

Does quantum communication not require optical fiber cables



Overview

Another step towards a quantum internet has been completed, and it doesn't require any special communications equipment. Because classical information needs to be sent, quantum teleportation cannot occur faster than the speed of light. So does it mean quantum communication specifically teleportation still need transmission media like fiber optic, radio wave, coaxial cable, etc to implement classical channel /. Two commercial telecommunications facilities have been connected by a secure quantum network that used existing fibre optic cables at room temperature - a key step towards a feasible quantum internet Another step towards a quantum internet has been completed, and it doesn't require any special. These laws are called classical in opposition to quantum physics: the physical laws that govern very small systems, such as atoms, electrons, and photons. This development shows that quantum communication might not require dedicated. Researchers at Northwestern University, in Evanston, Ill. For decades, researchers have tried to squeeze quantum signals alongside classical signals. The universities of Bristol and Cambridge in the UK and Deutsche Telekom in Germany have announced separate advances in quantum communications over classical fiber networks. In the case of the UK, researchers demonstrated a videoconference, the transfer of encrypted medical data and secure remote.



Article Content

Sep 16, 2025

Ultra-secure quantum data sent over existing internet

Another step towards a quantum internet has been completed, and it doesn't require any special communications equipment. Two data centres in

Dec 22, 2025

Simulating Optical Fiber Networks for Quantum

Optical fiber networks provide a promising solution for this challenge by enabling secure and efficient quantum communication. This blog explores how

Sep 02, 2025

Do quantum teleportation require transmission media?

It said on wikipedia: Because classical information needs to be sent, quantum teleportation cannot occur faster than the speed of light. So does it mean quantum communication

Jun 06, 2026

US scientists demonstrate quantum entanglement on live internet cables

Riding the light highway: Quantum entanglement on live internet cables achieved As part of the test, the team set up an 18

Oct 25, 2025

WORLD WIDE WEB JOURNAL Home

Internet communications tools Document preparation Computing industry Computing standards, RFCs and guidelines Computer crime Language types Security and privacy Computational complexity and

Feb 13, 2026

Scientists Sent First Quantum Messages Over Fiber

Scientists have sent quantum information across a record-breaking 158 miles using ordinary computers and fiber-optic cables. It is the first time

Apr 25, 2026

"Impossible" quantum teleportation done on basic

Northwestern University engineers made a remarkable advance in quantum computing and communication, demonstrating quantum teleportation

Aug 07, 2025

Quantum Data Travels 250 km on Telecom

Mirko Pittaluga, Yuen San Lo, et al. optical fiber quantum communications quantum internet quantum key distribution quantum networks

Jan 18, 2026

Optical and Quantum Communications, and the

Fiber optic cables provide the most promising infrastructure for a future quantum internet because they can transmit quantum information (qubits)

Aug 11, 2025

Quantum Teleportation Becomes Reality on Active

Quantum teleportation has been successfully conducted over a fiber optic cable carrying Internet traffic, merging quantum and classical

Oct 02, 2025

Quantum communication could be integrated into

Quantum communication doesn't necessarily need to be delayed; it might be possible to integrate it into existing fiber optic networks. To bring

Mar 22, 2026

The quantum internet is compatible with existing fiber

In order to transmit quantum and traditional data over a fiber-optic network, the two streams would need to be multiplexed. Multiplexing is a method by which multiple

Apr 01, 2026

Ultra-secure quantum messages sent a record distance

Unlike binary bit based digital communications, quantum information is transmitted in qubits, which can store multiple values at once, making quantum

May 19, 2026

Quantum computing: How basic broadband fiber could

QUANTUM COMPUTING Unlike the metal wires currently used, it is easy to multiply the number of fiber optic cables in a single device, which means

Dec 17, 2025

Do quantum teleportation require transmission media?

But it also said, it doesn't need transmission media: The main advantage with this is that Bell states can be shared using photons from lasers making teleportation achievable through open

Nov 22, 2025

Quantum internet breakthrough after "quantum data"

Technology Computing Quantum Computing Quantum internet breakthrough after "quantum data" transmitted through standard fiber optic cable

Feb 26, 2026

Quantum internet inches closer thanks to new chip — it

Scientists have sent quantum signals over standard fiber-optic cables using the same connectivity that powers today's web, in what could be a major

Aug 07, 2025

Building the Quantum Supercomputers of Tomorrow

In a landmark achievement for quantum technology, a team of physicists at the University of Oxford has successfully connected two quantum

May 28, 2026

Quantum Technology Fueling the Next Generation Optical Communication ...

In the digital era, optical communication ensures the revolutionary leap in information transmission over long distances. Optical communication relies on principals of optics and light for

Aug 26, 2025

Quantum communication across a 250-kilometre optical

A long-distance, real-world quantum cryptography link has been demonstrated over a fibre-optic telecommunications network in Germany.

Jul 25, 2025

First demonstration of quantum teleportation over busy

Northwestern University engineers are the first to successfully demonstrate quantum teleportation over a fiber optic cable already carrying

Dec 28, 2025

Optical fibers fit for the age of quantum computing

However, the cable networks used today to transmit information across the globe are likely to be sub-optimal for quantum communications, due to the solid cores of their optical fibres.

Nov 18, 2025

Quantum Communication 101

One promising way forward for the scaling of quantum computers is to connect them to combine their respective qubits, which will require quantum communication links.

Aug 03, 2025

Quantum communication advances on fiber networks

The universities of Bristol and Cambridge in the UK and Deutsche Telekom in Germany have announced separate advances in quantum

Mar 15, 2026

What Is Quantum Fiber? A Breakthrough in Next-Gen C

Quantum Fiber is a super-fast internet service that runs through fiber-optic cables — much faster and more reliable than older types like DSL. It's designed to give you

Apr 28, 2026

Quantum and Classical Data Coexist in Fiber Optics

For decades, researchers have tried to squeeze quantum signals alongside classical signals in fiber optic cables. Quantum bits, however, are

Feb 16, 2026

"Impossible" quantum teleportation done on basic

This development shows that quantum communication might not require dedicated lines, which clears the path for easier and more widespread

Jan 17, 2026

Engineers enable quantum communication over existing

This breakthrough lays the groundwork for quantum communication by leveraging existing infrastructure and sending quantum data alongside

Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://www.regen-power.co.za>

Email: info@regen-power.co.za

Phone: +49 176 845 2036

Address: Taunusanlage 15, 60325 Frankfurt am Main, Germany

This document is for informational purposes only. Specifications subject to change without notice.

