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Beam Diagnostic for the DALI accelerator

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DALI is an envisioned suite of advanced accelerator-based THz sources that are continuously tunable over the frequency range from 0.1 THz to 30 THz. The THz sources will provide radiation with high pulse energy (up to $100 \ \mu J - 1 \ mJ$) at a high but flexible repetition rate up to 1 MHz. An MeV ultra-fast electron diffraction (UED) source will complement this facility.

The contribution will illustrate the machine design as well as discuss the foreseen diagnostic systems used for every machine part. Bunch position, arrival time and bunch compression state are crucial properties of the generated beams. Especially the low-charge operation (< 1 pC) of the UED beamline is a challenge for every non-invasive diagnostic systems.

Footnotes

Funding Agency

I have read and accept the Conference Policies

Yes

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