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Status of the beam dynamics studies for the PERLE Energy Recovery Linac

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PERLE (Powerful Energy Recovery Linac for Experiments) is a three-turn, high power Energy Recovery Linac under construction at IJCLab, France. It emerged from the design of the LHEC and FCC-eh and will serve as a hub for the validation of several technical choices and exploration of a broad range of accelerator phenomena in an unexplored operational power regime (up to 10 MW in its final version). Up to now, the final lattice design and phasing has been finalised. Current studies focus on non-linear effects and longitudinal dynamics. Also, the commissioning scheme is under development. We will present the status of the beam dynamics studies of the project, and highlight some of the ongoing studies

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

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