

Scintillating plastic fibres have been used for more than 30 years in tracking detectors. The advent of a new type of photodetector, the so-called Silicon Photomultiplier (SiPM), allows for new applications of the elegant and flexible SciFi technology. In the context of a major upgrade program of the LHCb detector, to be operational after the LHC shutdown LS2, R&D is being performed on a large scale SciFi detector. With more than 300 m² of detector surface, it is conceived to replace the currently installed Inner (Silicon micro-strips) and Outer Trackers (straw tubes) by a single technology. The talk will give a short summary of the scintillating fibre technology and revisit some of the past fibre detectors (UA2, Chorus, D0). It will then discuss the design of the LHCb SciFi tracker and focus on some topics of the current R&D program.