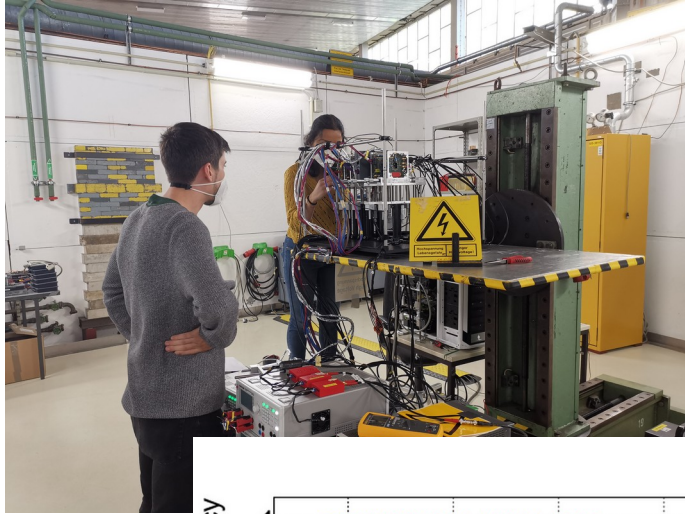


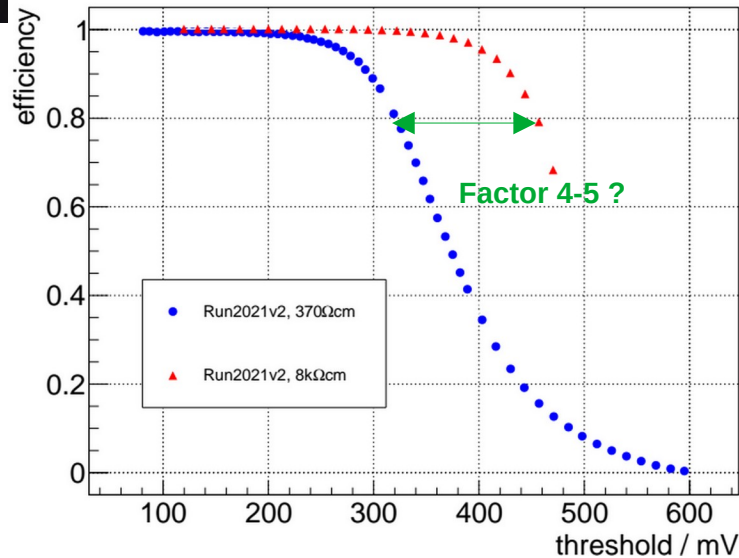
Weekly Update

- Testbeam 11.7.
- TS3 and Run2021V3 preparations

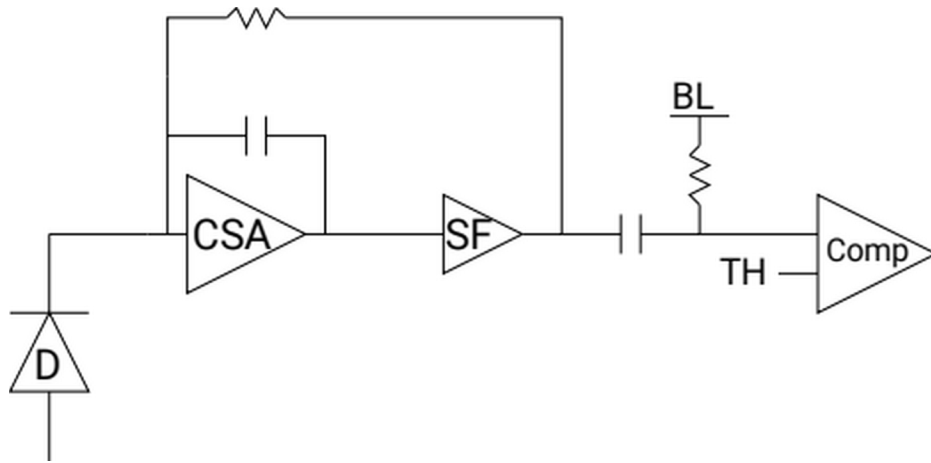


Testbeam

- 1 week DESY (11.-17.7.)
- Alpide Telescope with Lyso+SiPM time ref
- DUTs:
Run2021v2 with TS3
Run2021v3 (HiDR)
- 3 Scans:
1x TS3 with 370 OhmCm (Sub-Pixel Timing)
1x Run2021v3 with 370 OhmCm
1x Run2021v3 with 8k OhmCm



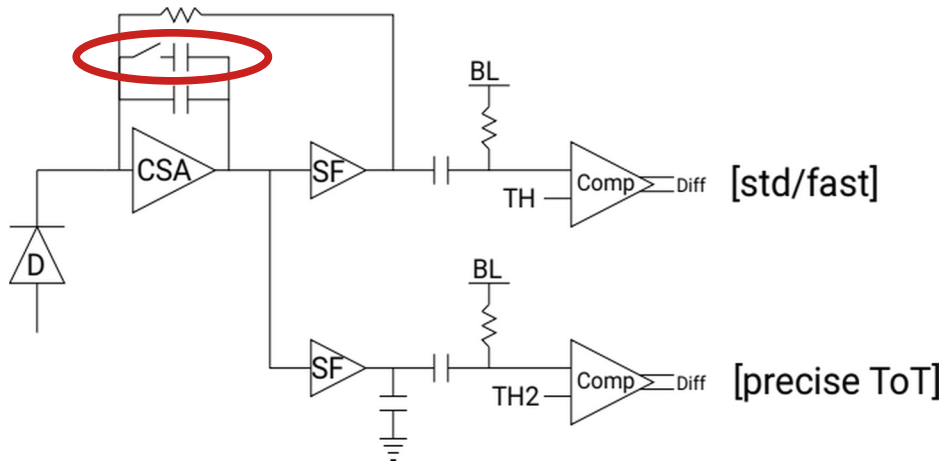
The (Run2021)V3-Chip



- Pixel size $165 \times 50 \mu\text{m}^2$
- Two (distributed) comparators per pixel with differential signal transmission
→ one pixel to two periphery cells
- HiDR: Feedback capacity can be increased
$$U_{\text{amp}} = Q_{\text{Signal}} / C_f$$

→ More charge required to use full output swing
- Successfully operated in the lab with Sr90 source
→ Optimisation on going

The (Run2021)V3-Chip



- Pixel size 165x50 μm^2
- Two (distributed) comparators per pixel with differential signal transmission
→ one pixel to two periphery cells
- HiDR: Feedback capacity can be increased
$$U_{\text{amp}} = Q_{\text{Signal}} / C_f$$

→ More charge required to use full output swing
- Successfully operated in the lab with Sr90 source
→ Optimisation on going

Stretch TDC

