

7th Beam Telescopes and Test Beams Workshop



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The CERN East Area

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The East Area is among the oldest and longest-operating CERN's facilities, in which beam tests, experiments and irradiations are hosted since the 1960's. The primary beam is extracted from the Proton Synchrotron, from which a 24 GeV/c proton beam is directed either towards the IRRAD and CHARM irradiation facilities or towards a primary target to produce three secondary beams. These beams of up to 12 GeV/c (T9) and 6 GeV/c (T10) serve test beam areas and 3.6 GeV/c T11 beam serves the CLOUD experiment, which studies cloud formation under the influence of cosmic rays.

In order to continue delivering reliable beams in the future, the CERN council has approved the East Area Renovation project in 2016, which is now being implemented during a two-year stop of all beams at CERN. The new East Area will respect modern infrastructure norms and limit better radiation doses to equipment and personnel. A new layout of the beamlines is proposed including new laminated magnets that will allow for cycled powering scheme. Together with a full infrastructure renovation, energy efficiency will be greatly enhanced. The new beamlines will provide higher energies (15 GeV/c T9 and 12 GeV/c T10) and thus provide a useful energy overlap to the North Area beamlines.

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