

Tutorial 7

4. 6. 2021

Task 1. Prove two normal operators commute, if and only if they have a common basis of eigenvectors.

Task 2. Find a decomposition of CH (controlled H) gate, into one qubit gates and CNOTs. You can use the AXBXC decomposition.

Task 3. BB84 protocol uses four states of one qubit. Can you use more to make things harder for the attacker?