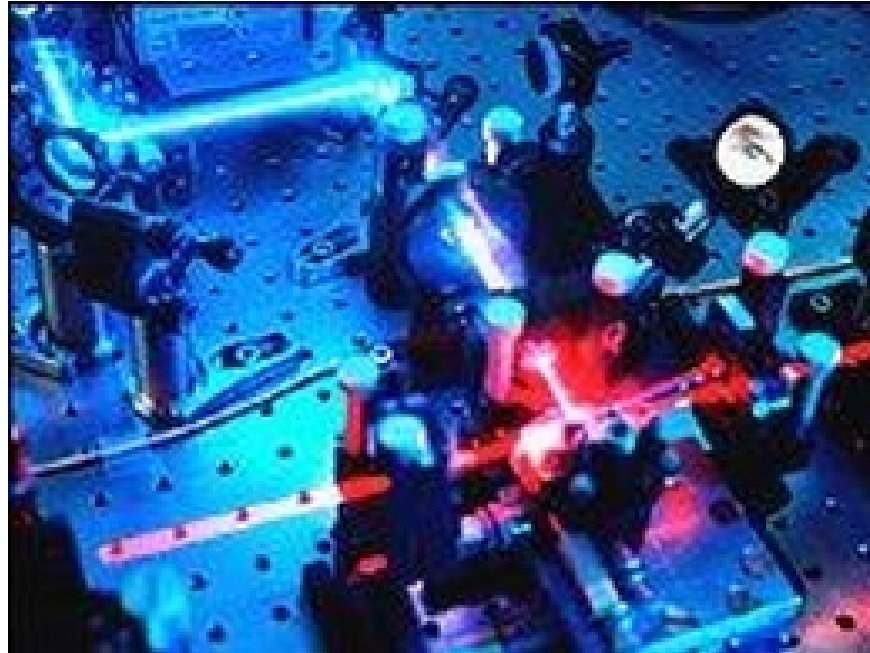


Quantum encryption - Future security technology

Quantum encryption is a new encryption technology that has just been introduced at a scientific conference in Vienna. Its operating principle is completely different from the encryption technology we are using.



Quantum encryption is a new encryption technology that has just been introduced at a scientific conference in Vienna. The reason is called new because its operating principle is completely different from the encryption technology that we are using.

Specifically, its security systems and protocols are completely different from those used by today's computer networks. Most encryption technologies today use mathematical modeling, meaning that they are still penetrated as long as there is enough time and computing resources. As for quantum coding, this intrusion becomes impossible. Quantum coding is based on the laws of quantum theory, and so far recognized as unbreakable. That theory was introduced by two researchers Charles Bennett (IBM) and Gilles Brassard (University of Montreal) 25 years ago.

At the same scientific conference held in Vienna, Mr. Gilles Brassard was also present to witness his 'child' for the first time in real life. Explaining this technology, Gilles Brassard said: *'All quantum security systems are based on Heisenberg's unchanging Principle, and based on the fact that you cannot measure quantum information unless you disturb them. Therefore, it will not be possible to intervene (eavesdrop) the communication channel between two people if it does not create some disturbance.'*

Quantum encryption technology uses photons, the basic component of light, to achieve the ability to "penetrate".

Tiny light rays (photon size) are transmitted through the network nodes at a rate of millions of times per second. The network node is where small electronic grooves are installed with light-sensitive sensors to 'receive' photons, and encrypt the data received by random number lock. This process is similar to today's encryption methods but is much more sophisticated and sophisticated.

During the show in Vienna, when the 'intruder' tried to access the network to 'eavesdrop' quantum communication, the photons became chaotic and the sensor device at the nodes realized this change. , and immediately the system is disconnected to ensure that the data is not compromised. Then the data will be transferred to a more secure channel.

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