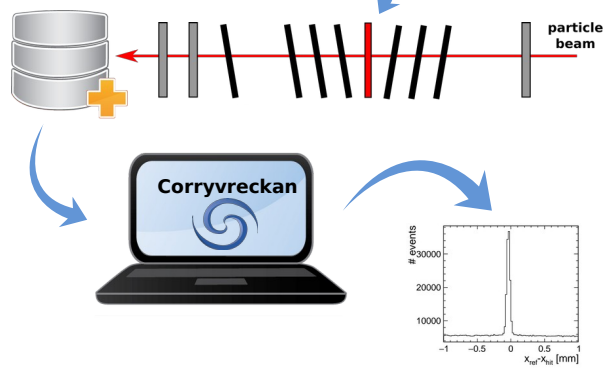
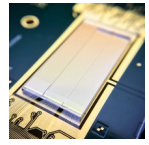
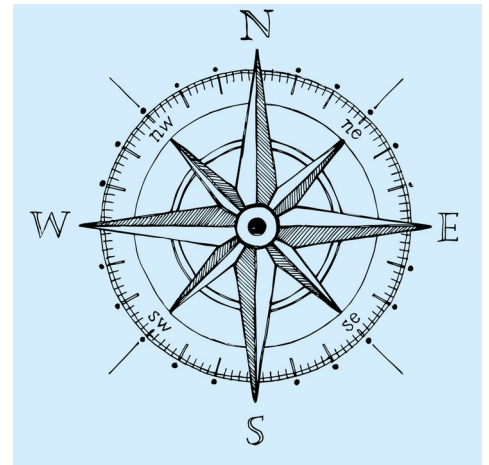


# BTTB11

# Hands-On Tutorials

\* for in-person participants



# Test-beam Reconstruction with Corryvreckan

F. Feindt, A. Simancas,  
G. Vignola

## Content

- **Introduction**

- What is Corryvreckan?
- What's new since BTTB10?

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

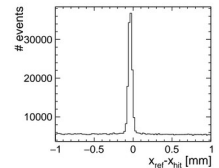
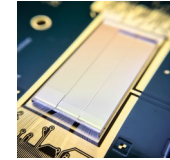
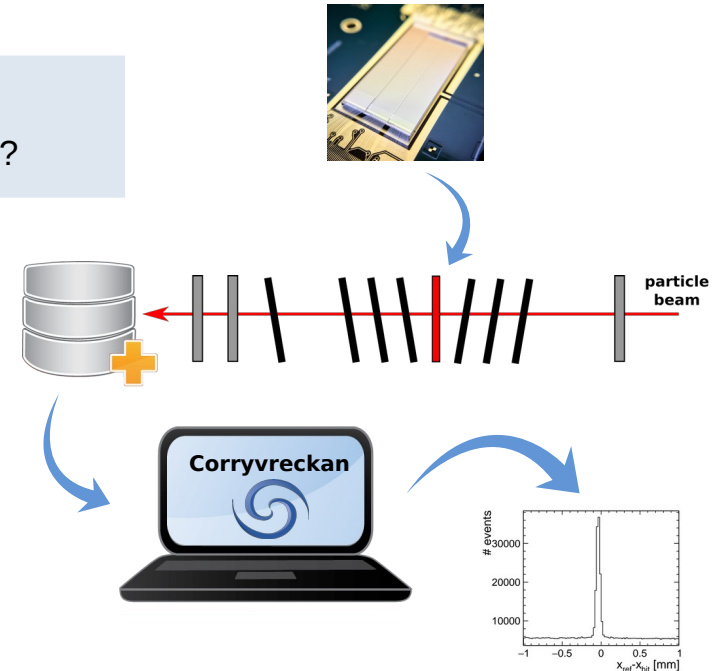
- **Hands-on**

- installation options
- **setting up an analysis step-by-step**

- Which option is the **right one** for my needs?

