

Electron Detection System Working Group Update



LUXE

Ivo Schulthess, on behalf of the electron detection system working group
LUXE Steering Board Meeting

25.06.2025

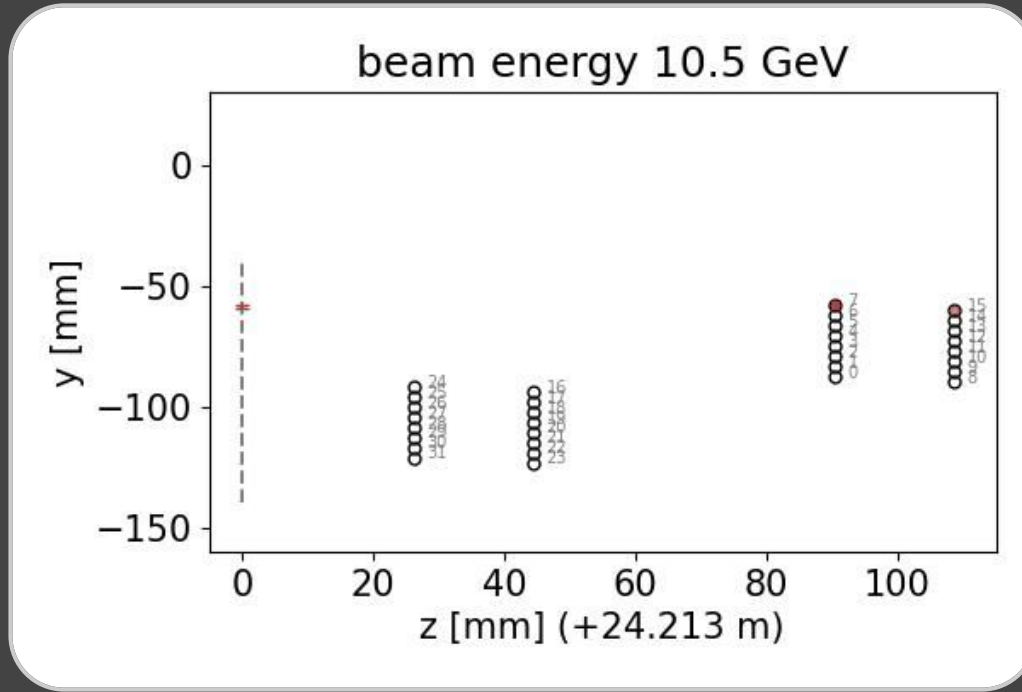
EDS Update, 25.06.2025

Summary

- LED pulser is progressing in collaboration with Stefan Schmitt
- Proceeding of EDS@E320 is accepted by NIMA and will be published soon
- current effort is going into ETTsim
 - got a running simulation and can analyse the data
 - y-scans as a first test
 - E-scans -> goal to get a detector response matrix
 - vertical smearing from dipole
 - understanding the various input parameters and the spectrometer settings, and the response of the EDS

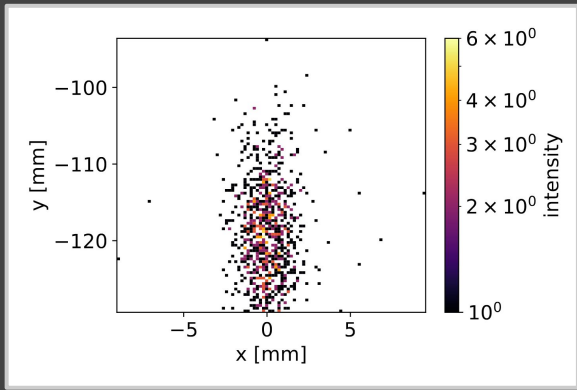
EDS Update, 25.06.2025

ETTSim - Beam Energy

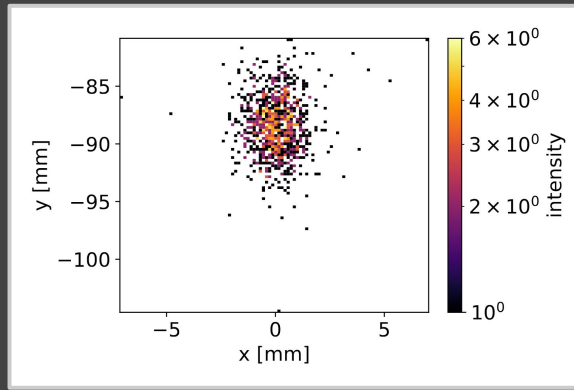


EDS Update, 25.06.2025

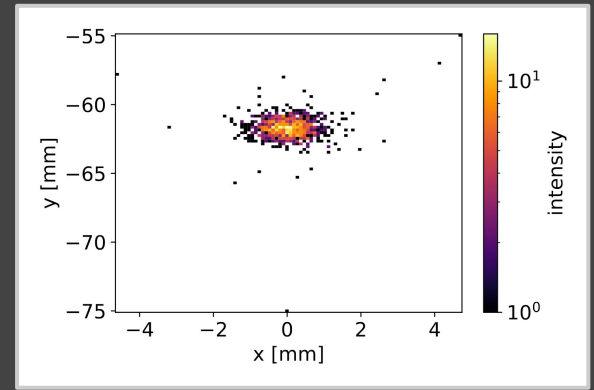
ETTSim - Beam Size Dispersion



5 GeV



7 GeV



10 GeV

EDS Update, 25.06.2025

ETTSim - Beam Size Expansion

