

IV measurements on APDs

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¹CERN

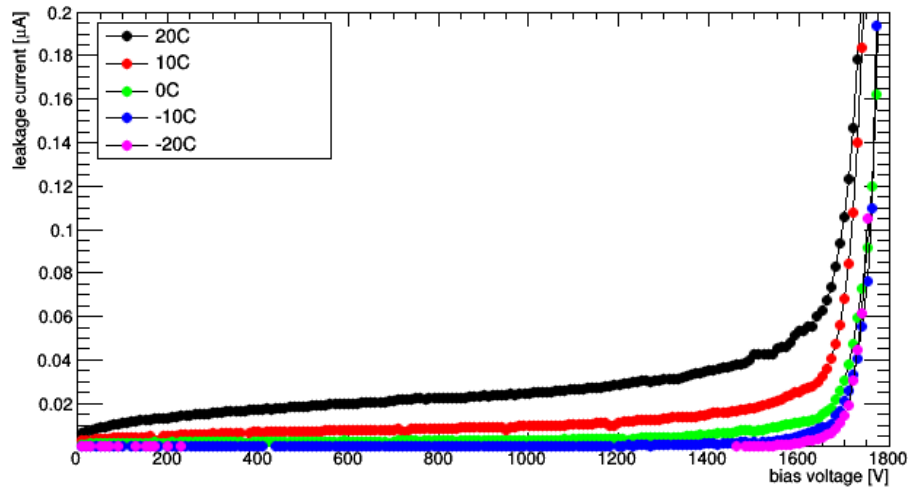
²IFCA-Santander

List of samples

- Unirradiated
 - APD 364-6-19
 - APD 432-5
 - APD 432-6-20
- Irradiated protons PS
 - APD Set-1951
 - $1.06\text{E}13 \text{ p/cm}^2$
 - APD Set-1950
 - $9.28\text{E}13 \text{ p/cm}^2$

