Contribution ID: **20**   Type: **not specified**

Corryvreckan reconstruction software

Tuesday 15 January 2019 10:20 (20 minutes)

Corryvreckan is a modular reconstruction framework developed for test beam data analysis within the CLICdp collaboration. It has been created in the same spirit as Allpix squared, and thus shares its philosophies of high configurability and flexibility, user-friendliness, and high standard of documentation. Corryvreckan's modular structure allows for separation between the framework core and the implementation of the algorithms in each module. This allows users to 'plug-in'the wanted modules and configure their parameters easily from one configuration file. The software is written in modern C++, following the C++11 and C++14 standards and has a continually updated user manual. Notable features of Corryvreckan are the 4D tracking capabilities, online monitoring module useful for checking data quality during data taking, and the ability to use different combinations of triggered and trigger-less devices.

In this talk, the software framework will be outlined, and details of the module capabilities discussed. Examples of reconstructed data and configuration set-ups will also be shown.

In conjunction with this talk there will be a 2.5 hours 'hands-on'tutorial on Corryvreckan during BTTB7.

Primary author: WILLIAMS, Morag Jean (University of Glasgow (GB))

Presenter: WILLIAMS, Morag Jean (University of Glasgow (GB))

Session Classification: Software Tools