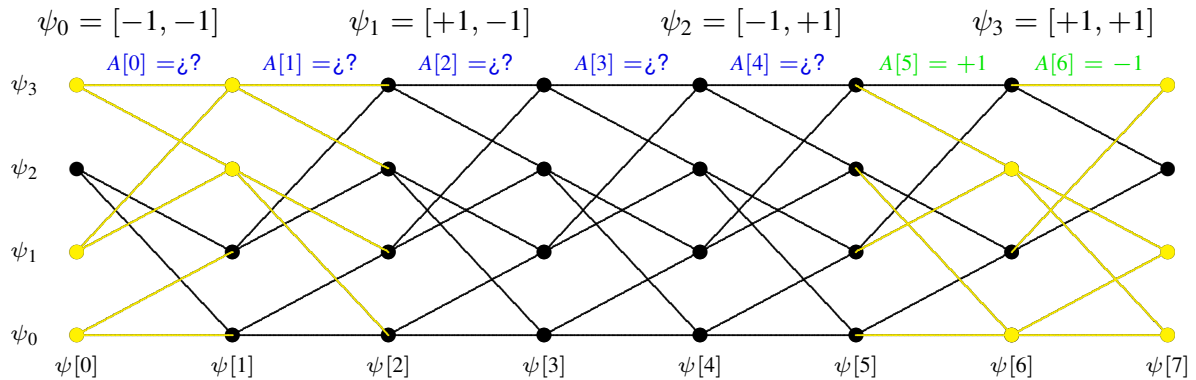


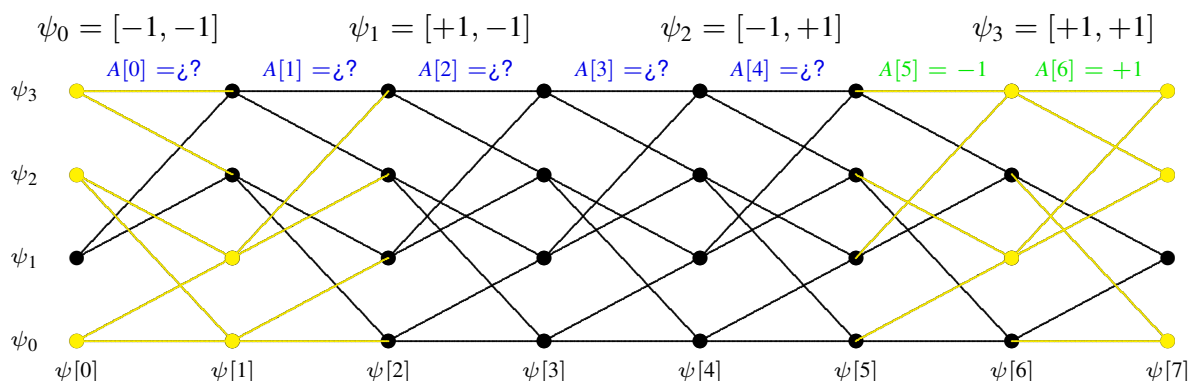
Detección de una secuencia de L símbolos

- Ejemplo para $K_p = 2$, $L = 5$ y 2-PAM $A[n] \in \{\pm 1\}$
 Secuencia $A[0], A[1], A[2], A[3], A[4]$
 - ▶ Cabecera: $[+1, -1]$
 $A[-2] = +1, A[-1] = -1, A[5] = +1, A[6] = -1$
 - ★ Estado inicial y final: $\psi[0] = \psi[K_p + L] = [-1, +1] \equiv \psi_2$



Detección de una secuencia de L símbolos

- Ejemplo para $K_p = 2$, $L = 5$ y 2-PAM $A[n] \in \{\pm 1\}$
 Secuencia $A[0], A[1], A[2], A[3], A[4]$
 - ▶ Cabecera: $[-1, +1]$
 $A[-2] = -1, A[-1] = +1, A[5] = -1, A[6] = +1$
 - ★ Estado inicial y final: $\psi[0] = \psi[K_p + L] = [+1, -1] \equiv \psi_1$



