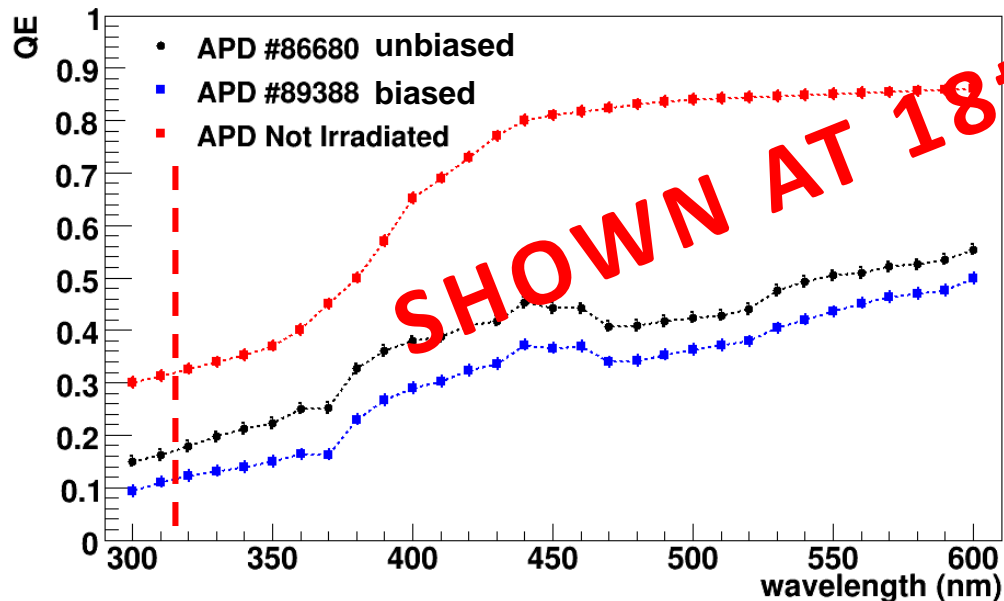


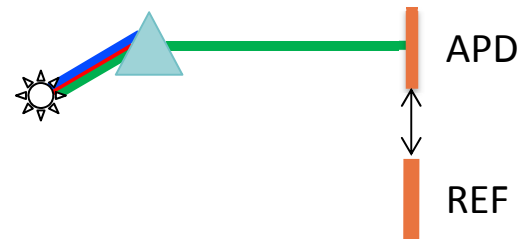
The same samples were irradiated with fast (0.1-10 MeV) neutrons at Tapiro, up to a fluence of 1×10^{13} n/cm² (10 years x5 of B2)

- One device was biased during irradiation
- Secondary photons TID less than previous Calliope test

Excelitas APD Quantum Efficiency after 1×10^{13} n/cm²



QE measurement at Gain = 1
PIN diode used as reference
Excelitas QE curve from datasheet



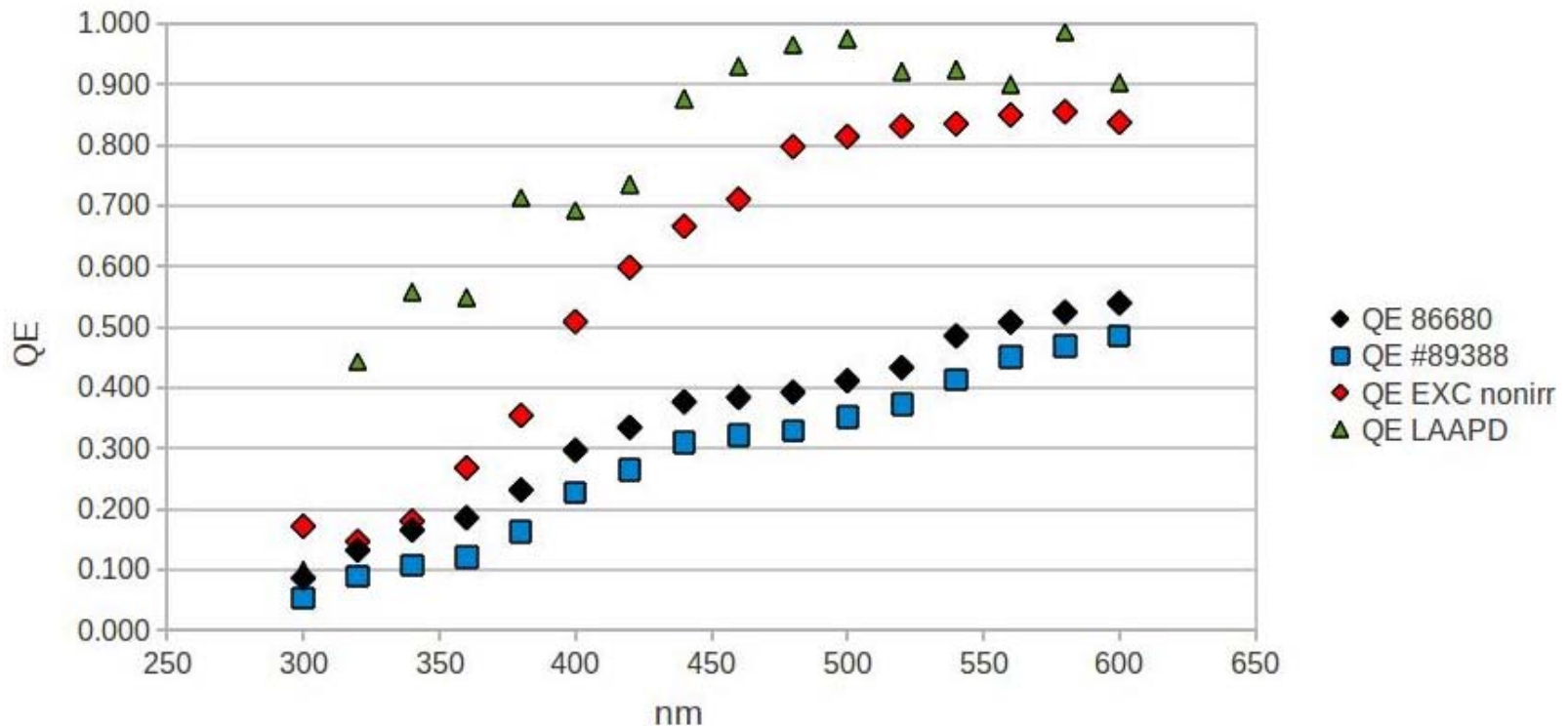
Excelitas APDs show a significant loss in Quantum Efficiency after 1×10^{13} n/cm² :

- Main component is probably due to damage to resin cover
- Slight difference could be due to biasing during irradiation (silicon oxides damage)

Hamamatsu calibrated PIN diode now used as reference

Previous measurements corrected with reference QE:

- inter-calibration of previous reference PIN by RS



LAAPD measurement to be repeated (scattered data points)

A scan around 315 nm should be repeated for both LAAPD and Excelitas for a thorough comparison for final publication

