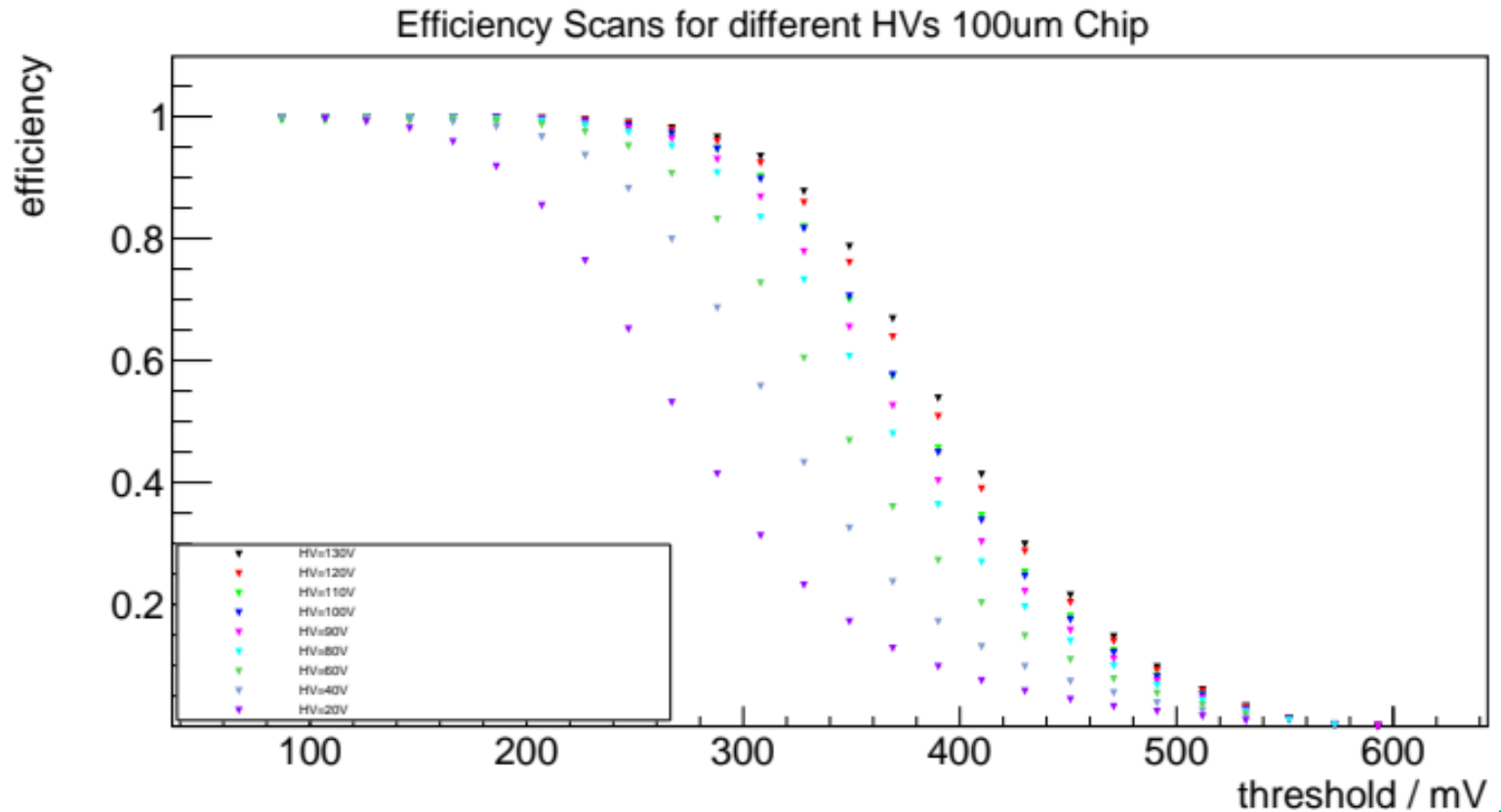


Testbeam Results

- Setup: Telescope (3 Mupix 10 references, 1 DUT)
- DUTs: Run2021 v2: 100 μm (HV appl. at chip) and 50 μm (HV appl. at pixel)
- Threshold scans at different HVs