Detección de una secuencia de L símbolos

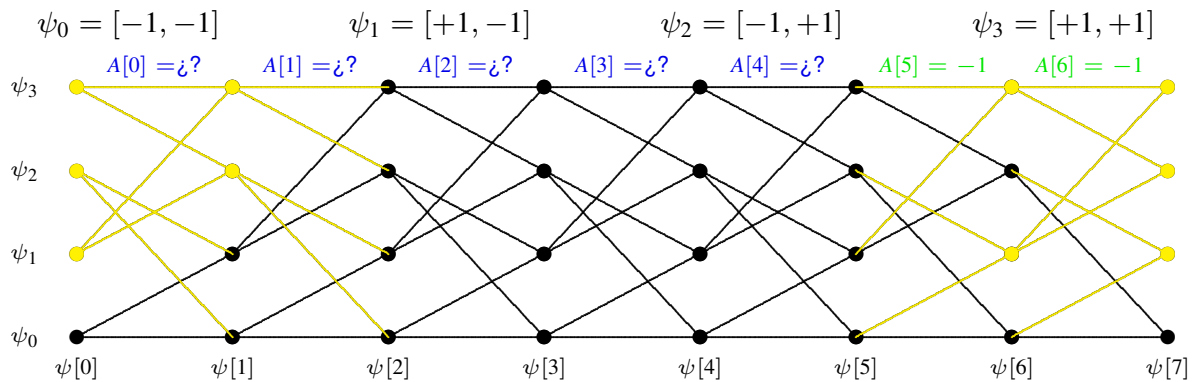
- Ejemplo para $K_p = 2$, $L = 5$ y 2-PAM $A[n] \in \{\pm 1\}$

Secuencia $A[0], A[1], A[2], A[3], A[4]$

- ▶ Cabecera: $[-1, -1]$

$$A[-2] = A[-1] = A[5] = A[6] = -1$$

- ★ Estado inicial y final: $\psi[0] = \psi[K_p + L] = [-1, -1] \equiv \psi_0$



Detección de una secuencia de L símbolos

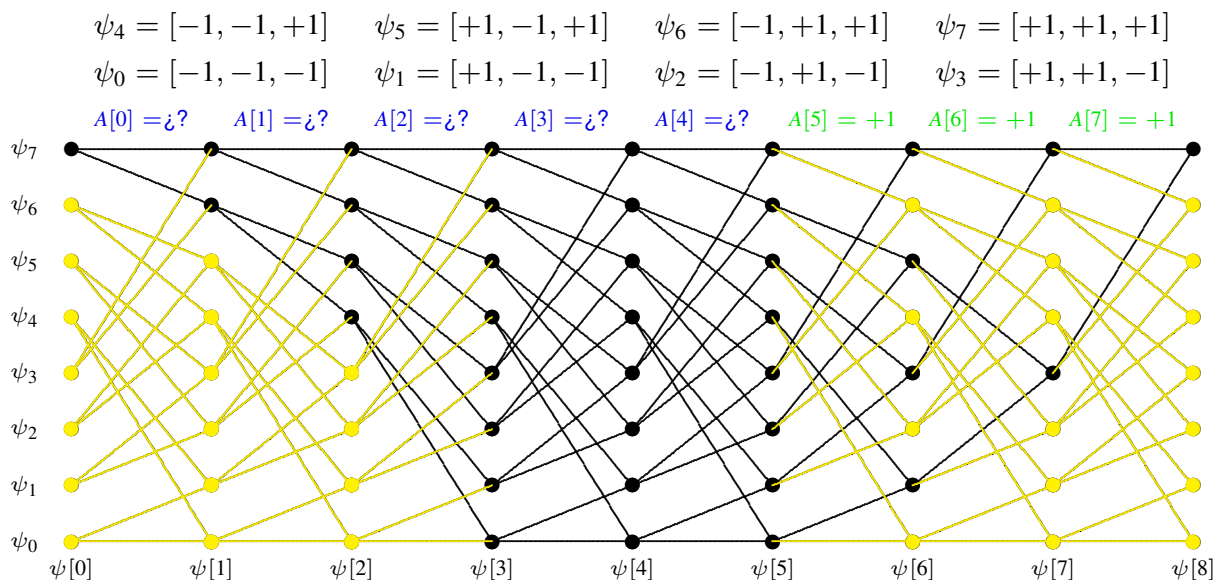
- Ejemplo para $K_p = 3$, $L = 5$ y 2-PAM $A[n] \in \{\pm 1\}$

