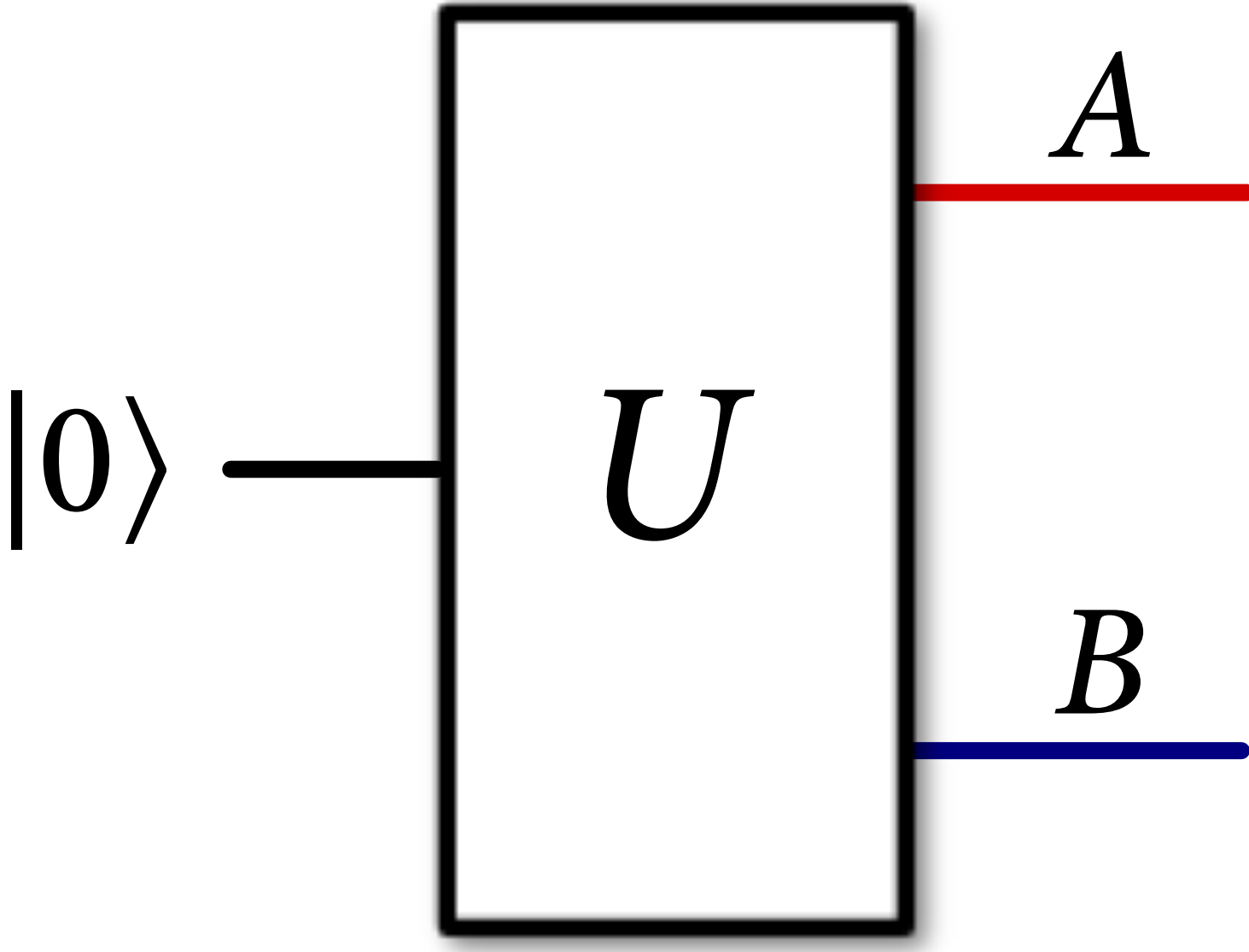
$|0\rangle$
U
A
B