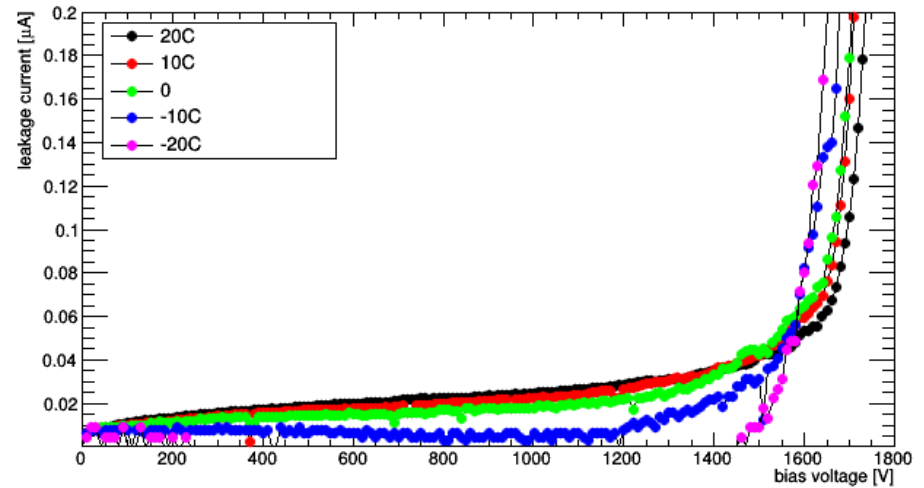
APD 364-6-19

I -- V : APD 364-6-19



- IV measurement
 - 0V – 1800V, $\Delta V = 5V$
 - -20C – 20C, $\Delta T = 10C$

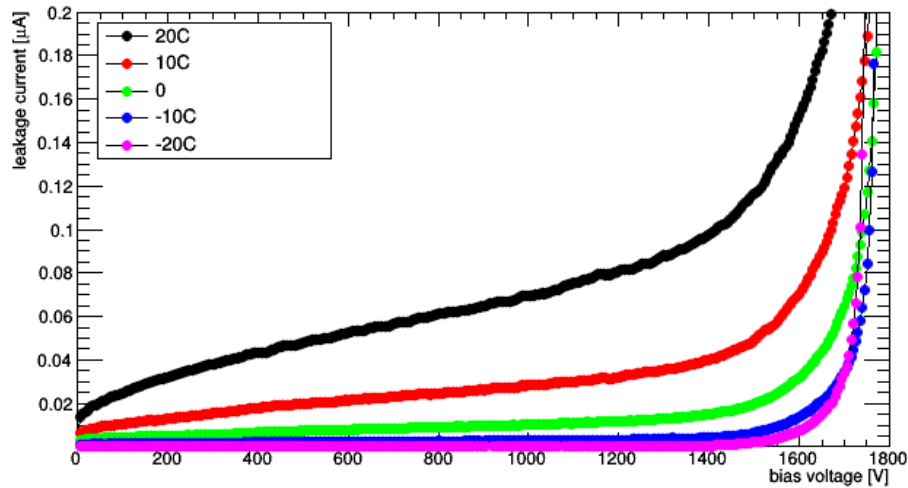
I -- V : APD 364-6-19 scaled to 20C



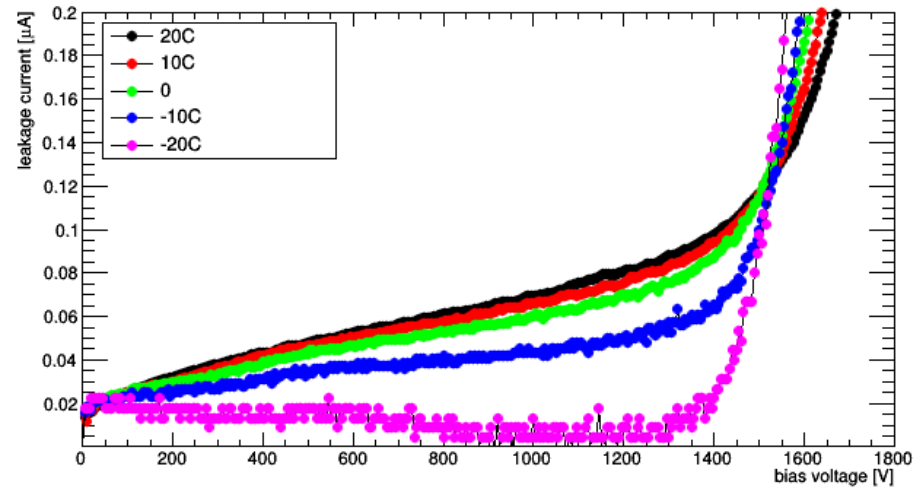
- Scaling to 20C
 - $E_{\text{gap,Si}} = 1,12\text{eV}$

