## **Status report - Thursday**

**Timeline for Bachelor Studies** 

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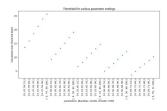
September 10th, 2020

#### March

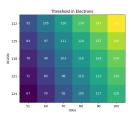
- Starting to work together with Bogdan and Pascal on the ALPIDE Telescope.
- · Main Operation of the Telescope
- · What is a Threshold Scan?

## April

Plotting first results of threshold scans

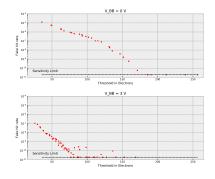


 Later that month: Automising the procedure and plotting the first Threshold "Heatmaps"



### **April**

- Also finishing the First Google Document
- Looking at first Noiseoccupancy Scans



- Deciding to take Cosmic data due to the Health restrictions
- · Finishing the second Google Document

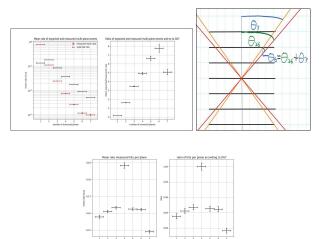
## May

- Cosmics yield huge filesizes. Starting to work on a program that handles them...
- Meanwhile keep taking as much data as possible, and documenting the process in another Google Document



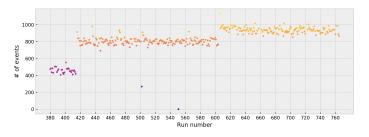
## May

 Looking especially at Muon rates, chip effectiveness and making first calculations about angular distributions



### June

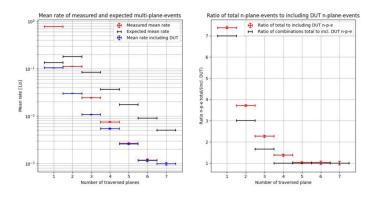
Finishing the compression program, and taking first looks at the cosmic data as a whole



 Starting to work on a tracking algorithm, since the data per run is too small for corryvreckan

#### June

Fixing muonrate calculations and looking at overestimation

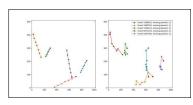


# July

 Finishing Event organization and first align attempts (First with Testbeam Data)

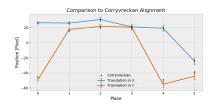


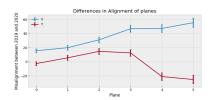
· Meanwhile visualizing the first Cosmics



### July

· Finished Tracking algorithm and comparing alignment to DESY-Testbeam Data





- Found out, that transporting the telescope changes the alignment by up to 1.7mm.
- Looking at  $\chi^2$  and identifying further alignment issues

