





 t_k, k





 t_k, k

$$(\alpha_i \stackrel{\$}{\leftarrow} \{0, \frac{\pi}{4} \dots \frac{7\pi}{4}\})_{i=1}^{n-1}$$



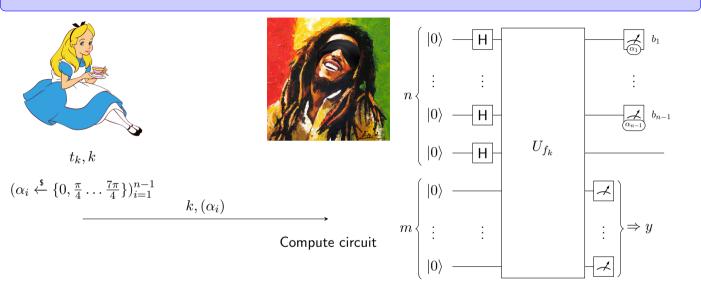




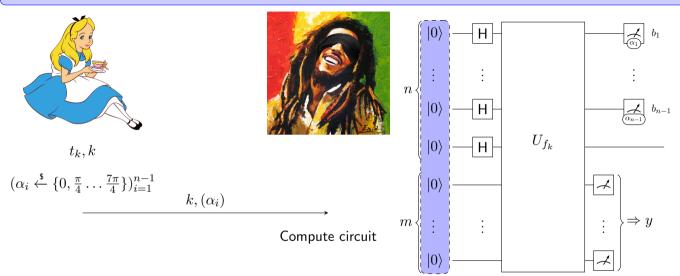
 t_k, k

$$(\alpha_i \xleftarrow{\$} \{0, \frac{\pi}{4} \dots \frac{7\pi}{4}\})_{i=1}^{n-1}$$

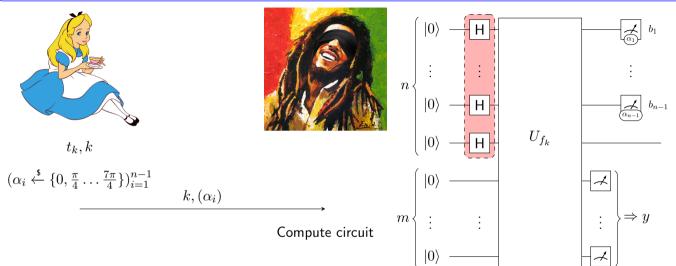
 $k, (\alpha_i)$



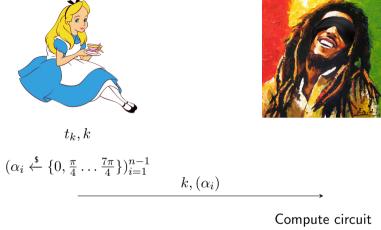
$(|0\rangle^{\otimes n}|0\rangle^{\otimes m}$

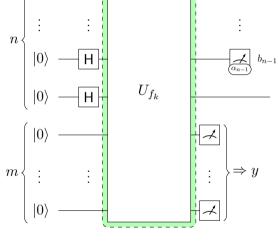


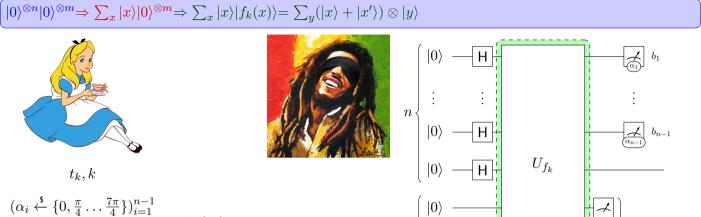
$\int |0\rangle^{\otimes n} |0\rangle^{\otimes m} \Rightarrow \sum_{x} |x\rangle |0\rangle^{\otimes m}$



$\begin{array}{c} |0\rangle^{\otimes n}|0\rangle^{\otimes m} \Rightarrow \sum_{x} |x\rangle|0\rangle^{\otimes m} \Rightarrow \sum_{x} |x\rangle|f_{k}(x)\rangle \\ \\ |0\rangle - |H\rangle \\$







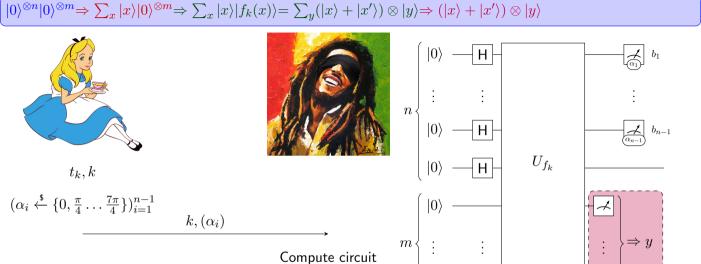
Compute circuit

m

 $|0\rangle$

 $\Rightarrow y$

 $k, (\alpha_i)$



 $|0\rangle$

