

Thermionic injector vs. SRF-Gun: Femtosecond-level characterization of beam arrival-time jitter at the CW SRF accelerator ELBE

Summary

The poster will discuss the characterization of the two electron injectors installed at the superconducting CW linear accelerator ELBE at Helmholtz-Zentrum Dresden-Rossendorf (HZDR). Data from a high resolution bunch arrival-time monitor (BAM), a bunch compression monitor (BCM) and a energy dependent position measurement (eBPM) have been carried out. A comprehensive set of measurements have been performed in order to investigate the changes of arrival-time and energy jitter of the electron beam for different bunch compression states for each individual injector.

Primary author: Dr KUNTZSCH, Michael (HZDR)

Co-authors: Dr TEICHERT, Jochen (HZDR); Dr MICHEL, Peter (HZDR); Mr SCHURIG, Rico (HZDR); Dr LEHNERT, Ulf (HZDR)

Presenter: Dr MICHEL, Peter (HZDR)