

# ESRF-EBS Upgrade Program Update

C. Maccarrone, H. Pedroso-Marques, A. Meunier, J. Leonardon

*The European Synchrotron Radiation Facility (ESRF)  
FR - 38000 Grenoble*

The old ESRF machine has been in operation for about 30 years. During his life it has been updated and upgraded many times in order to improve both performances and reliability, that were remarkable..

The EBS (Extremely Brilliant Source) upgrade program (phase II) has been launched in 2015. This program has the main goal to increase the brilliance and coherence, by reducing the horizontal emittance from 4 to 0.13 nm.rad.

To achieve this goal, a new storage ring will replace the old one on the same tunnel, avoiding building modification or new constructions and keeping beamlines in the same position. Some other modifications to the Booster, Front-Ends and transfer lines will be implemented in order to be adapted to the new storage ring.

This presentation will summarize the project of the new machine and the status of the implementation of the program. Then, will go through the main vacuum related aspects, issues observed and future activities to be performed until the restart of the machine foreseen by December-2019.