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Light upgrade of the ESRF booster

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The ESRF booster has been built more than 30 years ago as injector of the first ESRF storage ring and it is still used to inject in the EBS. Several components of the booster have been updated in the years and it is now operated off-energy and with emittance exchange at extraction, however the lattice has not been modified since the '90s. A project to reduce the equilibrium emittance and bunch length of the booster by exchanging 18 quadrupole magnets has been proposed. In this paper we present the beam dynamics studies in presence of errors and the expected gain in injection efficiency.

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

Author: CARMIGNANI, Nicola (European Synchrotron Radiation Facility)

Co-authors: BENABDERRAHMANE, Chamseddine (European Synchrotron Radiation Facility); WHITE, Simon (European Synchrotron Radiation Facility); PERRON, Thomas (European Synchrotron Radiation Facility)

Presenter: CARMIGNANI, Nicola (European Synchrotron Radiation Facility)

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