《全球首颗量子卫星“墨子号”在轨测试 完成》

导读:全球首颗量子卫星“墨子号”已经完成在轨测试，量子通讯和我们更进一步。

The world’s first quantum satellite is currently in the middle of in-orbit testing, and will carry out additional scientific tests after November, the Chinese Academy of Sciences (CAS) announced on Oct. 12. Nicknamed “Micius,” the satellite, Quantum Experiments at Space Scale (QUESS), was launched in China in August.

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“QUESS has three missions to fulfill, which are the launch into orbit, in-orbit testing and scientific experiments. Currently, QUESS has entered the second stage, and has completed two tests - of the satellite platform and the payload. Tests of satellite-ground links are now underway,” said Pan Jianwei, chief scientist behind the quantum communication satellite project, during an interview with the Beijing Times.

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According to reports, the battery packs of the satellite are functional, and the success rate of its remote control has reached 100 percent. The satellite has successfully tracked all ground stations with satisfactory accuracy.

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“The satellite has also established three types of satellite-ground links, which has laid a foundation for QUESS scientific missions. We have been adjusting and optimizing parameters, accumulating data for future research,” Pan said.

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Quantum communication boasts ultra-high security, as a quantum photon can neither be separated nor duplicated. It is therefore impossible to wiretap, intercept or crack the information transmitted through it.

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QUESS, as planned, will also beam entangled photons to two Earth stations, 1,200 kilometers apart, in a move to test quantum entanglement over a greater distance. It will additionally test quantum teleportation with a ground station in Ali, Tibet, the Xinhua News Agency reported.

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