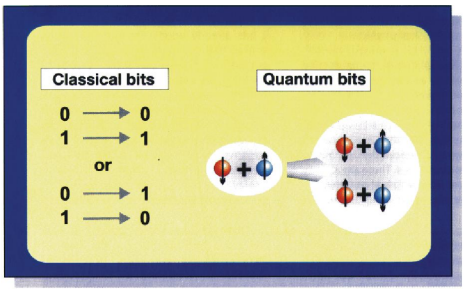
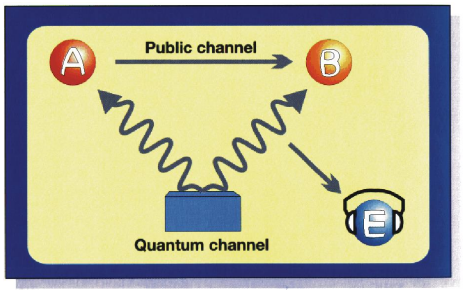
CZYTAMY PO ANGIELSKU

Quantum computers

Physics. Physics research: topics, significance and prospects, Deutsche Physikalische Gesellschaft e.V., October 2002, str. 52



Classical bus (left) can only take on a value of “0” or “1”. In a computational operation, they can either retain or switch these values. Quantum bits can exist simultaneously in a state of “0” and “1” by means of superposition. After a computational operation, the result is a complex superposition of all possible output bits as a function of the input bits.



Secure data transmission can be achieved in quantum cryptography if Alice (A) and Bob (B) encrypt their data using a code that they exchange via a quantum channel. Eve (E), the spy, cannot top this code without Alice and Bob noticing. (Oliver Benson, University of Constance)

Dictionary:

switch – zamienić
complex – zespolony
encrypt – zaszyfrować
quantum channel – kanał kwantowy
to top the code – podglądać kod