

7th Beam Telescopes and Test Beams Workshop



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Status of the EUDET-type beam telescope infrastructure

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EUDET-type beam telescopes are widely used by test beam users. Based on six Mimosas26 sensors they provide a high-spatial resolution and a simple integration for users. The infrastructure comes with three pillars: the hardware for mechanical mounting of user devices and a trigger communication to the EUDET/AIDA TLU, the EUDAQ software as a top-level DAQ framework and the EUTelescope software for track reconstruction and analysis.

In this talk, we report on the status of the available devices and recent developments within the infrastructure. This includes the status from CERN (ACONITE, AIDA, AZALEA) and the status from DESY (DATURA, DURANTA). A motivation and an overview are given on the necessary changes for updating user integrations for EUDAQ2, as well as the possibilities of new trigger and synchronisation modes which are coming with the AIDA TLU. This will be applied in a hands-on session of the workshop. Finally, a new and common GBL processor within EUTelescope was written as well as an N-tuple dumper. These developments provide a clearer scope of EUTelescope as well as possibilities for new interfaces. In two hands-on sessions of this workshop different use cases are explained. We conclude with educational applications and a 3-stage future development plan.

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