



Overview of the Hands-On Sessions

6 different tutorials at BTTB7
on Tuesday/Thursday afternoon



Tools for your test beam and you

Taking Data / Simulation

EUDAQ2
AIDA TLU

AllPix²

Analysis

Corryvreckan

EUTelescope
(passive)

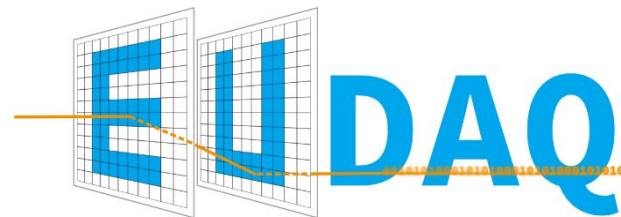
EUTelescope
(active)

Publication

Presentation
Skills

Usage of EUDAQ2 and AIDA TLU (or EUDET telescope upgrades)

by Yi Liu, Mengqing Wu, Dave Cussans, Jan DE

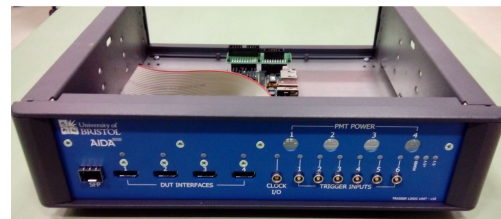
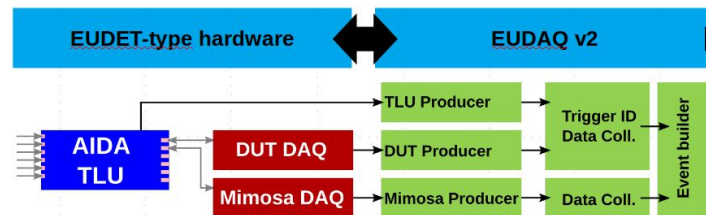


Contents

- How to use EUDAQ2 and the AIDA TLU
- new data taking modes
- How to update a EUDAQ1 producer/conv.

Possible preparation

- <https://github.com/eudaq/eudaq/blob/master/README.md#quick-installation-for-unix>



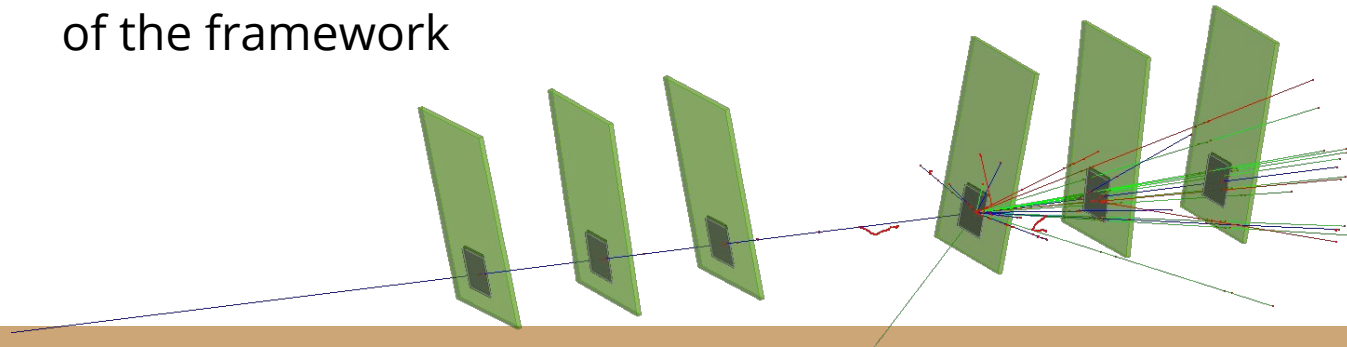
Allpix² Simulation Framework by Simon Spannagel

Contents

- step-by-step walk-through of a simple simulation
- additional guidance on different installation options
- outlook to more advanced features of the framework

Recommended Preparation

- Installation of the latest version (v1.3.1) on your computer or remote machine:
<https://cern.ch/allpix-squared>
- CVMFS version available



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The Corryvreckan reconstruction software by Morag Williams

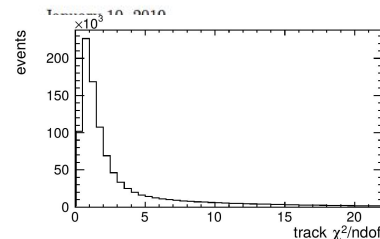
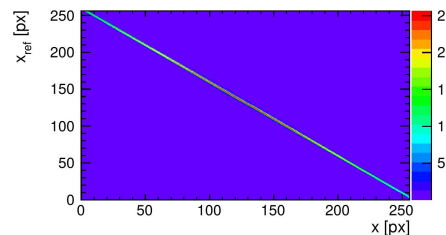


Corryvreckan User Manual

Morag Williams (morag.williams@cern.ch)
Simon Spannagel (simon.spannagel@cern.ch)
Jens Kröger (jens.kroeger@cern.ch)

Contents

- Introduction to the framework
- Hands-on simple reconstruction and analysis of test beam data
- Build-up of complexity, with the addition of different types of devices and configurations
- Look at available inputs and outputs, including data monitoring

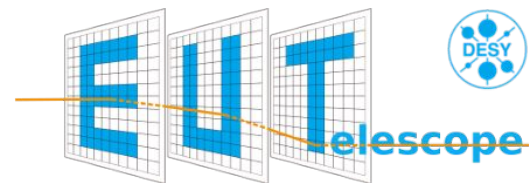


Recommended Preparation

- Installation of the latest version of Corryvreckan on your laptop or remote machine:
<https://gitlab.cern.ch/corryvreckan/corryvreckan>
- Installation guide available in the manual, found on the gitlab front page.

