

Status of the CMS silicon strip tracker

- The CMS silicon strip tracker has been in operation for more than 10 years in the CMS experiment
- The performance of the detector is monitored regularly during operation: signal to noise ratio, hit efficiency are compatible with expectation
- Radiation effects are visible in all parts of the detector: sensors in the first layer of TIB are around space charge inversion point
- The detector is operated at a temperature of -20°C , it is expected that the operation temperature will be decreased down to -25°C towards the end of Run 3 in order to reduce number of sensors experiencing thermal runaway
- The detector has been recommissioned after Long Shutdown 2 (LS2) and successfully participated in the LHC pilot beam test in October 2021
- The CMS silicon strip tracker is about to start operation for Run 3 and is expected to continue to provide high quality data for physics analyses.