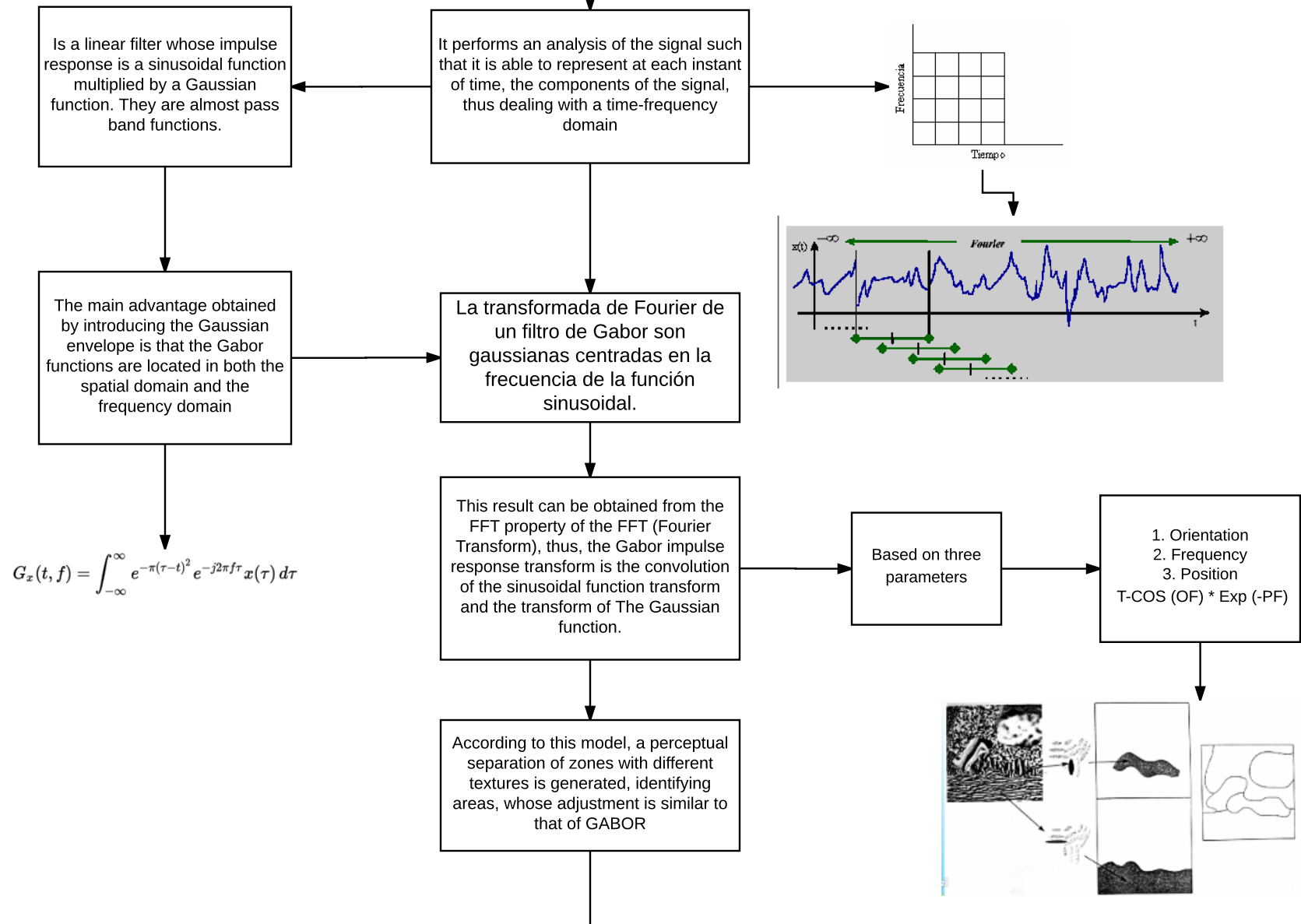


GABOR TRANSFORM



Expresses a
correlating signal
With each atom
as follows

$$Sf(u, \xi) = \int_{-\infty}^{+\infty} s(t)g(t-u)e^{-i\xi t} dt$$

Where $g(t)$ is a known function
As the "atomic function of Gabor"
 U is the shift in time and
 ξ specifies frequency translation
Of the Fourier Transformation of
, this is:

$$G_{u\xi}(\omega) = G(\omega - \xi)e^{-i\omega(u-\xi)}$$