$\vec{x} \in \{0,1\}^{\lambda}$

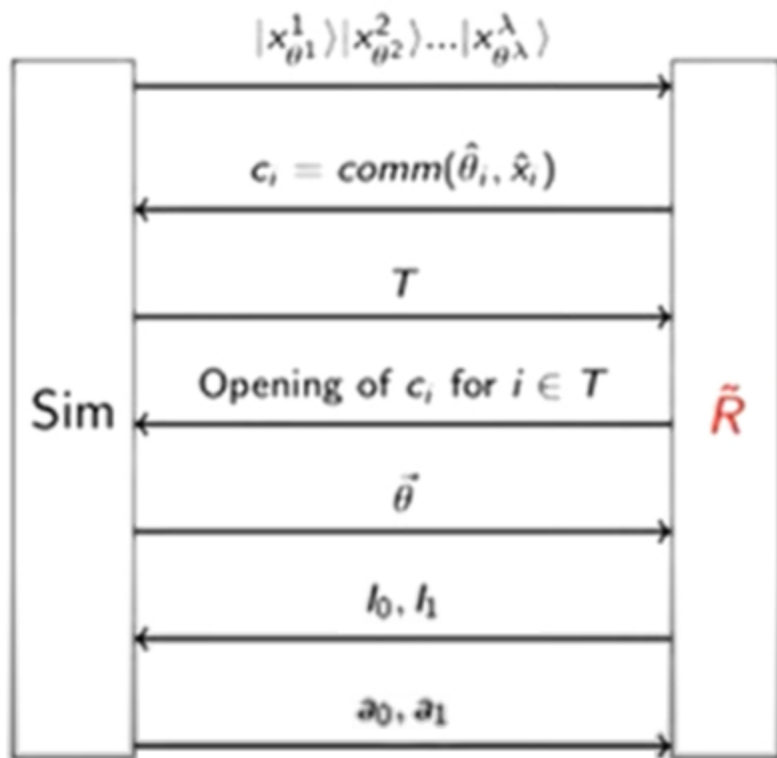$\vec{\theta} \in \{+, \times\}^{\lambda}$

Extract $\vec{\hat{\theta}}$

$|x_{\theta^1}^1\rangle |x_{\theta^2}^2\rangle \ldots |x_{\theta^\lambda}^\lambda\rangle$

$\vec{\hat{\theta}} \in \{+, \times\}^{\lambda}$

$\downarrow$ Measurement

$\vec{\hat{x}} \in \{0,1\}^{\lambda}$

$c_i = comm(\hat{\theta}_i, \hat{x}_i)$

T

Opening of c_i for $i \in T$

Sim

$\vec{\theta}$

$\tilde{R}$

I_0, I_1

$I_b = \{i : \theta_i = \hat{\theta}_i\} \setminus T$

$I_{\bar{b}} = \{i : \theta_i \neq \hat{\theta}_i\} \setminus T$

a_0, a_1

$a_0 = Enc_{\vec{\hat{x}}_{I_0}}(m_0)$

$a_1 = Enc_{\vec{\hat{x}}_{I_1}}(m_0)$

Compute b

$m_b = Dec_{\vec{\hat{x}}_{I_b}}(a_b)$