China's quantum satellite first transmits 'hackable' data to Earth

China is said to have done the world's first quantum satellite transmission of a 'unbreakable' piece of code about the Earth.

This marked a milestone in the new generation of encryption, based on 'quantum cryptography'.

Last August, China launched the world's first quantum communication satellite to orbit Earth with Long March-2D missiles to test the fundamental laws of quantum mechanics in space.

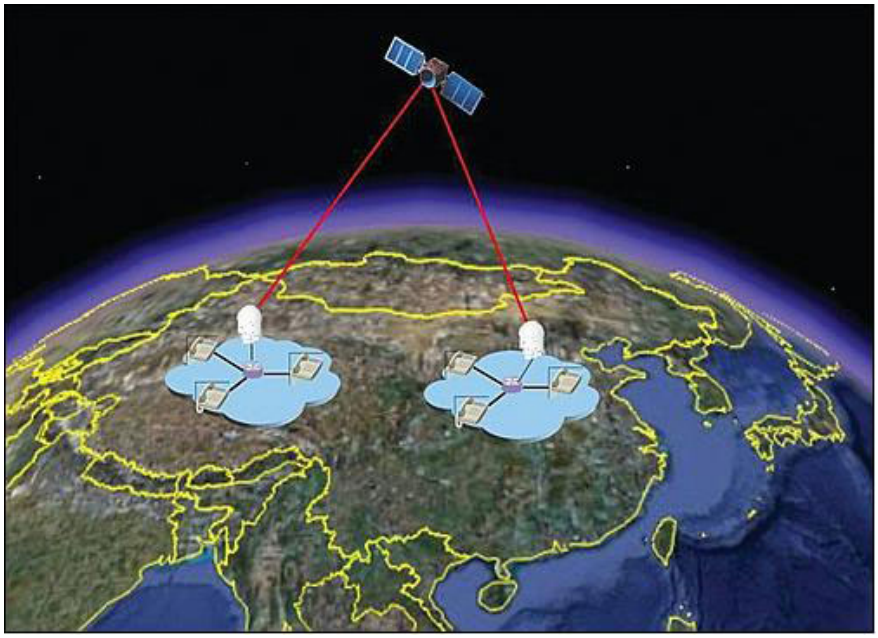
Called **Quantum Science Satellite,** nicknamed **Micius** or **Mozi** (Chinese name ??), satellites are designed to establish Hack-Proof communication systems (prevented hacked) in the global surveillance era. , by transmitting unbreakable encryption key from outer space to the ground.

Now, supposedly with this satellite, Chinese scientists at Quantum Experiments at Space Scale were able to send quantum key data fragments by emits photons from space to the ground station, transcending much longer distances than before.

Chinese scientists successfully sent quantum keys over a distance of 1,200 km (745 miles) from the universe to Earth at a transfer rate more than 20 times higher than expected, and using optical fibers of the same length , scientist Pan Jianwei told Xinhua.

> 'That can meet the need to make a completely secure call or transmit large amounts of bank data', Jianwei said.

Quantum Science Satellite could become the world's first transcontinental quantum key distribution system and China hopes to build a global quantum cryptographic communication system by 2030.



The QUESS project was initially successful in transmitting data from the universe to Earth

Theoretically, using cryptography for safer encryption and avoiding interference because the information is encoded in quantum molecules and will be destroyed as soon as the system detects signs of attempted invasion.

> 'Satellite quantum key distribution can be used for urban quantum systems, where there is enough fiber and is convenient to connect many users in a city of more than 100 square kilometers', Jianwei said. 'We can imagine the quantum system that integrates space - ground, allowing quantum cryptography - mostly applications for quantum information - to become more useful on a global scale.'

China has been very ambitious to realize the importance of quantum technology, which is expected to become a faster and more powerful supercomputer era.

Since two decades ago, quantum technology has become a strategic focus point in China's 5-year plan. While the US invested about $ 200 million a year in quantum research, China spent $ 101 billion on quantum physics in 2015.

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