

Contribution ID: 136 Type: ORAL

Estimation of the fluxes in ILD calorimeters at FCC-ee

Thursday 10 October 2024 11:36 (15 minutes)

The calorimeter systems of the detectors near future HET factories must operate in very different running conditions: machine backgrounds, dominant cross-sections and luminosities vary by several orders of magnitude as a function of the center-of-mass energy. A determination of the expected fluxes in the calorimeters is mandatory to scale the electronics, power dissipation and data output.

Using a new versatile tool, a set of fluxes is evaluated from detailed simulations: energy, time and occupancy spectra, as well as secondary distributions, power, dynamic ranges in energy and time, and data fluxes, given reasonable hypotheses on the electronics.

Preliminary results will be presented and discussed for the ILD detector at the FCC-ee.

Primary author: BOUDRY, Vincent (LLR - CNRS, École polytechnique/IPP Paris)

Co-authors: DE LA TAILLE, Christophe (OMEGA); Mr U. OF HAWAII AT MANOA, Hassouna (U. of Hawaii

at Manoa)

Presenter: BOUDRY, Vincent (LLR - CNRS, École polytechnique/IPP Paris)

Session Classification: Parallel - WG3

Track Classification: WG3: WG3 - Detector R&D