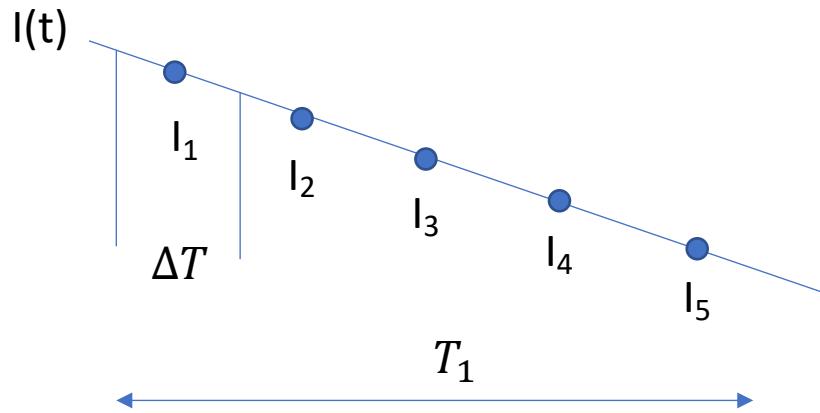


## Justification formule de la dia 5



$$I_{MOY} = \frac{I_1 + I_2 + \dots + I_N}{N}$$

$$I_1 = \frac{\Delta Q_1}{\Delta T} \dots I_N = \frac{\Delta Q_N}{\Delta T} \Rightarrow I_{MOY} = \frac{\frac{\Delta Q_1}{\Delta T} + \frac{\Delta Q_2}{\Delta T} + \dots + \frac{\Delta Q_N}{\Delta T}}{N}$$

$$I_{MOY} = \frac{\frac{\Delta Q_1}{\Delta T} + \frac{\Delta Q_2}{\Delta T} + \dots + \frac{\Delta Q_N}{\Delta T}}{N} = \frac{\sum_1^N \Delta Q_i}{N \Delta T} = \frac{\Delta Q_{TOTAL}}{N \Delta T} = \frac{\Delta Q_{TOTAL}}{T_1}$$

$$\Delta Q_{TOTAL} = I_{MOY} \cdot T_1 = \frac{U_{MOY}}{R} \cdot T_1 = C \cdot \Delta U \Rightarrow \frac{\Delta U}{U_{MOY}} = \frac{T_1}{RC}$$