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The UT silicon tracker for LHCb's Upgrade I

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A key part of the LHCb charged particle tracking system is the silicon detector (UT) placed after the VErtex LOcator and before the dipole magnet. Its main function is to make a quick measurement on the momentum of tracks using the small magnetic field between the VELO and the UT. The fully software trigger is consequently sped up by a factor of three. Also of prime importance is the rejection of a large fraction of ghost tracks during the full reconstruction. Many physics results depend on the proper implementation of this detector. Novel features including internal pitch adapters and high voltage feed-throughs in the silicon. Construction techniques will be described.

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