Only Telescope reco and X0 Images using EUTelescope

by Jan-Hendrik Arling et al.

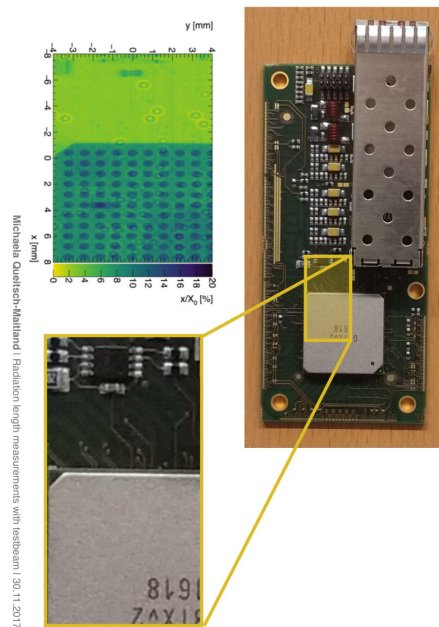


Contents

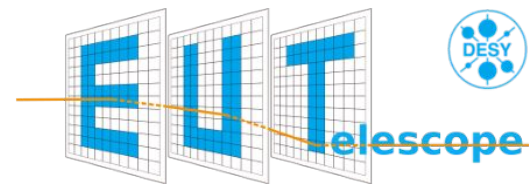
- brief overview on EUTelescope
- analysis flow from raw hit data to a image
- **using the GBL processor**
- using a “noDUT” and “SUT” dataset

Recommended preparation

- <https://github.com/eutelescope/eutelescope/wiki/Installation-and-preparation-for-BTTB7>



Telescope with DUT reconstr. using **EUTelescope** by Edo Rossi et al.

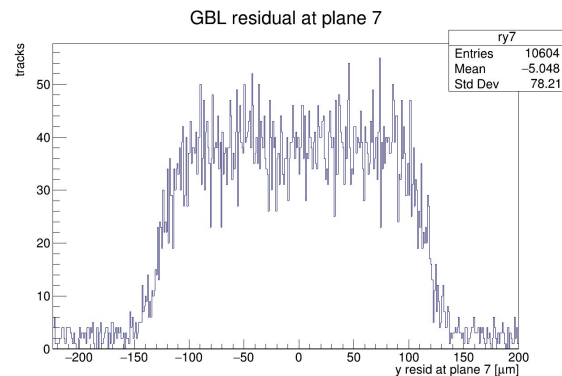
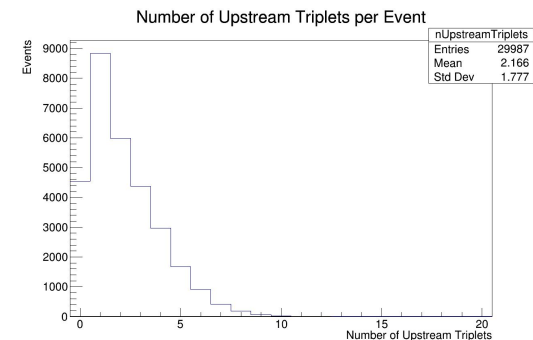


Contents

- DUT integration
- analysis flow from raw hit data to DUT residuals
- **using the GBL processor**
- optional using your dataset

Recommended preparation

- <https://github.com/eutelescope/eutelescope/wiki/Installation-and-preparation-for-BTTB7>



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EUTelescope
(passive)

EUTelescope
(active)

Presentation
Skills

Making the most of your 10 minutes of fame

Presentations Skills by David Barney

Contents

- identifying some simple but effective methods of improving presentations and posters
- hands-on activities to reinforce concepts

Recommended (mental) preparation

- your own laptops
- be prepared to share your work with fellow participants

a different example...

Review of Test Data Indicates Conservatism for Tiles Penetration

- The existing SOFI on tile test data used to create Crater was reviewed along with STS-107 Southwest Research data
 - Crater overpredicted penetration of tile coating significantly
 - Initial penetration to described by normal velocity
 - Varies with volume/mass of projectile (e.g. 200ft/sec for 3cu. In)
 - Significant energy is required for the softer SOFI particle to penetrate the relatively hard tile coating
 - Test results do show that it is possible at sufficient mass and velocity
 - Conversely, once tile is penetrated SOFI can cause significant damage
 - Minor variations in total energy (above penetration level) can cause significant tile damage
 - Flight condition is significantly outside of test database
 - Volume of ramp is 1920cu in vs 3 cu in for test

Thank you for your attention!!

You can attend up to 3 different tutorials - sign up

Tuesday
13:30

EUTelescope
(Scattering)

Corryvreckan

Presentation
Skills

Tuesday
16:30

EUTelescope
(DUT)

AllPix²

Thursday
14:00

EUDAQ2
AIDA TLU

AllPix²

Presentation
Skills