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Research and development at the BESSY II booster beamline

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With the refurbishment completed, the optical beamline delivers all the required diagnostics. This paper reports on their status focusing in particular on the R&D beamline branch. The additional branch is equipped with programable mirror and lens position controllers allowing elaborate optical optimisation. This system is used for educational purposes and for improving the source point imaging system through the study of polarisation characteristics. Test systems for an ultra-fast diode and a THz detector are equipped with CMOS cameras and polarisation filters.

Furthermore the R&D branch complements the existing diagnostics to measure bunch lengths and investigate non-linear beam dynamics.

Footnotes

Funding Agency

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Yes

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