

Notes M&PD PSD

signal $x(t)$

$$\text{TF} : X(f) = \int_{-\infty}^{+\infty} x(t) e^{-2\pi i f t} dt$$

$$\text{ESD} = |X(f)|^2$$

T temps integration

$$\text{PSD} \simeq \frac{|X_T(f)|^2}{2T}$$

$$\lim_{T \rightarrow +\infty} X_T = X(f)$$

$$x = s + b$$

$$|X_T(f)|^2 = \underbrace{|S_T(f)|^2} + \underbrace{|B_T(f)|^2}_{\text{cte}(T)}$$

si pas corrélé

MOUVAIS

$$\sqrt{\text{PSD}} \propto \frac{|B_T(f)|^2}{\sqrt{T}}$$