

7th Beam Telescopes and Test Beams Workshop



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Type: **not specified**

Hands-on: EUDAQ2 and AIDA TLU tutorial

Thursday 17 January 2019 14:00 (2h 30m)

**** Please bring your Laptop to the tutorial (optionally with a ROOT6 (or 5) installation/binary for the Online Monitor) ****

The EUDAQ framework and the TLU are two main components for EUDET-type telescopes. Both are coming with defined interfaces for user integration.

Slight changes for the users come with the second version of EUDAQ2 and the AIDA TLU. In this tutorial we will go through the installation, a minimum example to understand the EUDAQ framework, how-to to write an producer or move an producer from EUDAQ1 and the control of the AIDA TLU.

In addition, it will presented the new possibilities of data taking: multiple data collectors and different synchronization modes (by event ID, trigger ID or common clock).

As a preparation, participants can install EUDAQ2 on their Laptop/PC before the tutorial: Take the master-branch of the github repository, see the README here for example: <https://github.com/eudaq/eudaq#quick-installation-for-unix>

Further information are the EUDAQ quick start and manual as pdf: <http://eudaq.github.io/> and the AIDA TLU manual: https://github.com/PaoloGB/firmware_AIDA/blob/master/Documentation/Latex/Main_TLU.pdf

Possible contents due to need:

- Installation and usage
- Moving from EUDAQ 1 to 2 (Producer and Converter)
- Using the AIDA TLU and new DataCollectors
- Using the Python interface

**** As a possible preparation you can install EUDAQ2(and CACTUS for the AIDA TLU if you want to control the TLU via EUDAQ):**

- EUDAQ2: <https://github.com/eudaq/eudaq#quick-installation-for-unix>**
- CACTUS (IPBUS): <https://ipbus.web.cern.ch/ipbus/doc/user/html/software/install/compile.html#instructions>
- AIDA TLU Producer: <https://github.com/eudaq/eudaq/blob/master/user/tlu/README.md>

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Session Classification: Hands-On Tutorials