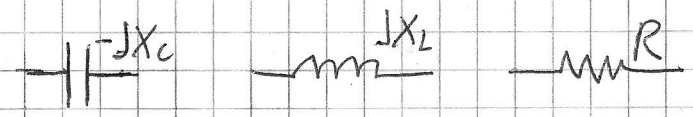
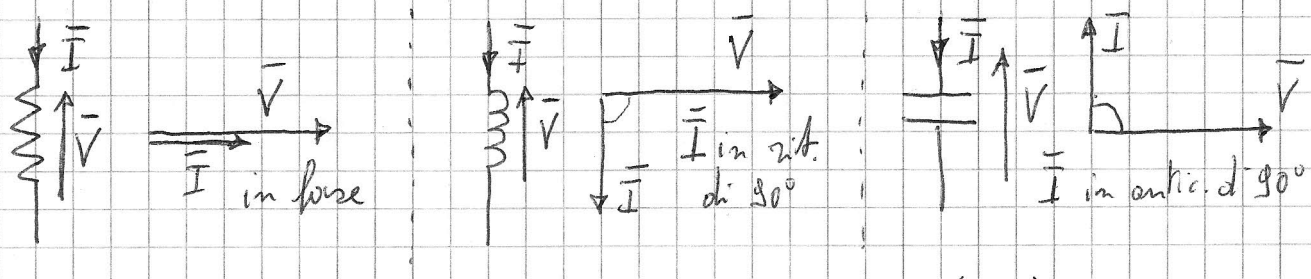
Grandezze sinusoidali $\rightleftarrows$ vettori $\rightleftarrows$ numeri complessi.

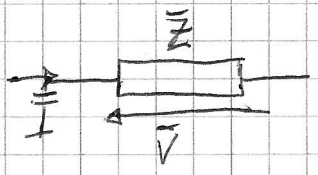
$T = \frac{1}{f}$ $\quad \omega = 2\pi f = \frac{2\pi}{T}$ $\quad T[s]$ $\quad f[Hz]$ $\quad \omega\left[\frac{rad}{s}\right]$

$\omega L = X_L$ $\quad \frac{1}{\omega C} = X_C$

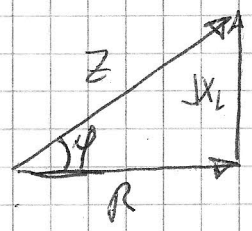




$\bar{Z} = R \pm jX$ $\quad |Z| = \sqrt{R^2 + X^2}$ $\quad \varphi = \angle Z = \tan^{-1}\left(\pm \frac{X}{R}\right)$



In alternata $\bar{V} = \bar{Z} \cdot \bar{I}$ $\quad |V| = |Z| \cdot |I|$

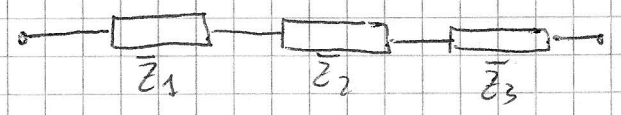


$M = \sqrt{a^2 + b^2}$ $\quad \varphi = \tan^{-1}\left(\frac{b}{a}\right)$

$a + jb \rightleftarrows M\angle\varphi$

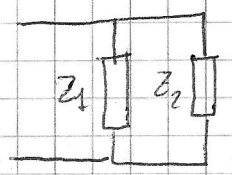
$a = M\cos\varphi$ $\quad b = M\,\mathrm{sen}\,\varphi$

SERIE



$\bar{Z}_{tot} = \bar{Z}_1 + \bar{Z}_2 + \bar{Z}_3$

PARALLELO DI 2 Impedenze $\bar{Z}_{tot} = \frac{\bar{Z}_1 \cdot \bar{Z}_2}{\bar{Z}_1 + \bar{Z}_2}$



PARALLELO DI n IMPENZE $\frac{1}{\bar{Z}_{tot}} = \frac{1}{\bar{Z}_1} + \frac{1}{\bar{Z}_2} + \frac{1}{\bar{Z}_3} + \dots$

Seguiranno altri esercizi (e alcune soluzioni) nei prossimi giorni.