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Type: Speed talk

Bunch compressor commissioning at ARES

Friday 9 September 2022 10:35 (3 minutes)

We present the first commissioning results of the movable bunch compressor designed for the ARES linac at DESY. The development and simulated performance has been reported and predicts sub-fs electron bunches with high charge densities. Commissioning results of the injector part of the ARES linac delivered promising beam quality results to achieve these numbers. The bunch compressor system will be used to benchmark numerical models for coherent synchrotron radiation and space charge for ultra-short electron bunches. Here we will present first measurements of the dispersion management and compensation as well as calculations for the longitudinal dispersion. In the future the Polaris transverse deflecting structure will be commissioned to fully characterize the ARES electron beam.

Summary

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