

TPS - Electronique Numérique

A - Echantillonnage

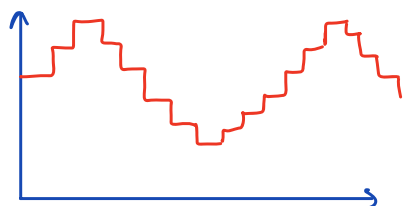
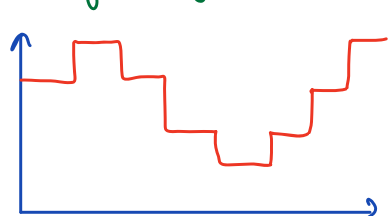


Latéris

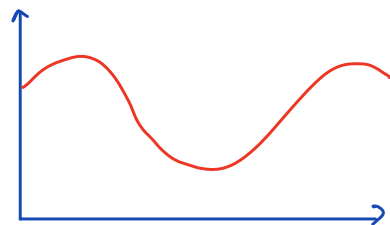
$t_a = 20\text{ms}$

$10\text{pts} \rightarrow f_e = 500\text{Hz}$

"O" $f = 100\text{Hz}$ $A = 10\text{V}$



$100\text{pts} \rightarrow f_e = 5\text{kHz}$

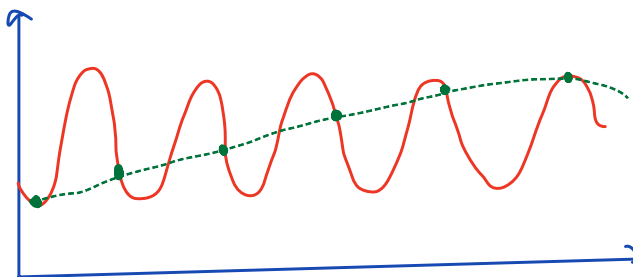


$1000\text{pts} \rightarrow f_e = 50\text{kHz}$

$$t_a = \frac{N}{f_e}$$

$\left. \begin{matrix} t_a = 40\text{ms} \\ N = 41\text{pts} \end{matrix} \right\} \Rightarrow f_e = 1,025\text{kHz}$

"O" $f = 950\text{Hz}$ $A = 10\text{V}$
 $\hookrightarrow$ $f_{\text{mes}} = \quad \text{Hz}$

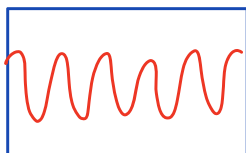
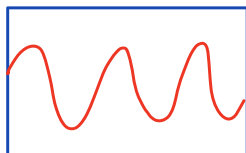
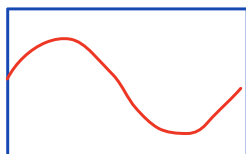


Oscilloscope

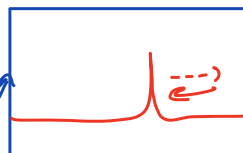
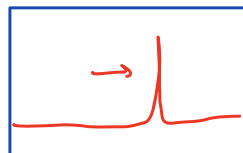
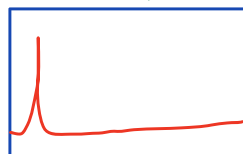
$N = 2500$ $t_a = 10\text{ms}$

"O" $f = 100\text{Hz}$ $\Rightarrow$ $f_{\text{rep}} =$

CH1



FFT



Quantification

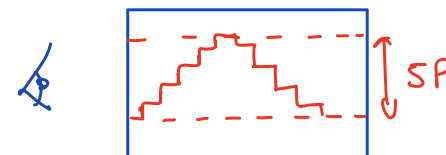
$\times 2\text{bits} \rightarrow 4\text{valeurs}$

$1\text{V} \Rightarrow P = \underline{\quad} \text{V}$

11	1,0
10	?
01	?
00	0,0

$\times$ SysAN

"O" $\updownarrow 20\text{V} \rightarrow$ SysAN
 Latéris $\left| \begin{matrix} 10000\text{pts} \\ 2\text{ périodes} \\ \text{calibre } \pm 10\text{V} \end{matrix} \right.$



$\Rightarrow$ $k =$