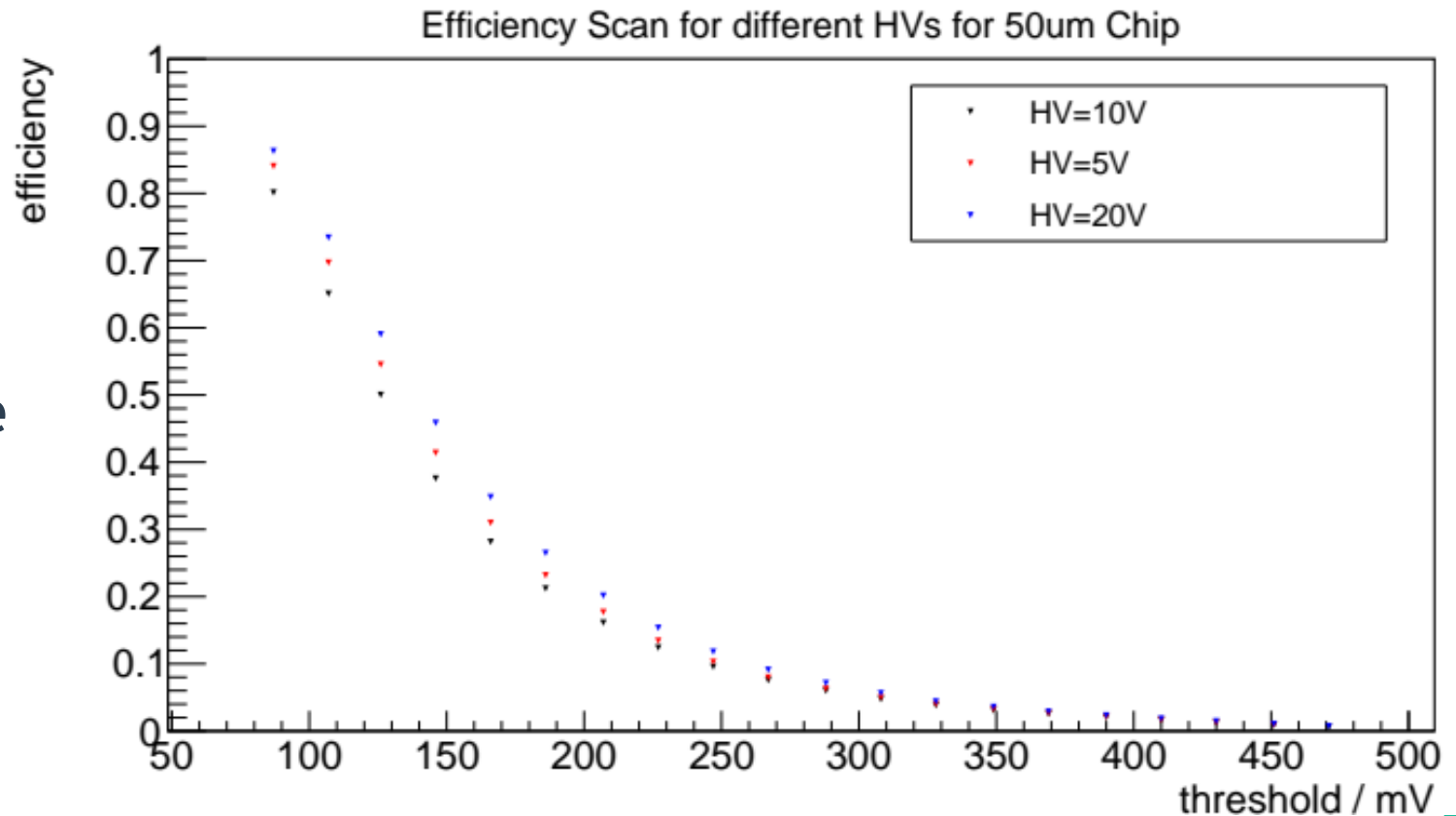
Efficiency for different HVs 100 μm Chip

