## Basic phase kicback equations

## Abstract

Equations typed in  $\LaTeX$  to explain basic phase kickback circuit implemented with Qiskit in python. Complete description available .

## **Equations**

$$\frac{1}{\sqrt{2}}(|01\rangle + |11\rangle)$$

$$\frac{1}{\sqrt{2}}(|01\rangle + e^{i\frac{\pi}{4}}|11\rangle) = \frac{1}{\sqrt{2}}(|0\rangle + e^{i\frac{\pi}{4}}|1\rangle) \otimes |1\rangle$$