**Focus** can be adjusted according to **interests of participants!**

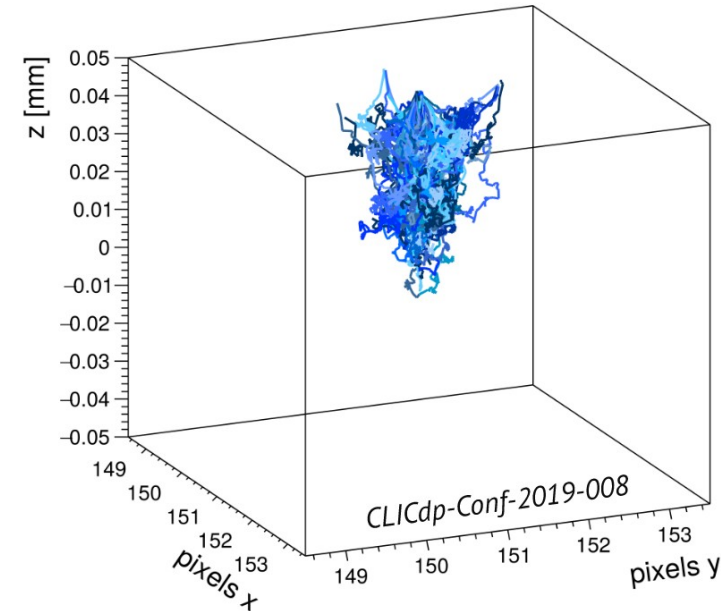
- many different **example use-cases**
- analyse **SPS** and **DESY** data
- focus on different **event building** schemes



# Silicon Detector Monte-Carlo Simulations with Alpix Squared

H. Wennl6f, S. Ruiz Daza,  
M. Del Rio Viera, S. Lachnit,  
S. Spannagel, P. Schütze

- 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

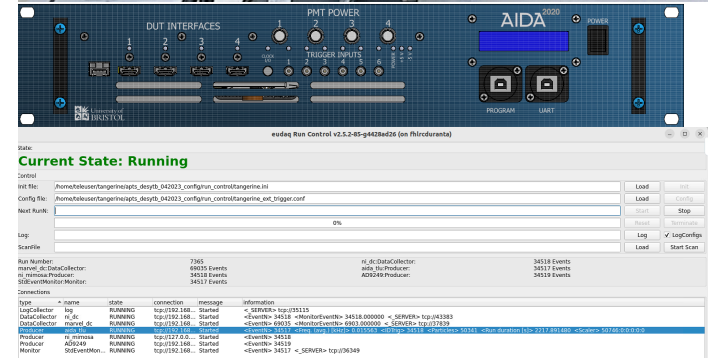


# How to Test Beam?

## Making the most of your beam time

- Test beams are challenging and we need to efficiently use the available time
- In the Hands-on we will go through ...
  - The DESY II infrastructure
  - Soft-/Hardware interfaces
  - Integration possibilities
  - Operating the telescopes
  - If time allows for: optimising the geometry

Due to safety considerations only **10 people** per slot with mandatory **safety lecture**.  
**Registration mandatory!** Info coming up ...



name	state	connection	message	information
LogCollector	Running	tcp://192.168.1.100:10000	Started	<SERVER> tcp://192.168.1.100:10000
DataCollector	Running	tcp://192.168.1.100:10000	Started	<SERVER> tcp://192.168.1.100:10000
Monitor	Running	tcp://192.168.1.100:10000	Started	<SERVER> tcp://192.168.1.100:10000
Producer	Running	tcp://192.168.1.100:10000	Started	<SERVER> tcp://192.168.1.100:10000
Monitor	Running	tcp://192.168.1.100:10000	Started	<SERVER> tcp://192.168.1.100:10000

