MATLAB Assignment

1. Repeat the SISO case (Tx, channel, noise addition, Rx) and produce the SER plots in the previous slide (Rayleigh and AWGN)

2. Consider a channel of the form

$$h(\tau) = \sum_{i=1}^{10} 1 \cdot \delta(\tau - \tau_i)$$

where τ_i are uniformly distributed $[50m, 100m] \cdot \frac{1}{3 \cdot 10^8 \, m/\sec}$

Show the distribution of the real and imaginary part of

$H(f = 2.5GHz)$

Use the built-in functions randsrc to create QPSK signals easily

rand (for uniform RV) and hist (for plotting histograms)