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## **【322】 SiPM detectors for the LHCb SciFi tracker upgrade**

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The LHCb experiment obtained outstanding results with the data collected during last two LHC data taking periods.

An upgrade of the LHCb detector will be installed aiming for a full detector readout at 40 MHz for Run 3 and 4. To cope with the increased luminosity, the current downstream tracking system will be replaced by the Scintillating Fibre tracker.

The SciFi tracker uses 250 $\mu$ m scintillating fibres densely packed and arranged in layers readout by Silicon Photo-Multipliers (SiPMs).

Each single detector has to be characterised in terms of its electrical, geometrical and optical properties. A testing facility to characterise the 5500 multichannel arrays has been developed and employed during the production testing.

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