

**Alice**

$$\tilde{\mathbf{c}} = [0001110]$$

$$\hat{\mathbf{c}} = [0001111]$$

$$\hat{\mathbf{b}} = [1111010]$$

(4) Alice  $\tilde{\mathbf{b}}$

(11) Flipping

(12) LDPC 1 decoder

(13) Flipping

(14) Alice  $\hat{\mathbf{b}}$

$$\tilde{\mathbf{b}} = [1111011]$$

$$\widehat{\Delta \mathbf{b}} = [1110101]$$

(10) LDPC 2 decoder

(9) Classical channel

(8) LDPC 2 encoder

$$\Delta \mathbf{b} = [1110101]$$

(7) Bits difference

$$\mathbf{c} = [0001111]$$

(5) Source

$$\mathbf{k}_B = [0001]$$

(6) LDPC 1 Encoder

$$\mathbf{C} = [1111010]$$

(2) Bob  $\mathbf{b}$

(1) QRNG

$$\mathbf{b} = [1111010]$$

**Bob**

(3) Equivalent quant. channel