



Contribution ID: 1791 Contribution code: TUPM010

Type: **Poster Presentation**

First THz light generated in high energy section of FLUTE

Tuesday 3 June 2025 16:00 (2 hours)

FLUTE is a compact and flexible linac-based accelerator test facility at the Karlsruhe Institute of Technology (KIT) in Germany. It serves as a platform for a variety of accelerator studies and to generate intense short THz pulses for various photon science experiments. Later, FLUTE will be also used as an injector of laser-plasma accelerator-like bunches into the VLA-cSR (Very Large Acceptance compact Storage Ring), which is part of the cSTART (compact SStorage Ring for Accelerator Research and Technology) project currently in the technical design phase at KIT.

Recently, FLUTE's high energy section has been installed and commissioned. This includes the linac, bringing FLUTE beyond 5 MeV to full energy, the bunch compressor, and two corresponding diagnostics sections. A metal foil in the last diagnostics section has been used to generate a first THz signal with high energy electron bunches.

Footnotes

Paper preparation format

LaTeX

Region represented

Europe

Funding Agency

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Session Classification: Tuesday Poster Session

Track Classification: MC2: Photon Sources and Electron Accelerators: MC2.A08 Linear Accelerators