

Direct MIP detection with sub-10 ps timing resolution Geiger-Mode APDs

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Direct MIP detection with SPAD implemented in 180 nm CMOS technology

- Device presentation
- Timing performance with photons
- MIP time of flight measurements
- Radiation hardness studies
- Future developments

Bias (V)	FWHM (ps)	FWTM (ps)	σ (ps)	σ_{single} (ps)
24	27 ± 1	104 ± 4	11.5 ± 0.4	8.1 ± 0.3
27	22 ± 2	62 ± 3	9.4 ± 0.7	6.4 ± 0.5

