

E-cloud effects in the proposed CERN PS2 synchrotron

Sunday, October 10, 2010 3:30 PM (30 minutes)

One of the options considered for a future upgrade of the LHC injection complex entails the replacement of PS with PS2, a larger circumference and higher-energy synchrotron. Electron cloud has been identified as a potential limitation to the machine performance. We review studies of e-cloud build-up and present recent results of simulations of short-term e-cloud effects on the single-bunch dynamics in the smooth-lattice, quasi-static approximation, as implemented in the code Warp.

Primary author: VENTURINI, Marco (LBNL)

Co-authors: VAY, Jean-Luc (LBNL); FURMAN, Miguel (LBNL)

Presenter: VENTURINI, Marco (LBNL)

Session Classification: Poster Session

Track Classification: Poster