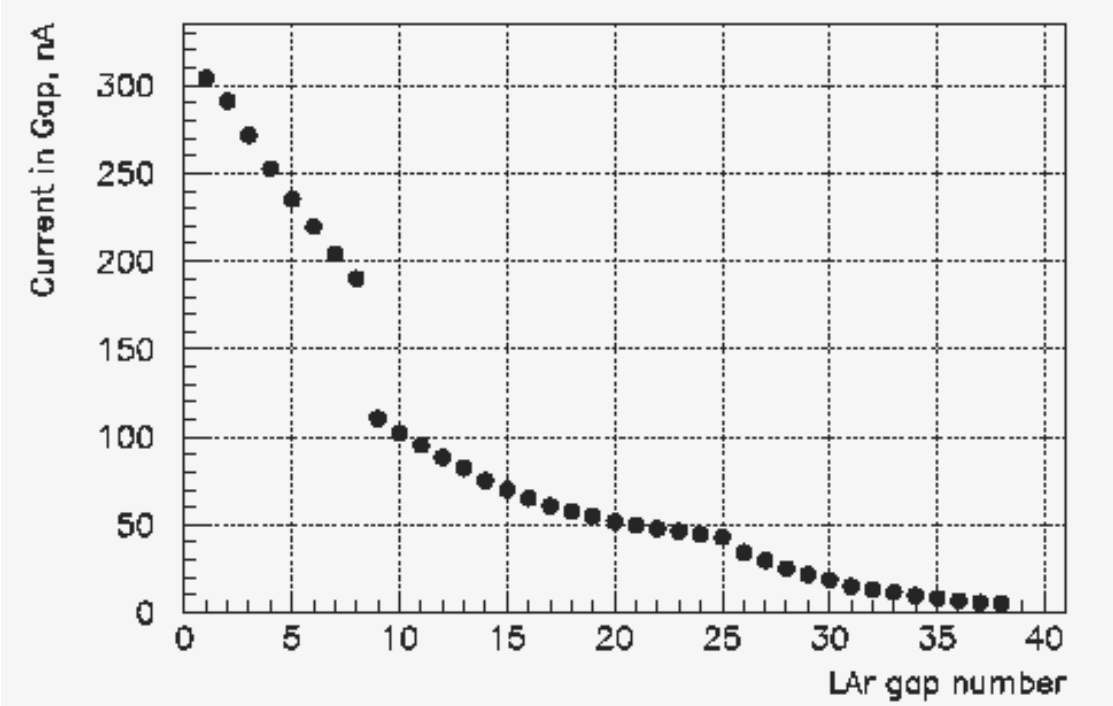
HEC General Meeting
22.02.2000 L.K.

Current in HV chain

- A.Kiryunin, Dec.99 gives **SIGNAL** current per BC, not the average current in the HV line



- Value 305 nA means energy deposition **42 MeV** per BC
- Current in HV:

$$I = \frac{Q}{T_{BC}} \qquad Q = \frac{42\ MeV}{23.6\ eV} \cdot 1.6 \cdot 10^{-19} = 2.85 \cdot 10^{-13}\ \mathrm{C}$$

so, total current in the gap $I = 11.4\ \mu A$ and in each subgap $I / 4 =$ ***2.85 μA***