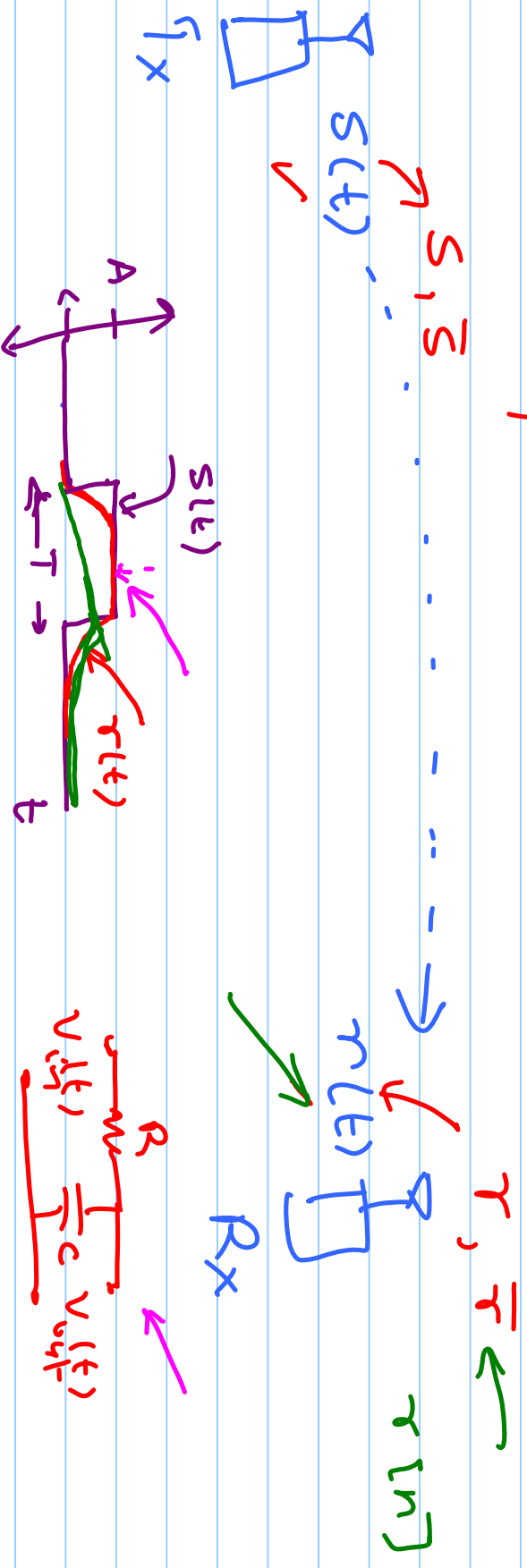


Digital Communication Systems



Probability of Error ←

→



Gaussian
r.p.

$s(t)$ → $r(t)$

Linear
Gaussian
model

$x(t)$

$$r(t) = s(t) + n(t)$$

AWGN

signal

"channel"
noise

RT

$$r = s + n$$

$x(t)$

$$r_b(t) = s_b(t) + n_b(t)$$

Band-limited
model

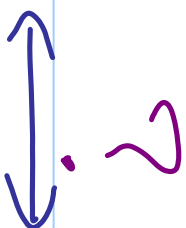
$x(t)$

$$r(t) = h(t) * s_b(t) + n(t)$$

Distorting
BL
model

Symbol-by-symbol
modulation

1, 2, ..., 6 → $s(t)$



Block ✓
modulation

100,50,000 → $s(t)$

OFDM ←