

# SFT Group Meeting

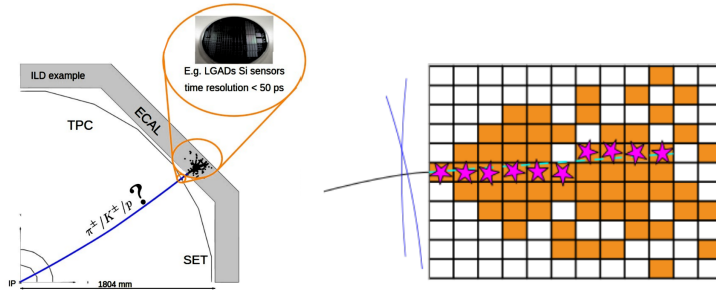
## Status Update #4

Konrad Helms

15th June 2023

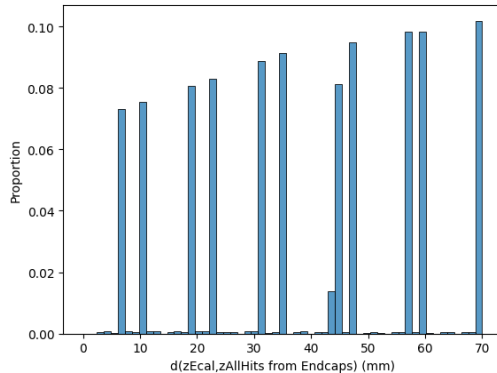
# What am I doing?

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



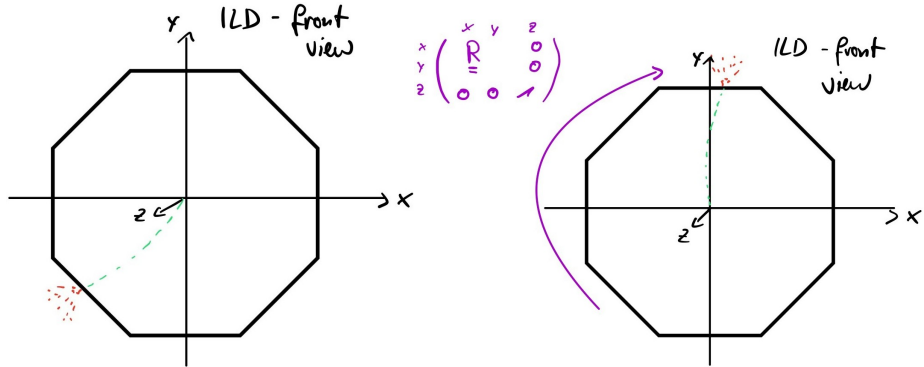
## 08 June - 15 June

- fixed plot (plotting issue!)



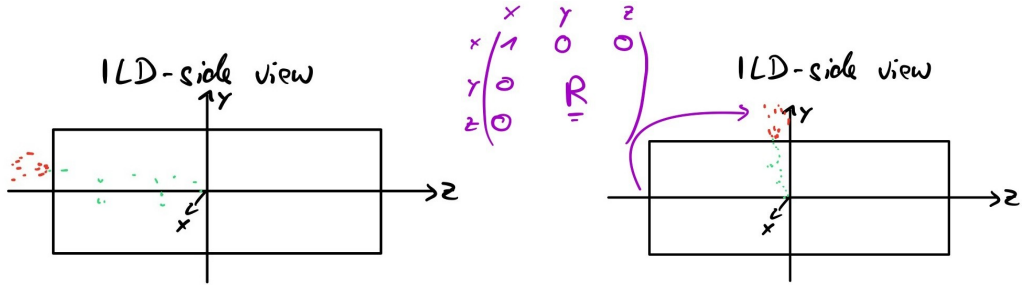
## 08 June - 15 June

- find a suitable coordinate system - rotate & centre



## 08 June - 15 June

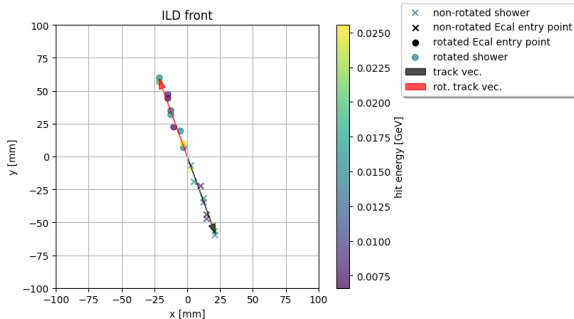
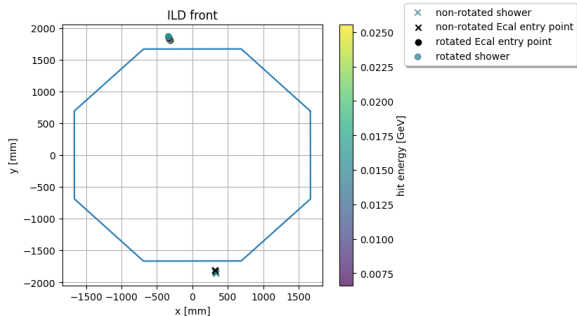
- find a suitable coordinate system - rotate & centre



# 08 June - 15 June

## Barrel Particle Example

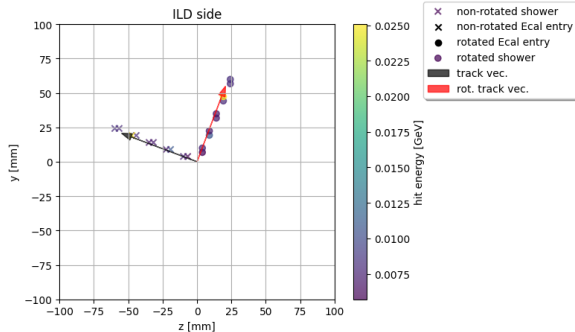
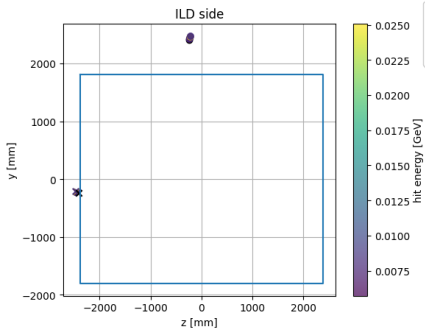
- left: rotated, right: rotated and centred



# 08 June - 15 June

## Endcap Particle Example

- left: rotated, right: rotated and centred



## 08 June - 15 June

- generated dataset with 30 hits closest to track extrapolation
- generated dataset with full shower
- started looking at PointNet(++)



# Outlook

- work on PointNet++ implementation