05.07.23

**Quantum shorts-list of topics**

1. No cloning
2. Entanglement
3. **Hong–Ou–Mandel effect**
4. BB84
5. Simon’s Algorithm
6. Error correction
7. Frequency comb
8. Kraus maps
9. Lindblad operator
10. Adiabatic quantum computing
11. The adiabatic theorem
12. Shot noise
13. Heisenberg limit
14. Shortcuts to adiabaticity
15. Jaynes cummings Hamiltonians
16. Coherent states
17. Wigner functions
18. The uncertainty principle
19. Gaussian states
20. Toric code
21. Bang Bang
22. Mach—Zehnder
23. Elitzur- Vaidman bomb
24. Majorana
25. Magic states
26. Cluster states
27. One way quantum computing
28. BKP states
29. Transmon qubit
30. Sisyphus effect
31. Ion traps
32. Mutual information
33. Von Neuman entropy
34. Quantum channels
35. GHZ game
36. Bell inequalities: CHSH
37. Kitaev’s wire
38. Shor code
39. Factoring
40. Stabilizer formalism
41. Universal gates