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Status of the commissioning of the X-band injector prototype for AWAKE Run 2c

Monday, 20 May 2024 16:00 (2 hours)

The status of commissioning of the electron injector intended for the next phase of the proton driven wake-field experiment (AWAKE) is presented, showing first experimental results from operating the brazing-free electron gun. To provide a high-quality electron beam, the UV laser was centered on the copper cathode, and a novel simplex and beam-based alignment of the focusing solenoid was performed. Measurements of the beam parameters and working points are addressed. The electron gun is shown to provide a high quality, stable and reproducible beam.

Footnotes

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LaTeX

Region represented

Europe

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