

Radiation Issues of the PS and SPS Accelerator Complex

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High intensity operation of the PS and SPS complex is mainly limited by losses and in particular by their radiological impact due to limited shielding. This is particularly evident for the PS and for that reason a series of studies has been carried out in the PS to understand the origin of losses, to minimize them and to alleviate their impact on personnel and equipment.

At the PS, losses during the injection, transition crossing and Continuous Extraction of the fixed target beams like the CNGS, have been deeply analysed. The solutions implemented and the actions ongoing to minimize the radiological impact will be presented.

Losses optimization has also continued in the SPS in particular at low energy. This will be briefly described together with open issues for the SPS complex, like shielding weaknesses of the transfer lines or potentially required modifications of the activated air management.