

Meet TIM, the LHC tunnel's robot

November 27 2016, by Corinne Pralavorio



TIM uses the tracks of the former Large Electron Positron (LEP) monorail. This image from 1991 shows the LEP monorail, which carried materials and workers when the tunnel housed the LEP collider. LEP was closed down in 2000 to make way for the construction of the LHC in the same tunnel. (Image: Patrice Loiez/CERN)

The name's TIM, Robot TIM – meet the spy patrolling the 27-km tunnel

of the Large Hadron Collider (LHC). TIM, the Train Inspection Monorail, is a mini vehicle transporting a set of instruments along tracks suspended from the tunnel's ceiling. This smart machine is used for real-time monitoring of the LHC tunnel: the tunnel structure, the oxygen percentage, the communication bandwidth and the temperature.

TIM provides visual and [infrared imaging](#) of the LHC tunnel and can move up to 6 km/h. It can also pull small wagons for specific tasks.

Two TIM units are currently running in the LHC tunnel, parked in a service tunnel of one of the LHC experiment, waiting for commands.

Provided by CERN

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