

# News on L0 Optimization and Robustness Studies

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- L0 optimization - new implementation
- Some robustness tests on each sub-trigger

# L0 optimization: “philosophy”

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- L0 optimization done with MINUIT -> systematic scanning of the whole parameter space ( $E_T$  thresholds, veto cut)
- for each set of thresholds there is a corresponding minimum bias retention rate -> constraint -> how to take this into account when calculating efficiencies?
- Idea: perform the optimisation as real as possible:
  - randomly reject L0 signal events in the same proportion as M.B. events so that the L0 output rate is at 1MHz (only do this if > 1MHz !)

... plots of robustness tests are attached ...