# ARCHITECTURE &FUNCTIONAL DECOMPOSITION

ATLAS&ALICE

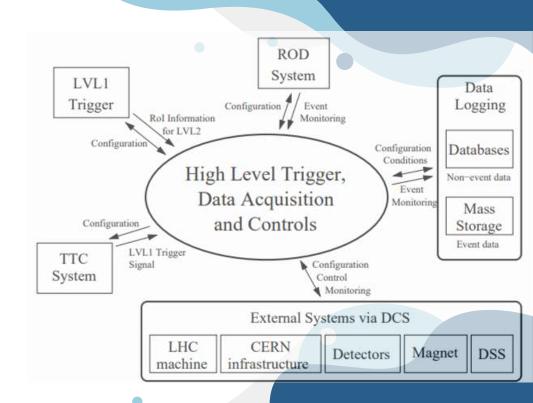
### 01. ATLAS





#### 1.1 ARCHITECTURE

- -The context diagram of the HLT/DAQ
- -It illustrates the inter-relations between the HLT/DAQ system seen as a whole and elements external to it that are directly related to data acquisition and triggering.
- -It also illustrates the type of data which is exchanged in each case



## 1.2 FUNCTIONAL DECOMPOSITION OF HLT/DAQ

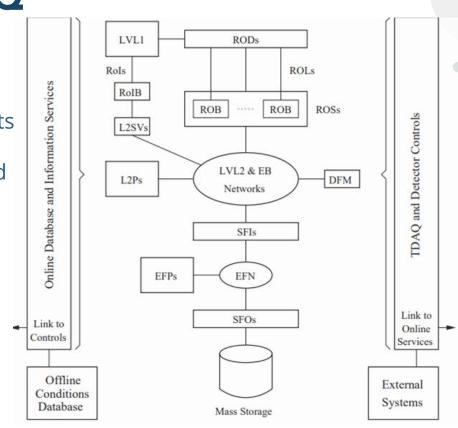
The HLT/DAQ system provides the ATLAS

 experiment with the capability of moving the detector data, e.g. physics events, from the detector to mass storage; selecting those events that are of

interest for physics studies; and controlling and monitoring the whole experiment

The following functions are identified:

- -Detector readout
- -Movement of event data
- -Event selection and storage
- -Controls
- -Monitoring



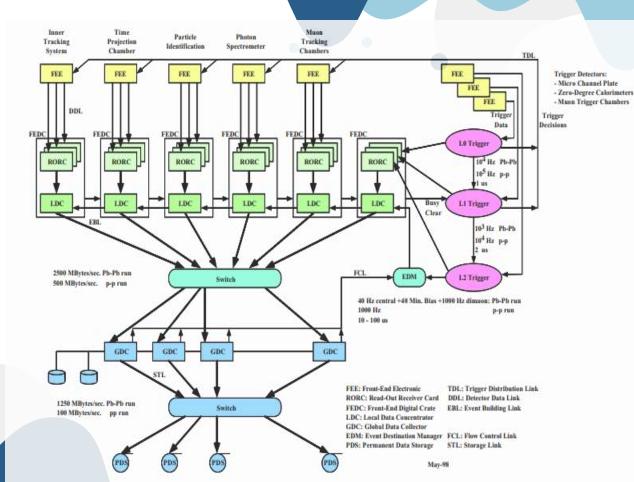
### 02. ALICE



#### 2.1 GENERAL ARCHITECTURE OF DAC

The DAQ consists of these subsystems:

- Detector readout and subevent building
- Event building and distribution system
- Monitoring system to check the quality of data collected
- Control and presentation
  system provides a unified
  interface to the DAQ



#### 03. SPD

HIGH LEVEL

MIDDLE LEVEL

**LOW LEVEL** 

