

SFT Group Meeting

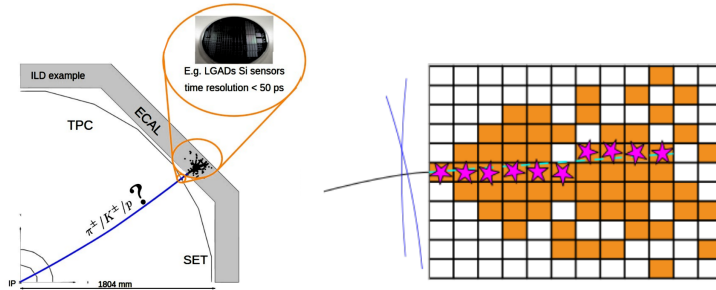
Status Update #3

Konrad Helms

8th June 2023

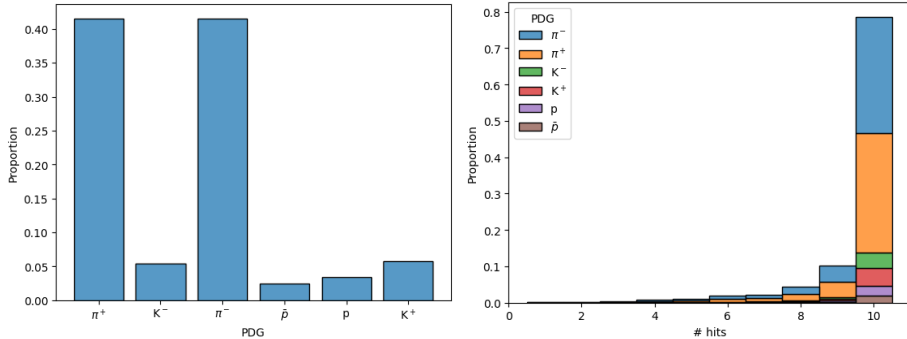
What am I doing?

- Regression: TOF estimation using ML techniques based on ECal hits
- data: first 10 hits closest to extrapolated track in ECal

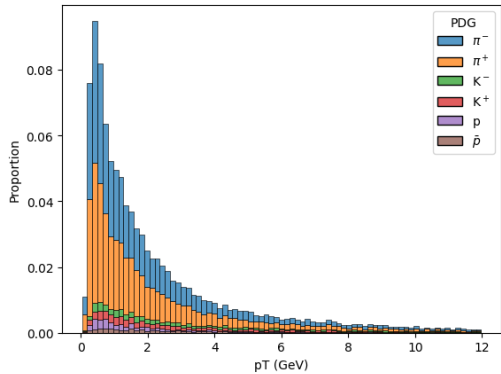
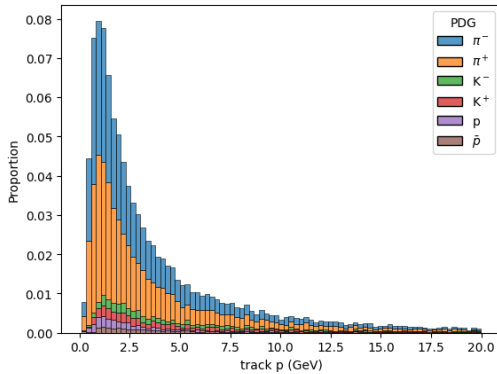


01 June - 08 June

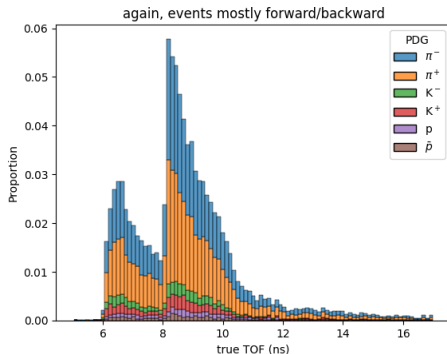
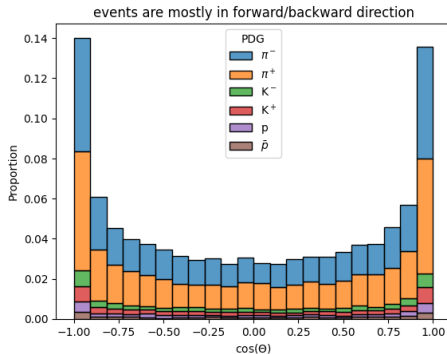
- to really make progress: understand data better! ➡ plots!



