

# Novel Real-time Alignment and Calibration of LHCb in Run2

## Target

- Use best alignment and calibration already in trigger to produce reprocessed-like quality data
- Provide new constants as soon as possible

## Requirements

- Speed: runs as soon as enough data is collected
- Iterative to find convergence
- Automatic (LHC never sleeps...)

## New Dedicated Framework

- Parallelised events reconstruction (~1700 nodes)
- Alignment constants computed on single node
- Use evaluated constants for eventual new iteration
- Update constants in the trigger if needed

## A Working Model for Future Experiments