APD 432-5 & APD 432-6-20

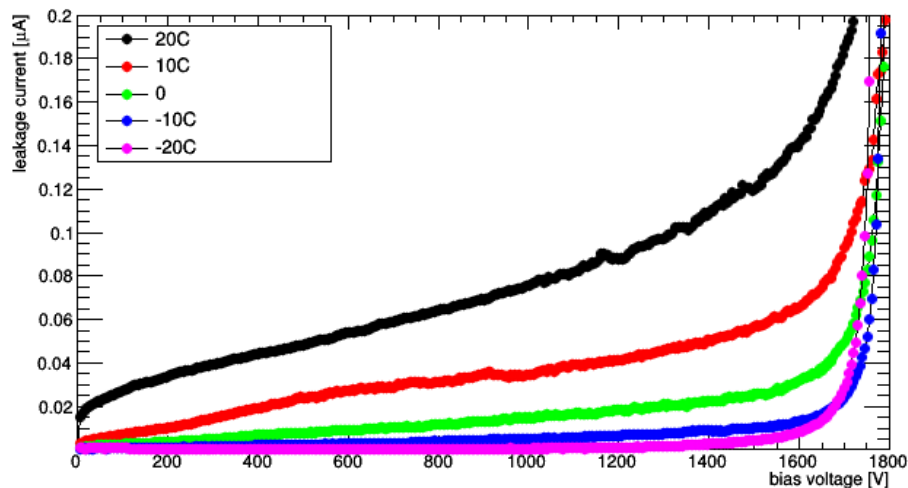
I -- V : APD_432-5



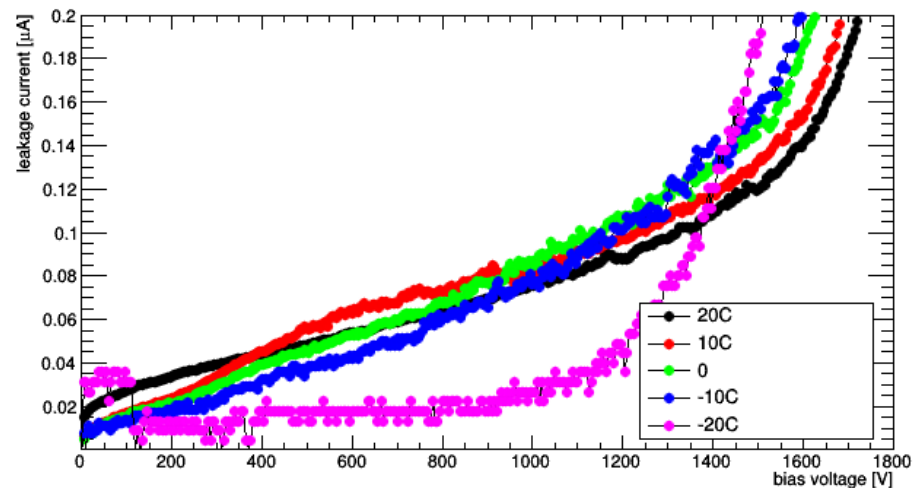
I -- V : APD APD_432-5 scaled to 20C



I -- V : APD_432-6-20

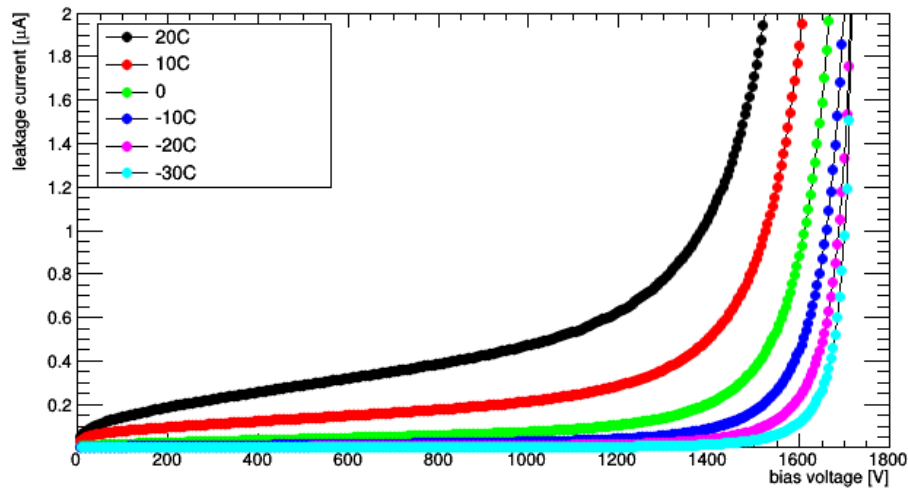


I -- V : APD APD_432-6-20 scaled to 20C

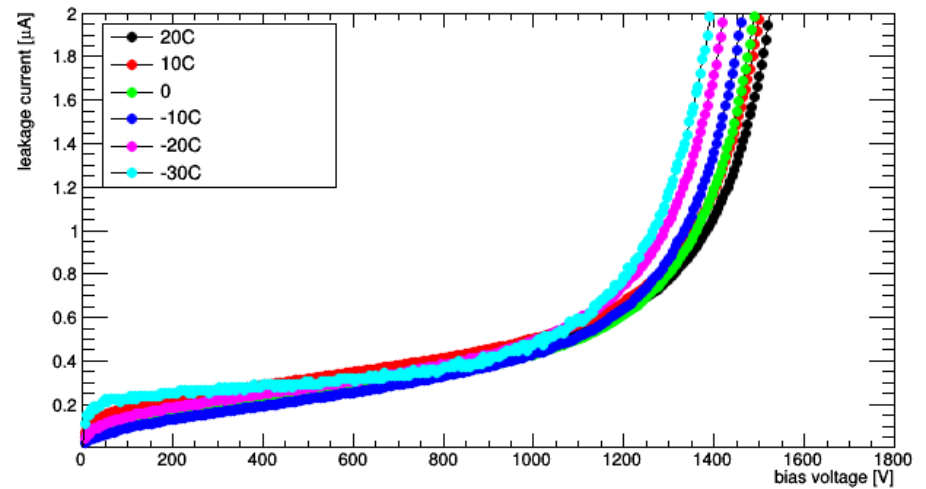


Irradiated APDs

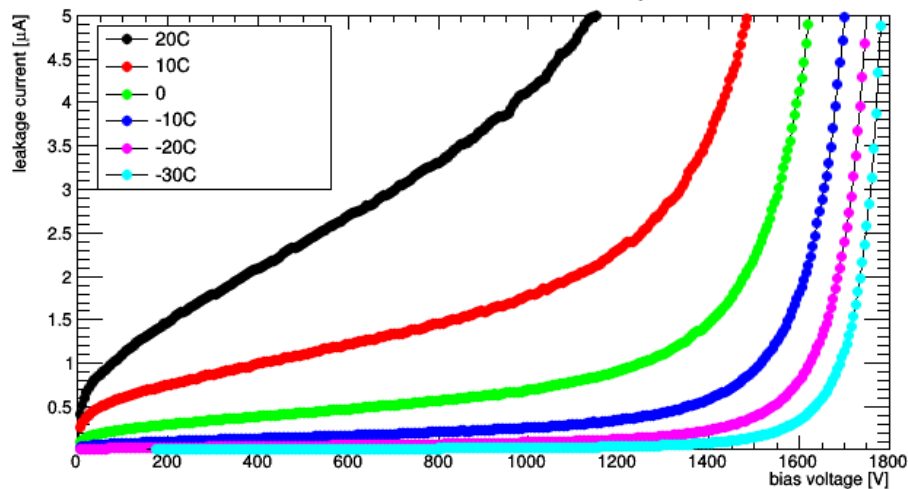
I -- V : APD Set-1951 $1.06\text{E}13 \text{ p/cm}^2$



I -- V : APD Set-1951 $1.06\text{E}13 \text{ p/cm}^2$ scaled to 20C



I -- V : APD Set-1950 $9.28\text{E}13 \text{ p/cm}^2$



I -- V : APD Set-1950 $9.28\text{E}13 \text{ p/cm}^2$ scaled to 20C

