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# The LHCb DAQ system for the LHC Run3.

*Monday 11 June 2018 10:40 (30 minutes)*

In order to optimise its physics reach in the LHC Run3, for the years 2020 and beyond, the LHCb Collaboration decided to re-optimize the detector and the data acquisition system. The new detector will operate at the LHC bunch-crossing frequency of 40 MHz, without a first level hardware trigger. The implementation of the data-acquisition and of the online computing system for the software trigger are challenging, since of the expected data rate to manage amounts to about 40 Tb/s. The system can be built at an affordable cost only by using off-the-shelf hardware as much as possible. However, technologies available evolve very quickly, thus the system architecture has to be flexible enough to avoid too strong bounds to a specific technology, and let us free to choose it until the last moment. We present the system architecture, the different implementation options we are studying along with measurements from these studies and will explain the decision criteria and technology drivers for choosing the components for the final system.

## Minioral

No

## Description

DAQ

## Speaker

Umberto Marconi

## Institute

INFN

## Country

Italy

**Authors:** Dr UMBERTO, Marconi (INFN Bologna); NEUFELD, Niko (CERN); SCHWEMMER, Rainer (CERN); COLOMBO, Tommaso (CERN); PISANI, Flavio (Universita e INFN, Bologna (IT)); VALAT, Sebastien (CERN); GALLI, Domenico (Dipartimento di Fisica); DURANTE, Paolo (CERN); MANZALI, Matteo (Universita di Ferrara & INFN (IT)); VONEKI, Balazs (CERN)

**Presenter:** Dr UMBERTO, Marconi (INFN Bologna)

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