



Contribution ID: 28

Type: **not specified**

## Sustainability of real time analysis at 5 TB/s data rate

*Monday 10 June 2024 15:56 (15 minutes)*

The LHCb collaboration is currently using a pioneer system of data filtering in the trigger system, based on real time particle reconstruction in Graphics Processing Units (GPUs). This corresponds to processing 5 TB/s of information and has required a huge amount of hardware and software developments. Among them, the corresponding power consumption and sustainability is an imperative matter in view of the next high luminosity era for the LHC collider, which will largely increase the output data rate. In this talk we show some of the proposals which can be considered to optimize the energy usage in terms of the computing architectures and the efficiency of the algorithms which are running on them.

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**Session Classification:** Parallel Session A