## Update on PMT simulation

25-07-2023

## PMT simulation update

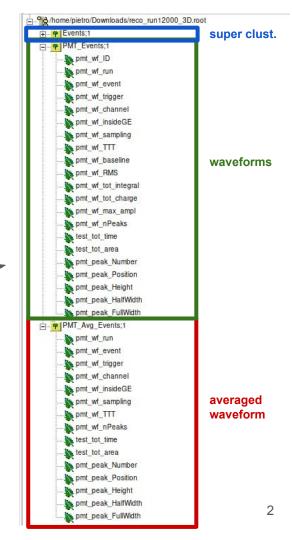
- simulation (CMOS + PMT) code is here:

https://github.com/CYGNUS-RD/digitization/tree/pmt (pmt branch)

- Running time:

8 sec/track for 8 keV ER (38% of the time is for the PMT, the rest is mostly for saturation)
17 sec/track for 16 keV ER (53% of the time is for the PMT)
40 sec/track for 30 keV ER (67% of the time is for the PMT)

- next steps:
  - a. reconstruct simulated waveforms with the updated reconstruction code (by David), here <a href="https://github.com/pietro14/reconstruction/tree/pmt\_reco\_w23">https://github.com/pietro14/reconstruction/tree/pmt\_reco\_w23</a> [pmt\_reco\_w23 branch] (currently able to reconstruct only real PMT and CMOS data)
  - compare Fe55 PMT data with simulation (who?)



## Longer tracks look reasonable in simulation

