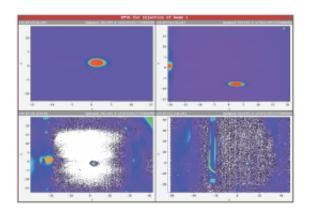


## Particles are back in the LHC

26 October 2009



The first ion beam entering point 2 of the LHC, just before the ALICE detector (23 October 2009)

Following this, LHC physics will begin with collisions at this energy. The time from first injection to first high-energy collisions will be at least four weeks. However, the complexity of scheduling coupled with inevitable glitches in a machine of this complexity could lead to this process taking longer. The first high energy collisions will most likely occur at a date after mid-December 2009.

Provided by CERN

During the last weekend (23-25 October) particles have once again entered the LHC after the one-year break that followed the incident of September 2008.

Friday afternoon a first beam of ions entered the LHC clockwise beam pipe through the Tl2 transfer line. The beam was successfully guided through the ALICE detector until point 3 where it was dumped. The particles did not travel along the whole circumference of the LHC.

During the late evening on Friday, the first beam of protons also entered the LHC clockwise ring and travelled until point 3. In the afternoon of Saturday, protons travelled from the SPS through the TI8 transfer line and the LHCb experiment, until point 7 where they were dumped.

All settings and parameters showed a perfect functioning of the machine, which is preparing for its first circulating beam in the coming weeks.

CERN is preparing the <u>Large Hadron Collider</u> for a restart in 2009. The first circulating beam of the year is likely to be injected in mid-November. This will be followed by a short period of collisions at the injection energy of 450GeV per beam and a ramp in energy to 3.5TeV per <u>beam</u>.



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