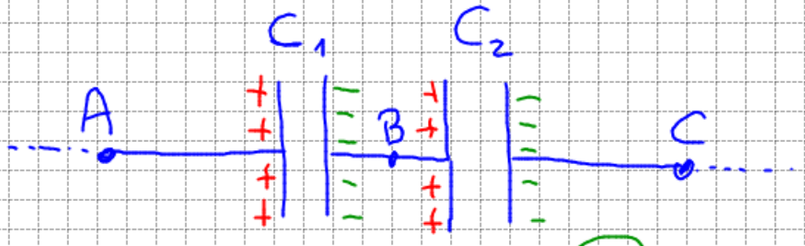
CONDENSATORI IN SERIE E IN PARALLELO

IN SERIE



$$\Delta V_{eq} = \Delta V_{AC} = \Delta V_{AB} + \Delta V_{BC}$$

$$\Delta V_{AB} \rightarrow \Delta V_1 \qquad \Delta V_{BC} \rightarrow \Delta V_2$$

$$\Delta V_{eq} = \Delta V_1 + \Delta V_2$$

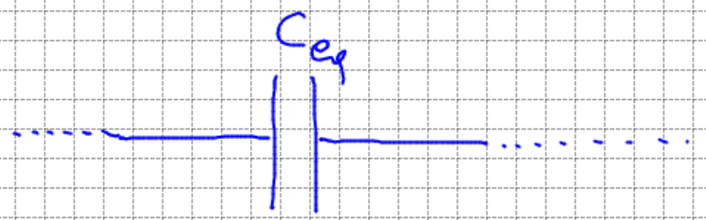
$$C = \frac{Q}{\Delta V}$$

$$\Delta V_{eq} = \frac{Q}{C_{eq}} \qquad \Delta V_1 = \frac{Q}{C_1} \qquad \Delta V_2 = \frac{Q}{C_2}$$

$$\frac{Q}{C_{eq}} = \frac{Q}{C_1} + \frac{Q}{C_2}$$

$$\boxed{\frac{1}{C_{eq}} = \frac{1}{C_1} + \frac{1}{C_2}}$$

$$C_{eq} = \frac{C_1 C_2}{C_1 + C_2}$$

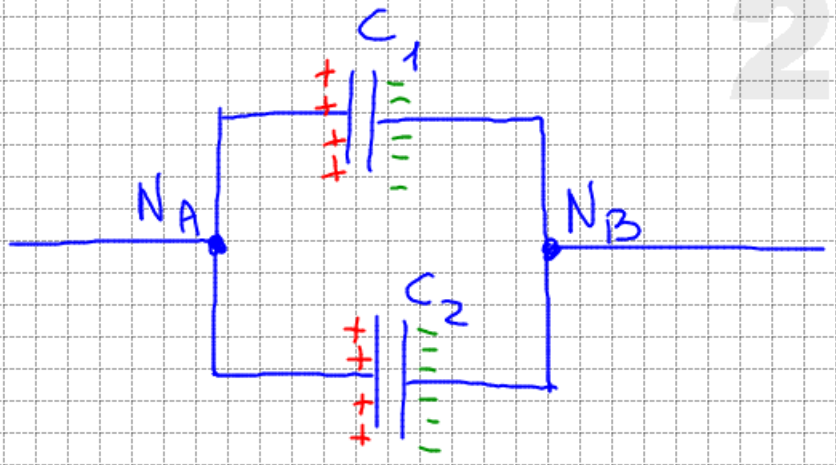


C_1, C_2, C_3

$$C_{eq} = \frac{C_1 \cdot C_2 \cdot C_3}{C_1 C_2 + C_1 C_3 + C_2 C_3}$$

PARALLELO

$$C = \frac{Q}{\Delta V}$$



$$Q_{eq} = Q_1 + Q_2 \qquad \Delta V_{N_A N_B} = \Delta V$$

$$Q_{eq} = C_{eq}\,\Delta V$$

$$Q_1 = C_1\,\Delta V \qquad Q_2 = C_2\,\Delta V$$

$$C_{eq}\,\Delta V = C_1\,\Delta V + C_2\,\Delta V$$

$$\boxed{C_{eq} = C_1 + C_2}$$