



Contribution ID: 88

Type: Oral

ALBA II Accelerator Upgrade Project

Thursday, 8 September 2022 09:30 (20 minutes)

ALBA is working on the upgrade project that shall transform the actual storage ring, in operation since 2012, into a 4th generation light source, in which the soft X-rays part of the spectrum shall be diffraction limited. The project has been officially launched in 2021 and a White Paper presenting the main concepts of the upgrade shall be published in 2022. The storage ring upgrade is based on a 6BA lattice which has to comply with several constraints imposed by the decision of maintaining the same circumference (269m), the same number of cells (16), the same beam energy (3GeV), and as many of the source points as possible unperturbed. The lattice optimization has achieved an emittance of 140pmrad, which is a factor 30 smaller than that of the existing ring, but with an array compactness that presents technological challenges for the magnets, vacuum, diagnostics, RF systems and injection elements designs that are being investigated through an intensive R&D program.

Would you like to participate in the Poster Prize competition?

No

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Session Classification: ALBA II