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Optics studies at the compact ERL

Monday 2 June 2025 16:00 (2 hours)

The compact ERL has been operated at the various beam optics as a test facility for industrial applications, such as the future EUV-FEL for a lithography. The short bunch length is the key for the high intensity SASE FEL therefore a tunable R56 of the arc optics is necessary for the bunch compression. We demonstrate the two kinds of arc optics: one is easy optics matching and another one is having a large energy acceptance. In addition, the deflector cavity is installed downstream of the undulators for the bunch length measurement. The beam optics is optimized for high resolution measurement. In this presentation, we show the summary of the optics tuning and the results.

Footnotes

Paper preparation format

Word

Region represented

Asia

Funding Agency

Author: Dr SHIMADA, Miho (High Energy Accelerator Research Organization)

Co-authors: TANAKA, Olga (High Energy Accelerator Research Organization); TANIKAWA, Takanori (High Energy Accelerator Research Organization); HONDA, Yosuke (High Energy Accelerator Research Organization)

Presenter: Dr SHIMADA, Miho (High Energy Accelerator Research Organization)

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