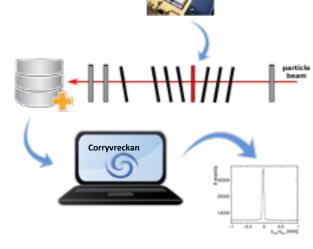


BTTB12 Hands-On Tutorials*

* for in-person participants



Test-beam Reconstruction with Corryvreckan

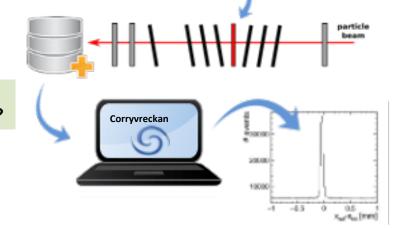
F. Feindt, N. Davis, S. Ruiz Daza

Content

- Introduction
- -What is Corryvreckan?
- -What's new since BTTB11?
- •Hands-on
- -installation options
- -setting up an analysis step-by-step

Focus can be adjusted according to interests of participants!

- •What's the philosophy?
- •Resources: Where to find what?



•Which option is the right one for my needs?

- many different example use-cases
- •analyse SPS and DESY data
- •focus on different event building schemes

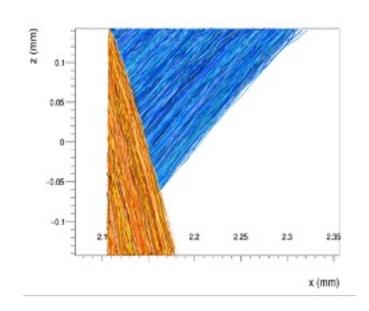
Hands-On Tutorials | BTTB12 | 15.04.2024 2

Silicon Detector Monte Carlo Simulations using Allpix Squared

- •A beginner's guide to detector simulations: **step-by-step** walkthrough of simple and more sophisticated setups
- Looking at what different modules are doing, and how to look at their outputs
- •Starting from simple sensor, and in the end including multiple sensors and importing electric fields from TCAD simulations
- •An exercise on setup resolution optimisation will be presented
- •Q&A: we are happy to answer any questions about the framework

H. Wennlöf, M. Del Rio Viera, S. Lachnit, D. Rastorguev



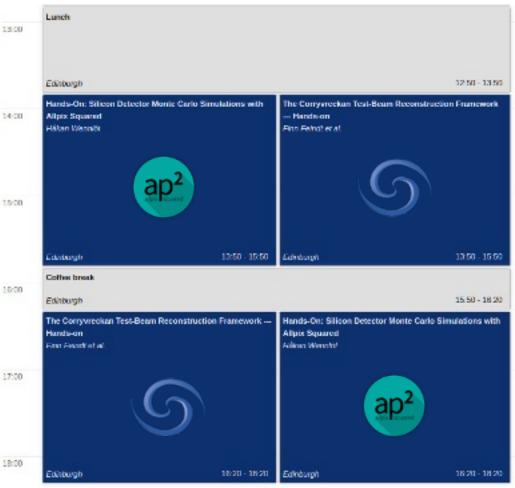


Timetable

- •Tuesday afternoon, two slots with both tutorials each capacity of 50 participants
- Allpix Squared: room 5237 (5th floor)
- Corryvreckan: room 5328 (5th floor)
- •The rooms are in another building "James Clerk Maxwell Building (JCMB)"



Tuesday



Preparation: 9 & 2

Virtual Machine for BTTB11 workshop (recommended)

Includes the sample data for *Corryvreckan* tutorial!

- •Comes with Corryvreckan, Allpix Squared, ROOT & Geant4
- Download and install VirtualBox
- •Download <u>virtual machine image</u> **before** the tutorial (large file!)
- •Click for instructions on setting up the virtual machine

<u>Local installation possible</u> (takes some time depending on satisfied dependencies), please install before tutorial

Sourcing via CVMFS (via LXPLUS/NAF/...) possible

•Additional preparation for *Corryvreckan* (download of sample data, not required for VM): instructions

Hands-On Tutorials | BTTB12 | 15.04.2024

Sign Up!

Please sign up for the tutorials via the workshop Indico before Tuesday 16th, 12:00

We wish you an interesting & productive time at the **BTTB12**!