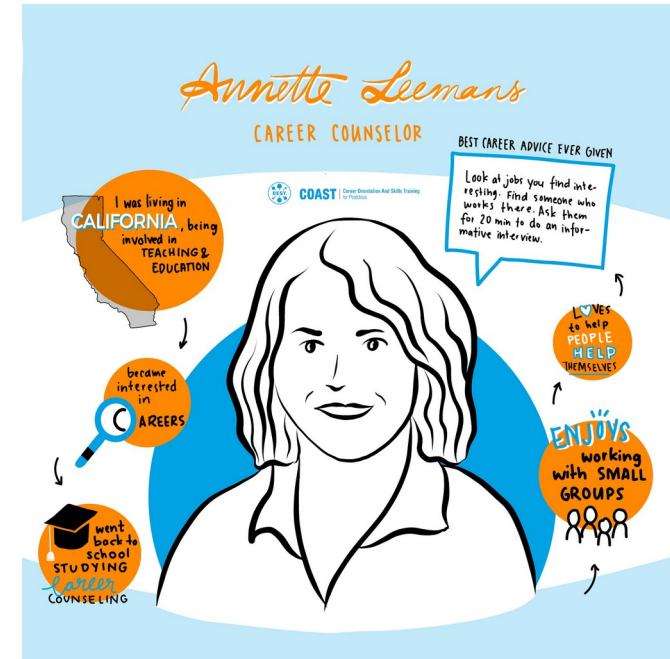
# COAST

Career Orientation And Skills Training

A. Leemans

## Create a Career that Suits You

- Aims:
  - Create awareness on strategic career planning
  - Reflect on your own expertise and values
  - Use tools to be your own advocate
  - Know the power networking
- Methods:
  - individual and group activities, discussion and reflection
- Trainers: Friederike Eickhoff & Annette Leemans
- Maximum: 12 participants



# Tuesday Timetable

# Thursday

14:00	DESY Canteen 13:00 - 14:30	Hands-On Tutorial: Testbeam Safety Lecture CSSB Auditorium 13:45 - 14:30
15:00	Making the most out of your test beam time Adrian Herkert et al.	The Corryvreckan Test-Beam Reconstruction Framework --- Hands-on Finn Feindt et al.
16:00	DESY TEST BEAM.	Bldg. 1 / ATLAS Control Room 14:30 - 16:30
17:00		Coffe Break TBD 16:30 - 17:00
18:00	DESY TEST BEAM.	Hands-On: Silicon Detector Monte Carlo Simulations with Allpix Squared Håkan Wennlöf et al.
19:00		Bldg. 1 / ATLAS Control Room 17:00 - 19:00
19:00	Bldg. 27 / TB22+TB24 14:30 - 19:00	

14:00	Hands-on: Create a Career that Suits You: Set Yourself Up for Lucky Coincidences! Annette Leemans	Hands-On: Silicon Detector Monte Carlo Simulations with Allpix Squared Håkan Wennlöf et al.	Making the most out of your test beam time Adrian Herkert et al.	The Corryvreckan Test-Beam Reconstruction Framework --- Hands-on Finn Feindt et al.
15:00	Bldg. 1 / SR3 13:30 - 15:30	Bldg. 1 / SR4b 13:30 - 15:30	DESY TEST BEAM.	Bldg. 1 / SR4a 13:30 - 15:30
16:00				Coffee Break
17:00			Bldg. 27 / TB22+TB24 13:30 - 18:00	Meet the industry Bldg. 1 / SR4a+b 16:00 - 18:00

# Preparation:



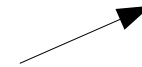
&



- **Recommendation:**

Virtual Machine for BTTB11 workshop

Includes the sample data  
for *Corryvreckan* tutorial!



- Comes with *Corryvreckan*, *Allpix Squared*, *ROOT* & *Geant4*
- Download and install [VirtualBox](#)
- Download [virtual machine image](#) **before** tutorial (> 5 GB)
- [Click](#) for instructions on setting up the virtual machine
- Local installation possible (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](#)

# Preparation:



- Visit the DESY II Test Beam safety lecture:

**Tuesday, 13:45, CSSB Auditorium**



# Sign Up!

Please sign up for the tutorials  
via the [workshop Indico!](#)

Do so until Monday 4 pm (Test Beam)  
or before the tutorials (others).

We wish you an interesting & productive time  
at the **BTTB11!**