01 June - 08 June

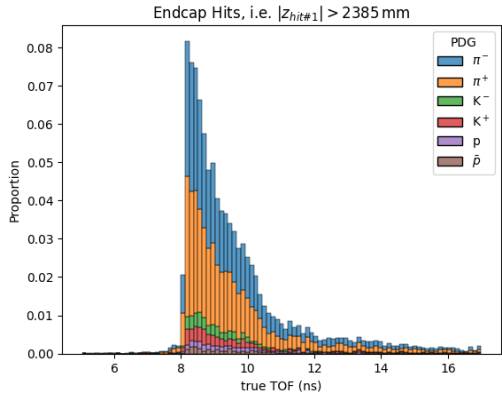
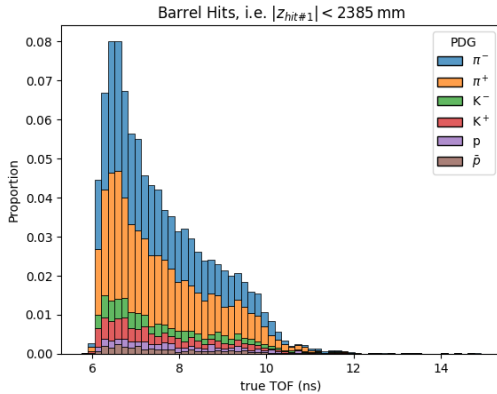


01 June - 08 June

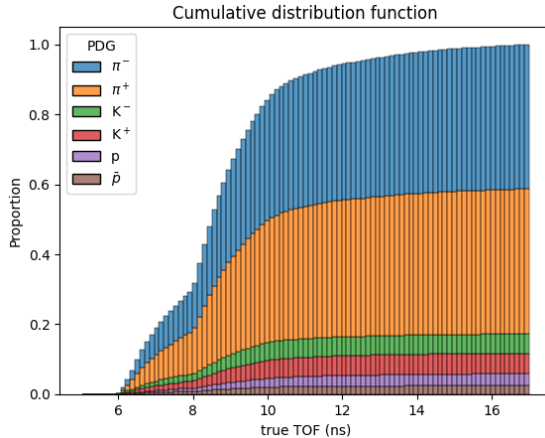


- quick estimation:
 - peaks at 6.5 ns and 8.5 ns
 - $\Rightarrow 6.5 \text{ ns} \cdot c \simeq 1.95 \text{ m}$ and $8.5 \text{ ns} \cdot c \simeq 2.55 \text{ m}$

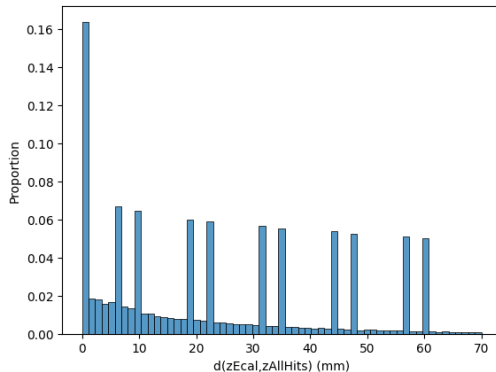
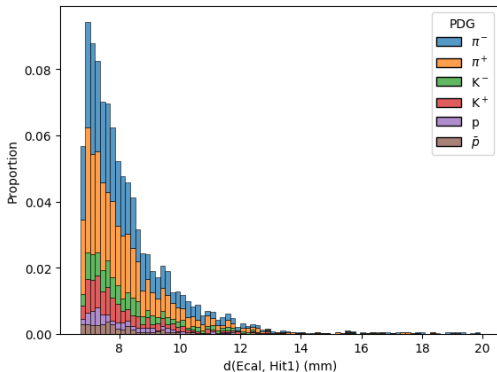
01 June - 08 June



01 June - 08 June

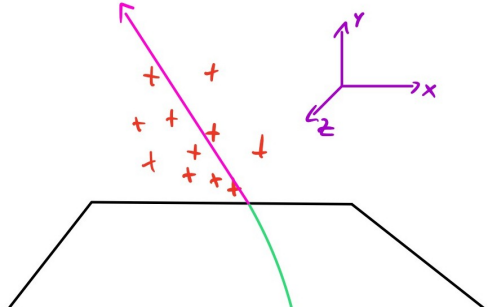
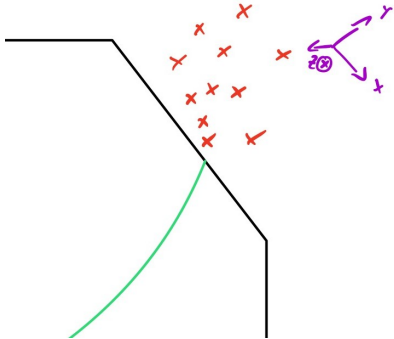


01 June - 08 June



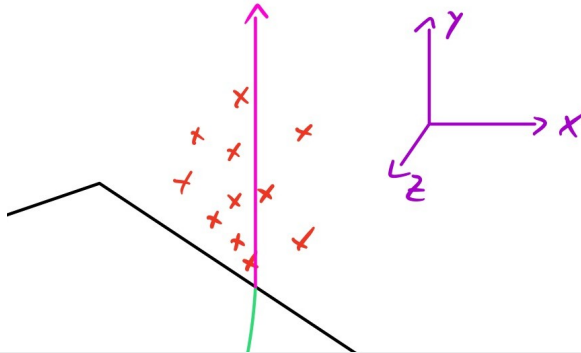
01 June - 08 June

- new coordinate system



01 June - 08 June

- new coordinate system



Outlook

- generate dataset with ≥ 10 points
- \vdots
- point cloud approach