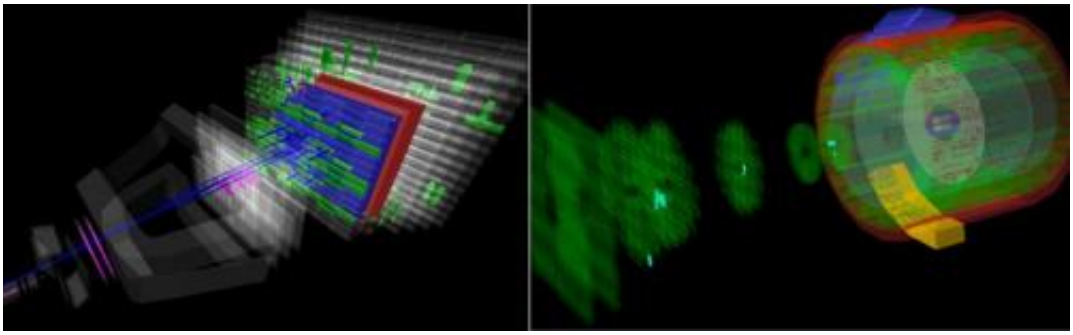
Injection tests make a splash

March 10 2015, by Paola Catapano



The splash events recorded by the LHCb (left) and ALICE experiments.

On Saturday 7 March, two of the LHC experiments saw proton beams for the first time after a two-year stop. Beam 2 (anticlockwise) made it through LHCb at 10.30 and Beam 1 (clockwise) passed through ALICE at 17.00. The two experiments were switched on to record so-called splash events, particles emerging from the collision between the proton beam and a block positioned to stop the beam. The proton beams passed through three of the eight sectors of the LHC machine – slightly more than 10 km of the 27 km ring.

"The tests were a big a success – on the one hand because we made it successfully to Point 3 with Beam 1 and onto the beam-dump block in Point 6 with Beam 2, and on the other hand because we discovered many issues, which we can still fix before we start commissioning with beam", said Verena Kain, one of the two engineers in charge of LHC operations at the weekend.

An essential first step before a full restart, these injection tests are now being followed by the final stages of the hardware commissioning of the machine at the CERN Control Centre. Commissioning with beam is scheduled to start in the week beginning 23 March.

Provided by CERN