



# First experiences with a parallel architecture testbed in the LHCb trigger system

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# Highlights

- In this talk we will present our efforts on the application of new technologies, such as GPU cards, to LHCb trigger system
- A node equipped with a GPU has been inserted in the LHCb online monitoring system; during normal data taking, a subset of real events was sent to the node and processed by GPU-based track reconstruction algorithms
- We will present the algorithms developed for parallel architectures, the setup of the testbed and discuss the GPU performance obtained during the data taking compared to the current LHCb track reconstruction