- **Numero complesso:** $Re + jIm \leftrightarrow (\sqrt{Re^2 + Im^2}; \arctan \frac{Im}{Re})$
- **Fasore:** $f(t) = |c|(\cos(\theta) + j\sin(\theta)) = |c|e^{j\Theta}$
- **C-C continua:** $f_1 \otimes f_2(t) = \int_{-\infty}^{+\infty} f_1^*(\tau) \cdot f_2(\tau + t)dt$
- **C-C normalizzata:** $f_1 \bar{\otimes} f_2(t) = \frac{\int_{-\infty}^{+\infty} f_1^*(\tau) f_2(\tau+t)dt}{\sqrt{E_{f_1} E_{f_2}}}$
- **C-C discreta:** $x_1 \otimes x_2(n) = \sum\limits_{k=-\infty}^{+\infty} x_1^*(k) x_2(k+n)$
- **C-C 2D:**$x_1 \otimes x_2(n,m) = \sum\limits_{u=-\infty}^{+\infty} \sum\limits_{v=-\infty}^{+\infty} x_1(u,v) x_2(n+u, m+v)$
- **Convoluzione continua:** $f_1 * f_2(t) = \int_{-\infty}^{\infty} f_1(\tau) f_2(t-\tau)d\tau$
- **Convoluzione discreta:** $x_1 * x_2(n) = \sum\limits_{k=-\infty}^{+\infty} x_1^*(k) x_2(k-n), k\epsilon Z$
- **Convoluzione 2D:** $x_1 * x_2(n,m) = \sum\limits_{u=-\infty}^{+\infty} \sum\limits_{v=-\infty}^{+\infty} x_1(u,v) x_2(n-u, m-v)$
- **Serie di Fourier:** $f(t) = \sum_{n=-\infty}^{+\infty} c_n e^{j\frac{2\pi n}{T}t}$
- **TdF continua:** $F(\mu) = \int_{-\infty}^{\infty} f(t) * e^{-j2\pi\mu t}dt$
- **TdF inversa:** $f(t) = \int_{-\infty}^{\infty} F(\mu) * e^{j2\pi\mu t}d\mu$
- **TdF box:** $F(\mu) = sinc(\mu w)$
- **TdF impulso:** $F(\mu) = 1$
- **TdF treno di impulsi:** $F(\mu) = \sum\limits_{n=-\infty}^{+\infty} \frac{1}{\Delta T}\delta(\mu - \frac{n}{\Delta T})$
- **TdF conv.:** $\mathcal{F}(f \cdot h(t)) = H(\mu) * F(\mu) \leftrightarrow \mathcal{F}(f * h(t)) = H(\mu) \cdot F(\mu)$
- **TdF tempo-discreta:** $\tilde{F}(\mu) = \frac{1}{\Delta T} \sum\limits_{n=-\infty}^{+\infty} F(\mu - \frac{n}{\Delta T})$
- **DTFT:** $\tilde{f}(n\Delta T) = f(n\Delta T) = f_n = \frac{1}{M} \sum_{m=0}^{M-1} F_m e^{j2\pi\frac{m}{M}n}, m \in [0, M-1]$
- **TdF 2D:** $F(u,v) = \sum_{x=0}^{M-1} \sum_{y=0}^{N-1} f(x,y) e^{-j2\pi\left(\frac{u}{M}x + \frac{v}{N}y\right)}$
- **TdF 2D inversa:** $f(x,y) = \frac{1}{M \cdot N} \sum_{u=0}^{M-1} \sum_{v=0}^{N-1} F(u,v) e^{j2\pi\left(\frac{u}{M}x + \frac{v}{N}y\right)}$
- **PB Butterworth:** $H(u,v) = \frac{1}{1+[D(u,v)/D_0]^{2n}}$
- **PB Gaussiano:** $H(u,v) = e^{-\frac{D^2(u,v)}{2D_0^2}}$
- **PA Butterworth:** $H(u,v) = \frac{1}{1+[D(u,v)/D_0]^{-2n}}$
- **PA Gaussiano:** $H(u,v) = 1 - e^{-\frac{D^2(u,v)}{2D_0^2}}$