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Operational Experience on Current silicon strip detector in CMS Experiment

The CMS outer silicon strip tracker with its more than 15000 silicon modules and 200m² of active silicon area is in its tenth year of operation at the LHC. We present the performance of the detector in the LHC Run 2 data taking. Results for signal-to-noise, hit efficiency and single hit resolution will be presented. We review the behavior of the system when running at beyond-design instantaneous luminosity and describe challenges observed under these conditions. The evolution of detector parameters under the influence of radiation damage will be presented and compared to simulations.

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