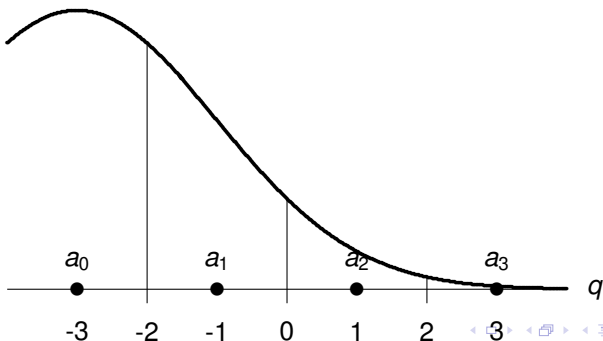
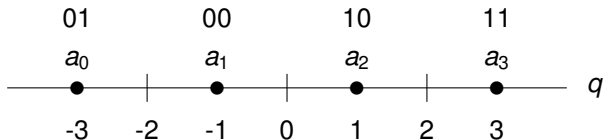


TEMA 2

EJEMPLOS

Ejemplo 2: Cálculo de la $P_{e|a_0}$ y de la BER_{a_0}



Cálculo de la $P_{e|a_0}$ y de la BER_{a_0} (II)

- Cálculo de $P_{e|a_0}$

$$P_{e|a_0} = Q\left(\frac{1}{\sqrt{N_0/2}}\right)$$

- Cálculo de BER_{a_0}

$$\begin{aligned} BER_{a_0} = & \underbrace{\left[Q\left(\frac{1}{\sqrt{N_0/2}}\right) - Q\left(\frac{3}{\sqrt{N_0/2}}\right) \right]}_{P_{e|a_0 \rightarrow a_1}} \times \underbrace{\frac{1}{2}}_{\frac{m_{e|a_0 \rightarrow a_1}}{m}} \\ & + \underbrace{\left[Q\left(\frac{3}{\sqrt{N_0/2}}\right) - Q\left(\frac{5}{\sqrt{N_0/2}}\right) \right]}_{P_{e|a_0 \rightarrow a_2}} \times \underbrace{\frac{2}{2}}_{\frac{m_{e|a_0 \rightarrow a_2}}{m}} \\ & + \underbrace{\left[Q\left(\frac{5}{\sqrt{N_0/2}}\right) \right]}_{P_{e|a_0 \rightarrow a_3}} \times \underbrace{\frac{1}{2}}_{\frac{m_{e|a_0 \rightarrow a_3}}{m}} \end{aligned}$$

Codificación de Gray

