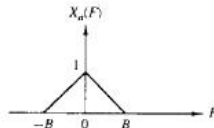
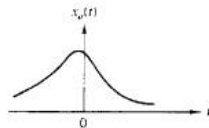


EL3005: Señales y Sistemas I

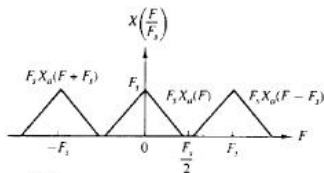
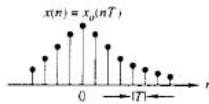
II. Muestreo de Señales

Jorge Silva

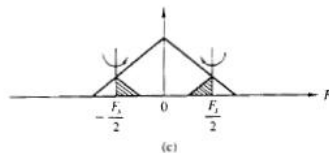
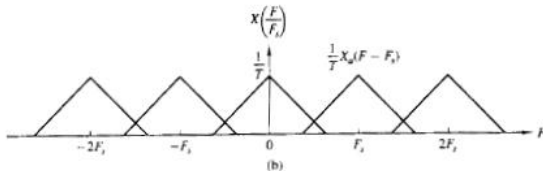
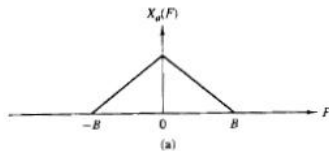


Ilustración Muestra de Señales donde $B < \frac{F_s}{2}$ 

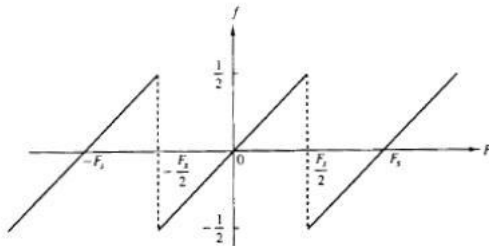
(a)



(b)

Ilustración Muestre de Señales donde $B > \frac{F_s}{2}$: ALIASING

Teorema del Muestreo

Figure 4.21 Relationship between frequency variables F and f .

Relación producto del Muestreo entre la frecuencia discreta de $(x(n))$ (DTFT $X(2\pi f)$) y la frecuencia continua FT F de $(x_a(t))$.

Teorema del Muestreo: Interpolación $\sum x(k) \cdot \text{Sinc}(\frac{\pi}{T}(t - k \cdot T))$

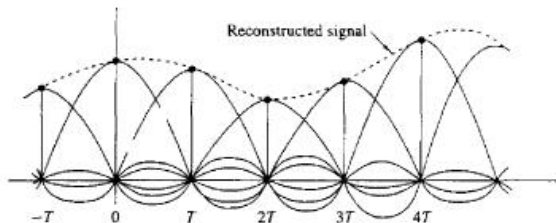
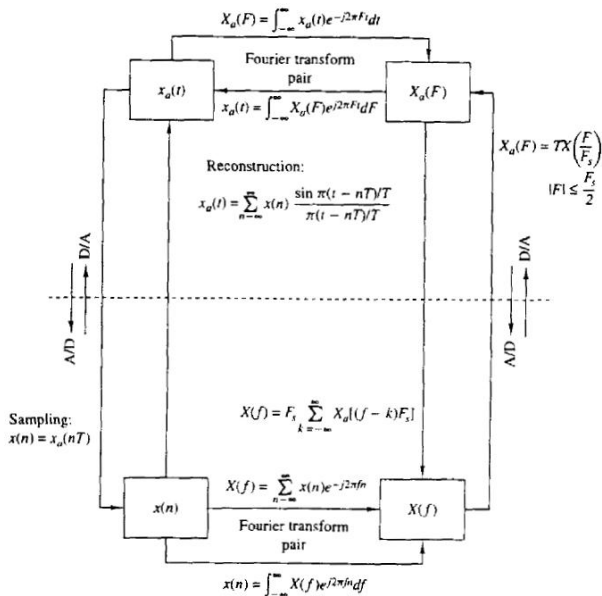


Figure 4.19 Reconstruction of a continuous-time signal using ideal interpolation.

Teorema del Muestreo



ALIASING en Señales Sinusoidales: Caso $\frac{F_s}{2} < F_0 < F_s$

