**Full offline-like event selection, mixture of inclusive and exclusive triggers**

**12.5 kHz (0.6 GB/s) to storage**