Secuencia $A[0], A[1], A[2], A[3], A[4]$

- ▶ Cabecera: $[+1, +1, +1]$

$$A[-3] = A[-2] = A[-1] = A[5] = A[6] = A[7] = +1$$

- ★ Estado inicial y final: $\psi[0] = \psi[K_p + L] = [+1, +1, +1] \equiv \psi_7$



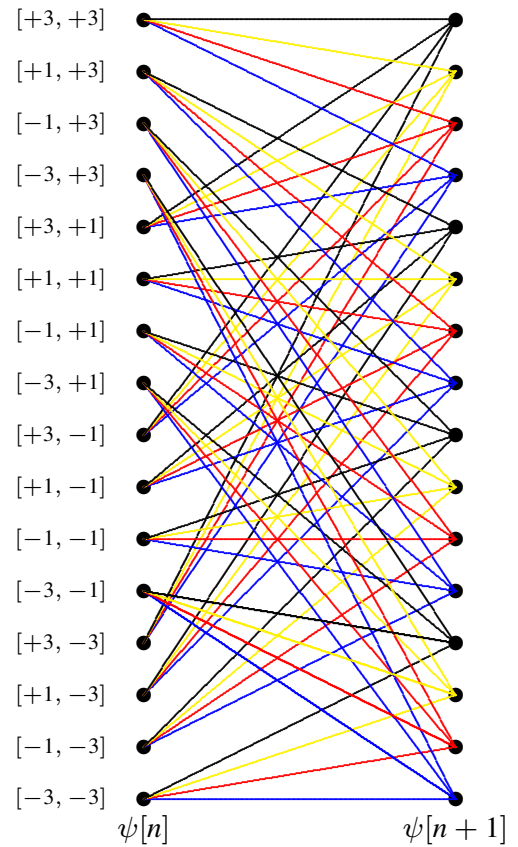
Rejilla para $M = 4$ en canal con memoria $K_p = 2$

$A[n]$	$A[n-1]$	$A[n-2]$	$o[n]$
+3	+3	+3	a_0
+1	+3	+3	a_1
-1	+3	+3	a_2
-3	+3	+3	a_3
+3	+1	+3	b_0
+1	+1	+3	b_1
-1	+1	+3	b_2
-3	+1	+3	b_3
+3	-1	+3	c_0
+1	-1	+3	c_1
-1	-1	+3	c_2
-3	-1	+3	c_3
+3	-3	+3	d_0
+1	-3	+3	d_1
-1	-3	+3	d_2
-3	-3	+3	d_3
+3	+3	+1	e_0
+1	+3	+1	e_1
-1	+3	+1	e_2
-3	+3	+1	e_3
+3	+1	+1	f_0
+1	+1	+1	f_1
-1	+1	+1	f_2
-3	+1	+1	f_3
+3	-1	+1	g_0
+1	-1	+1	g_1
-1	-1	+1	g_2
-3	-1	+1	g_3
+3	-3	+1	h_0
+1	-3	+1	h_1
-1	-3	+1	h_2
-3	-3	+1	h_3

GISC/GIT (UC3M)

$A[n]$	$A[n-1]$	$A[n-2]$	$o[n]$
+3	+3	-1	i_0
+1	+3	-1	i_1
-1	+3	-1	i_2
-3	+3	-1	i_3
+3	+1	-1	j_0
+1	+1	-1	j_1
-1	+1	-1	j_2
-3	+1	-1	j_3
+3	-1	-1	k_0
+1	-1	-1	k_1
-1	-1	-1	k_2
-3	-1	-1	k_3
+3	-3	-1	l_0
+1	-3	-1	l_1
-1	-3	-1	l_2
-3	-3	-1	l_3
+3	+3	-3	m_0
+1	+3	-3	m_1
-1	+3	-3	m_2
-3	+3	-3	m_3
+3	+1	-3	n_0
+1	+1	-3	n_1
-1	+1	-3	n_2
-3	+1	-3	n_3
+3	-1	-3	o_0
+1	-1	-3	o_1
-1	-1	-3	o_2
-3	-1	-3	o_3
+3	-3	-3	p_0
+1	-3	-3	p_1
-1	-3	-3	p_2
-3	-3	-3	p_3

Comunicaciones Digitales



Detección bajo ISI 7 / 7