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Status of the ALBA-II lattice studies

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Due to the constraints imposed by the tight geometry of the ALBA storage ring, the initial 6BA lattice envisioned for the ALBA-II upgrade was reconsidered in favor of a more relaxed 5BA configuration. The first engineering studies of magnets and vacuum chambers made evident many shortcomings of the 6BA optics. The here proposed 5BA optics allows for an easier integration at cost of a small increase of the natural emittance. The employed linear and non-linear optics optimization process is here described along with the first studies about dynamic aperture and lifetime.

Footnotes

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Paper preparation format

LaTeX

Region represented

Europe

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