

7th Beam Telescopes and Test Beams Workshop



Contribution ID: 61

Type: **not specified**

Hands-On: Starting with EU Telescope - no or passive DUT

Tuesday, 15 January 2019 13:30 (2h 30m)

Scope of the tutorial

In this tutorial, the participant will learn how to reconstruct particle tracks of the EUDET-type telescopes with the EU Telescope framework.

EU Telescope has many functionalities to reconstruct your taken testbeam data step by step. After converting the raw data (interface to EUDAQ), it is possible to cluster event entries and form hits on the telescope planes. For the alignment of the telescope planes as well as for the final step, the fitting of the track, the General Broken Lines (GBL) algorithm will be used.

The working principle of EU Telescope will be shown by doing two types of reconstruction analysis. First part is to begin with an empty telescope, so no DUT. With this one can perform an alignment of the Mimosa26 sensors of the telescope. After this, a scattering material as DUT will be used to show the material budget imaging possibility.

This tutorial will show the basics of EU Telescope reconstruction, the next step is then to analyze an (active) DUT, for which we offer another, advanced EU Telescope tutorial.

Preparation

We will offer different options to follow the hands-on by EU Telescope. An installation guide as well as further preparation recommendations will be provided in time before the workshop here.

Primary author: ARLING, Jan-Hendrik (Deutsches Elektronen-Synchrotron (DE))

Co-authors: ROSSI, Edoardo (Deutsches Elektronen-Synchrotron (DE)); DREYLING-ESCHWEILER, Jan (Deutsches Elektronen-Synchrotron (DESY)); QUEITSCH-MAITLAND, Michaela (Deutsches Elektronen-Synchrotron (DE)); BECOT, Cyril Pascal (Deutsches Elektronen-Synchrotron (DE))

Presenters: ARLING, Jan-Hendrik (Deutsches Elektronen-Synchrotron (DE)); ROSSI, Edoardo (Deutsches Elektronen-Synchrotron (DE)); DREYLING-ESCHWEILER, Jan (Deutsches Elektronen-Synchrotron (DESY)); QUEITSCH-MAITLAND, Michaela (Deutsches Elektronen-Synchrotron (DE))

Session Classification: Hands-On Tutorials