

SPS Scrubbing 2014

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Yearly machine scrubbing has been applied in the SPS since 2002 in order to reduce the amount of electron cloud in the machine and permit smooth operation with 25 ns beams. While a quick scrubbing is usually necessary to recover performance after any extended technical stop due to in vacuum deconditioning, a longer period needs to be envisaged when the machine stop is long and a large fraction of the machine is exposed to air. Therefore, the restart of the SPS after LS1 will offer a unique opportunity to qualify the machine degradation due to a long stop as well as quantify length and efficiency of a scrubbing run to recover the previous performance and possibly extend it to higher intensity beams. This information will be the key input to decide on the upgrade strategy for the SPS, as it will show whether the SPS can be operated with scrubbing also for future intensities or electron cloud needs to be actively suppressed through a-C coating. Goals, requirements (in terms of beam and instrumentation) and a possible planning of the SPS scrubbing run in 2014 will be covered by this presentation. In this context, we will also describe the doublet beam, which can be potentially used for enhancing the scrubbing efficiency.

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