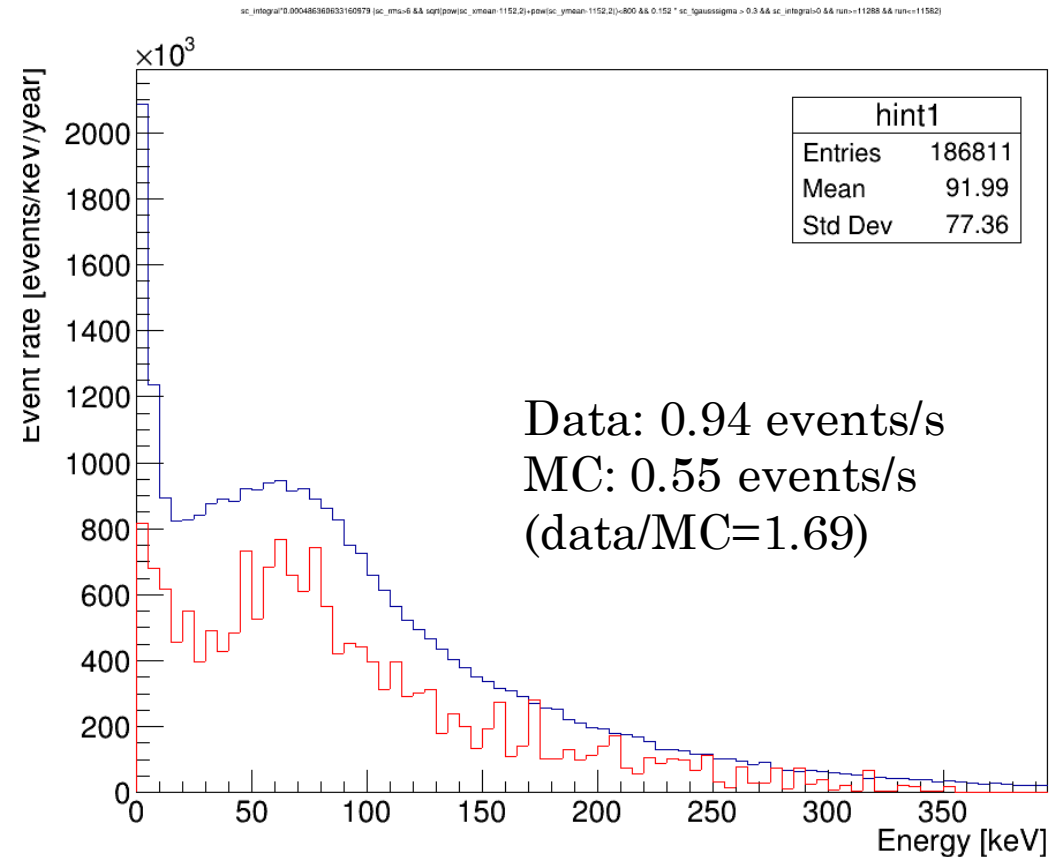


Data/MC preliminary comparison

- As a preliminary approach, I am comparing the data from run2 (LIME underground with 4cm of copper shielding) with the MC truth from GEANT4 simulations
- I apply to the data some cuts to reduce fake rate (as optimized by Emanuele)
 - $sc_rms > 6$
 - $0.152 * sc_tgaussigma > 0.3$
- I apply to data and to MC a geometrical cut at the center of the image with a radius of 800 pixels
- The data are normalized to the real data taking time computed as $stop_time - start_time$ of each run
 - How should we take into account the dead time of the camera?



Data/MC preliminary comparison

- External gamma simulation had low statistics, so I re-run it, also setting the maximum step in the gas to 10 um (for digitization) and 32x32cm²
- It shows a weird behaviour to be understood
- Any ideas?
 - No dependance between energy and track ID, particle type, position in xyz...
- Anyway I **digitized** the tracks from this new simulation, the equivalent simulation time is about 24hr
 - They need to be reconstructed with the exact same version of the reconstruction code as for the data analysis

