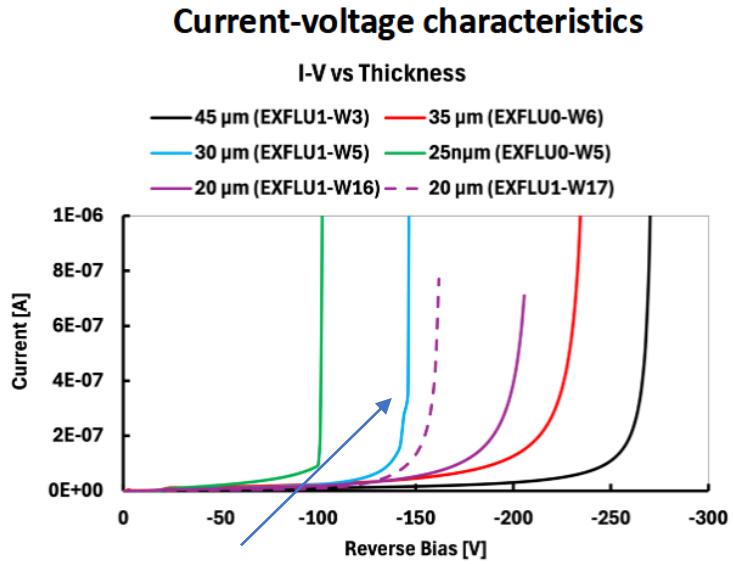
Timing with thin LGADs (ExFlu INFN) Torino

- Details on samples: TREDI 2025 Ferrero
  - We received a pile of them (estimate 50+)
- Sr90 timing done with one sample
  - ExFlu1 W5 pad 1.3 Sr 4-D **(30 µm thick)**
  - Breakdown at 65 V at -28°C
    - Seems too early, expect smaller current & VBD > 80 V
    - No C-V/I-V done beforehand
  - Single pad 1.3 mm, GR bonded

Production	Wafer	Thickness nominal [µm]	Gain implant Diffusion	p^+ Dose	C Dose	Sensor capacitance [pF]
EXFLU1	W3	45	CBL	1.14	1	3.9
EXFLU0	W6	35	CHBL	0.94	1	5
EXFLU1	W5	30	CBL	1.12	1	2.2
EXFLU0	W5	25	CHBL	0.94	1	4.1
EXFLU1	W16	20	CHBL	0.80	1	3.3
EXFLU1	W17	20	CBL	0.96	1	3.3



140 V at 20 °C (Ferrero, DESY TB)

Sr90 Results

-28°C