- >100 mV plateau reached for HV>60 V
- Up to 99.85% eff. reached

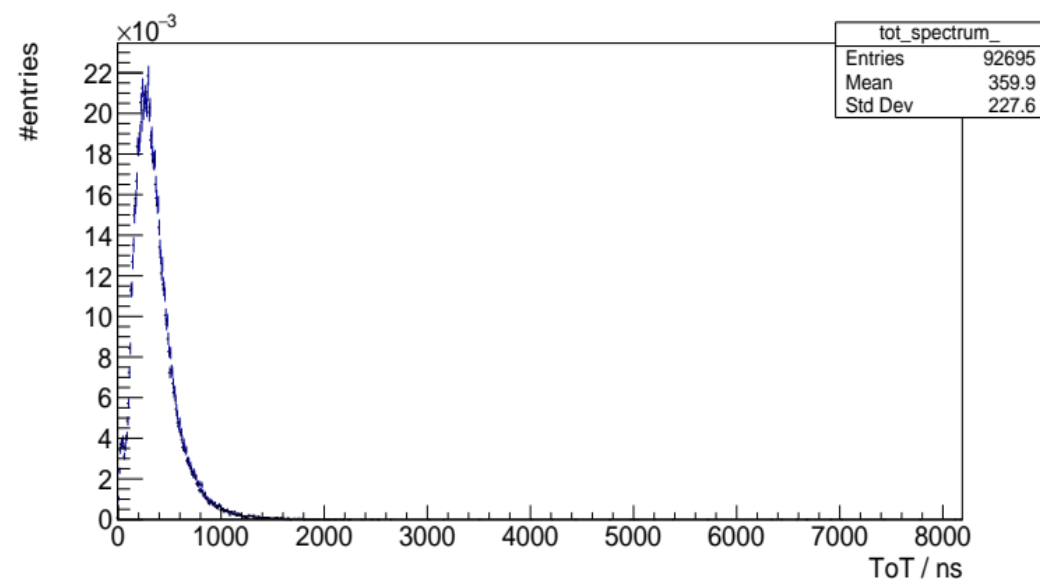
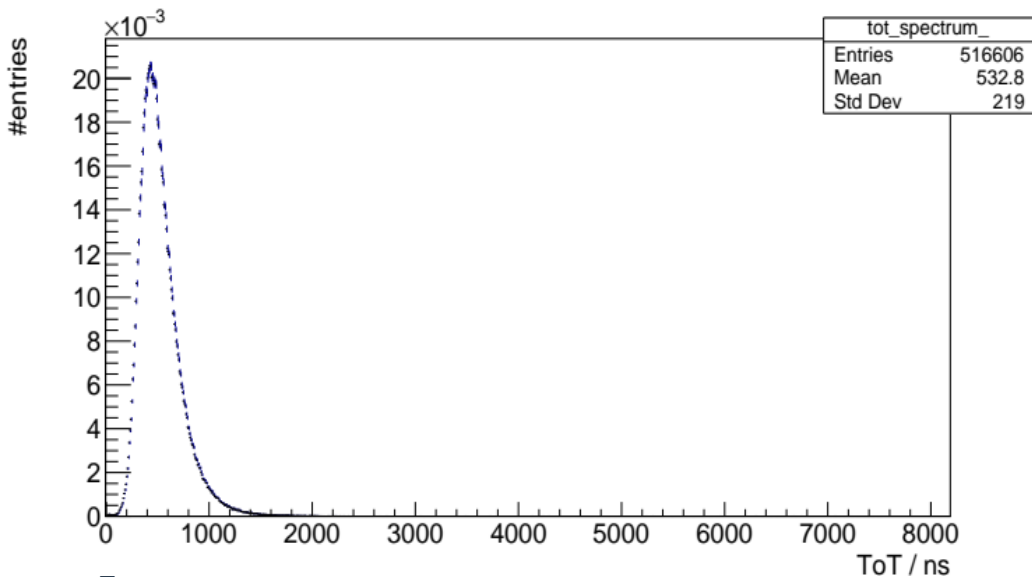


Efficiency for different HVs 50 μm Chip

- Thermal effect: HV current runs very high
- 5V only stable point



TOT at 20 V and Thr 1111 mV



- 100 μm Chip has higher ToTs at same threshold and HV (20 V)
→ Diffusion?

Measurements in the Lab

- High HV current for 50 μm chips depend on light
→ But current still runs in darkness for HV > 15V
- Planned: Compare the same Chips with Sr/ Fe source