

Status Report

Cosmics with the ALPIDE Telescope

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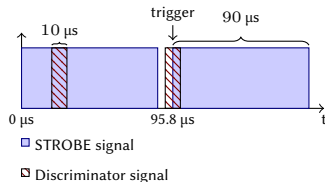
September 22th, 2020

Back in May...

- Limited access to GSI
- Set up the telescope to be pointed towards the sky and record cosmics
- At first **no scintillators** available

Method of operation

- Use a NIM signal generator to create artificial triggers for the chips.
- Trigger every $\sim 100 \mu\text{s}$
- That way no event should be missed



Back in May...

PROs

- Running "without" external trigger possible
- Thin time slices makes it really unlikely to detect two muons at the same time, especially from similar angles.

CONS

- $> 10\,000$ Events per second (mostly empty)
- 4.4 MB per second of Data written to the disk
- EUDAQ 1 crashed often at filesizes > 5 GB \rightarrow Runtime limited to ≈ 17 min