

International Workshop on Accelerator Alignment



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Status report of Survey activities at CERN

As well as, the Long Shut-Down 1 (LS1), many other projects are still progressing at CERN. The LINAC4, which will be the essential part of the injector chain in the future, is in the installation phase and will be connected to the existing accelerators in 2018. AWAKE, a project to verify the approach of using protons to drive a strong wakefield in a plasma which can then be harnessed to accelerate a witness bunch of electrons, will be using the proton beam of the CERN Neutrino to Gran Sasso, plus an electron and a laser beam. This facility will be installed in the CNGS target vicinity, as the experimentation with neutrino has been stopped at the end of 2012. ELENA, a small compact ring for cooling and further deceleration of 5.3 MeV antiprotons delivered by the CERN Antiproton Decelerator, is still in the study phase. In the HIE-Isolde project, the preliminary survey works have started and the installation is going to take place in 2015.

The CLIC study is still on going and the new achievements will be presented. Moreover, since the beginning of the year CERN has launched a study of the feasibility of a circular collider of about 100km circumference, hosting either hadrons or leptons.

This paper gives an overview of the survey activities realised in the frame of the above mentioned projects and the challenges to be addressed.

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